(Mark One)

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

X	ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
<u></u>	For the fiscal year ended December 31, 2022
	OR
	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	For the transition period from to
	Commission file number: 001-34028

AMERICAN WATER WORKS COMPANY, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 51-0063696

(I.R.S. Employer Identification No.)

1 Water Street, Camden, NJ 08102-1658 (Address of principal executive offices) (Zip Code) (856) 955-4001 (Registrant's telephone number, including area code) Securities registered pursuant to Section 12(b) of the Act:

Title of each class Common stock, par value \$0.01 per share <u>Trading Symbol</u> **AWK**

Name of each exchange on which registered

New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes 🗷 No 🗆

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes 🗆 No 🗷

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes 🗷 No 🗆

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes $\ lacktriangledown$ No $\ \Box$

Indicate by check mark whether the registrant is a large accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. □

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. 🗵

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). □

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes \Box No \blacksquare

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity,

as of the last business day of the registrant's most recently completed second fiscal quarter.

Common Stock, \$0.01 par value—\$25,487,300,000 as of June 30, 2022 (solely for purposes of calculating this aggregate market value, American Water has defined its affiliates to include (i) those persons who were, as of June 30, 2022, its executive officers, directors or known beneficial owners of more than 10% of its common stock, and (ii) such other persons who were deemed, as of June 30, 2022, to be controlled by, or under common control with, American Water or any such persons in clause (i) above).

Indicate the number of shares outstanding of each of the registrant's classes of common stock as of the latest practicable date: Common Stock, \$0.01 par value per share—181,858,619 shares as of January 31, 2023.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the American Water Works Company, Inc. definitive proxy statement for the 2023 Annual Meeting of Shareholders to be filed with the Securities and Exchange Commission within 120 days after December 31, 2022 are incorporated by reference into Part III of this report.

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FORWARD-LOOKING STATEMENTS

Statements included in Item 1—Business, Item 1A—Risk Factors, and Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations, and in other sections of this Annual Report on Form 10-K, or incorporated by reference therein, are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the Private Securities Litigation Reform Act of 1995. In some cases, these forwardlooking statements can be identified by words with prospective meanings such as "intend," "plan," "estimate," "believe," "anticipate," "expect," "project," "project," "propose," "assume," "forecast," "likely," "uncertain," "outlook," "future," "pending," "goal," "objective," "potential," "continue," "seek to," "may," "can," "should," "will" and "could" or the negative of such terms or other variations or similar expressions. Forward-looking statements may relate to, among other things: the Company's future financial performance, liquidity and cash flows; the timing and amount of rate and revenue adjustments, including through general rate case filings, filings for infrastructure surcharges and other governmental agency authorizations and proceedings, and filings to address regulatory lag; the Company's growth and portfolio optimization strategies, including the timing and outcome of pending or future acquisition activity; the ability of the Company's California subsidiary to obtain adequate alternative water supplies in lieu of diversions from the Carmel River; the amount and allocation of projected capital expenditures and related funding requirements; the Company's ability to repay or refinance debt; the future impacts of increased or increasing financing costs, inflation and interest rates; the Company's ability to execute its current and long-term business, operational and capital expenditures strategies; the Company's ability to finance current operations, capital expenditures and growth initiatives by accessing the debt and equity capital markets; the outcome and impact on the Company of governmental and regulatory proceedings and related potential fines, penalties and other sanctions; the ability to meet or exceed the Company's stated environmental and sustainability goals, including its greenhouse gas ("GHG") emission reduction, water delivery efficiency and water system resiliency goals; the ability to complete, and the timing and efficacy of, the design, development, implementation and improvement of technology and other strategic initiatives; the impacts to the Company of the ongoing COVID-19 pandemic; the ability to capitalize on existing or future utility privatization opportunities; trends in the water and wastewater industries in which the Company operates, including macro trends with respect to the Company's efforts related to customer, technology and work execution; regulatory, legislative, tax policy or legal developments; and impacts that future significant tax legislation may have on the Company and on its business, results of operations, cash flows and liquidity.

Forward-looking statements are predictions based on the Company's current expectations and assumptions regarding future events. They are not guarantees or assurances of any outcomes, financial results, levels of activity, performance or achievements, and readers are cautioned not to place undue reliance upon them. These forward-looking statements are subject to a number of estimates, assumptions, known and unknown risks, uncertainties and other factors. The Company's actual results may vary materially from those discussed in the forward-looking statements included herein as a result of the factors discussed under Item 1A—Risk Factors, and the following important factors:

- the decisions of governmental and regulatory bodies, including decisions to raise or lower customer rates;
- the timeliness and outcome of regulatory commissions' and other authorities' actions concerning rates, capital structure, authorized return on equity, capital investment, system acquisitions and dispositions, taxes, permitting, water supply and management, and other decisions;
- changes in customer demand for, and patterns of use of, water and energy, such as may result from conservation efforts, or otherwise;
- limitations on the availability of the Company's water supplies or sources of water, or restrictions on its use thereof, resulting from allocation rights, governmental or regulatory requirements and restrictions, drought, overuse or other factors;
- a loss of one or more large industrial or commercial customers due to adverse economic conditions, or other factors;
- changes in laws, governmental regulations and policies, including with respect to environmental, health and safety, data and consumer privacy, security and protection, water quality and water quality accountability, contaminants of emerging concern, public utility and tax regulations and policies, and impacts resulting from U.S., state and local elections and changes in federal, state and local executive administrations;
- the Company's ability to collect, distribute, use, secure and store consumer data in compliance with current or future governmental laws, regulations and policies with respect to data and consumer privacy, security and protection;
- weather conditions and events, climate variability patterns, and natural disasters, including drought or abnormally high rainfall, prolonged and abnormal ice or freezing conditions, strong winds, coastal and intercoastal flooding, pandemics (including COVID-19) and epidemics, earthquakes, landslides, hurricanes, tornadoes, wildfires, electrical storms, sinkholes and solar flares;
- the outcome of litigation and similar governmental and regulatory proceedings, investigations or actions;

- the risks associated with the Company's aging infrastructure, and its ability to appropriately improve the resiliency of or maintain and replace, current or future infrastructure and systems, including its technology and other assets, and manage the expansion of its businesses;
- exposure or infiltration of the Company's technology and critical infrastructure systems, including the disclosure of sensitive, personal or confidential information contained therein, through physical or cyber attacks or other means;
- the Company's ability to obtain permits and other approvals for projects and construction of various water and wastewater facilities;
- changes in the Company's capital requirements;
- the Company's ability to control operating expenses and to achieve operating efficiencies;
- the intentional or unintentional actions of a third party, including contamination of the Company's water supplies or the water provided to its customers;
- the Company's ability to obtain and have delivered adequate and cost-effective supplies of pipe, equipment (including personal protective equipment), chemicals, power and other fuel, water and other raw materials, and to address or mitigate supply chain constraints that may result in delays or shortages in, as well as increased costs of, supplies, products and materials that are critical to or used in the Company's business operations;
- the Company's ability to successfully meet its operational growth projections, either individually or in the aggregate, and capitalize on growth opportunities, including, among other things, with respect to:
 - acquiring, closing and successfully integrating regulated operations;
 - the Company's Military Services Group ("MSG") entering into new military installation contracts, price redeterminations, and other agreements and contracts, with the U.S. government; and
 - realizing anticipated benefits and synergies from new acquisitions;
- risks and uncertainties following the completion of the sale of the Company's Homeowner Services Group ("HOS"), including:
 - the Company's ability to receive any contingent consideration provided for in the HOS sale, as well as amounts due, payable and owing to the Company under the seller note when due; and
 - the ability of the Company to redeploy successfully and timely the net proceeds of this transaction into the Company's Regulated Businesses;
- risks and uncertainties associated with contracting with the U.S. government, including ongoing compliance with applicable government procurement and security regulations;
- cost overruns relating to improvements in or the expansion of the Company's operations;
- the Company's ability to successfully develop and implement new technologies and to protect related intellectual property;
- the Company's ability to maintain safe work sites;
- the Company's exposure to liabilities related to environmental laws and similar matters resulting from, among other things, water and wastewater service provided to customers;
- the ability of energy providers, state governments and other third parties to achieve or fulfill their GHG emission reduction goals, including without limitation through stated renewable portfolio standards and carbon transition plans;
- changes in general economic, political, business and financial market conditions;
- access to sufficient debt and/or equity capital on satisfactory terms and as needed to support operations and capital expenditures;
- fluctuations in inflation or interest rates, and the Company's ability to address or mitigate the impacts thereof;
- the ability to comply with affirmative or negative covenants in the current or future indebtedness of the Company or any of its subsidiaries, or the issuance of new or modified credit ratings or outlooks by credit rating agencies with respect to the Company or any of its subsidiaries (or any current or future indebtedness thereof), which could increase financing costs or funding requirements and affect the Company's or its subsidiaries' ability to issue, repay or redeem debt, pay dividends or make distributions;
- fluctuations in the value of, or assumptions and estimates related to, its benefit plan assets and liabilities, including with respect to its pension and other post-retirement benefit plans, that could increase expenses and plan funding

requirements;

- changes in federal or state general, income and other tax laws, including (i) future significant tax legislation, and (ii) the availability of, or the Company's compliance with, the terms of applicable tax credits and tax abatement programs;
- migration of customers into or out of the Company's service territories and changes in water and energy consumption resulting therefrom;
- the use by municipalities of the power of eminent domain or other authority to condemn the systems of one or more of the Company's utility subsidiaries, or the assertion by private landowners of similar rights against such utility subsidiaries;
- any difficulty or inability to obtain insurance for the Company, its inability to obtain insurance at acceptable rates and on acceptable terms and conditions, or its inability to obtain reimbursement under existing or future insurance programs and coverages for any losses sustained;
- the incurrence of impairment charges, changes in fair value and other adjustments related to the Company's goodwill or the value of its other assets;
- labor actions, including work stoppages and strikes;
- the Company's ability to retain and attract highly qualified and skilled employees and/or diverse talent;
- civil disturbances or unrest, or terrorist threats or acts, or public apprehension about future disturbances, unrest, or terrorist threats or acts; and
- the impact of new, and changes to existing, accounting standards.

These forward-looking statements are qualified by, and should be read together with, the risks and uncertainties set forth above and the risk factors included in Item 1A—Risk Factors and other statements contained in this Annual Report on Form 10-K, and readers should refer to such risks, uncertainties and risk factors in evaluating such forward-looking statements. Any forward-looking statements the Company makes shall speak only as of the date this Annual Report on Form 10-K was filed with the U.S. Securities and Exchange Commission ("SEC"). Except as required by the federal securities laws, the Company does not have any obligation, and it specifically disclaims any undertaking or intention, to publicly update or revise any forward-looking statements, whether as a result of new information, future events, changed circumstances or otherwise. New factors emerge from time to time, and it is not possible for the Company to predict all such factors. Furthermore, it may not be possible to assess the impact of any such factor on the Company's businesses, either viewed independently or together, or the extent to which any factor, or combination of factors, may cause results to differ materially from those contained in any forward-looking statement. The foregoing factors should not be construed as exhaustive.

PART I

ITEM 1. BUSINESS

The Company

With a history dating back to 1886, American Water is the largest and most geographically diverse, publicly-traded water and wastewater utility company in the United States, as measured by both operating revenues and population served. A holding company originally incorporated in Delaware in 1936, the Company employs approximately 6,500 professionals who provide drinking water, wastewater and other related services to over 14 million people in 24 states. The Company conducts the majority of its business through regulated utilities that provide water and wastewater services, collectively presented as the "Regulated Businesses." The Company also operates other market-based businesses that provide water and wastewater services to the U.S. government on military installations, as well as municipalities. Individually, these market-based businesses do not meet the criteria of a reportable segment in accordance with generally accepted accounting principles in the United States ("GAAP"), and are collectively presented throughout this Annual Report on Form 10-K within "Other," which is consistent with how management assesses the results of these businesses.

On December 9, 2021 (the "Closing Date"), the Company sold all of the equity interests of the HOS subsidiaries. See Item 1—Business—Other—Sale of Homeowner Services Group below and Note 5—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements for additional information.

On January 1, 2022, the Company completed the sale of its New York subsidiary, see Item 1—Business—Regulated Businesses—Sale of New York American Water Company, Inc. below and Note 5—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements for additional information.

Throughout this Annual Report on Form 10-K, unless the context otherwise requires, references to "we," "us," "our," the "Company," and "American Water" mean American Water Works Company, Inc. and its subsidiaries, taken together as a whole. References to "parent company" mean American Water Works Company, Inc., without its subsidiaries.

Regulated Businesses

The Company's primary business involves the ownership of utilities that provide water and wastewater services to residential, commercial, industrial, public authority, fire service and sale for resale customers. The Company's utilities operate in approximately 1,600 communities in 14 states in the United States, with 3.4 million active customers in its water and wastewater networks. Services provided by the Company's utilities are subject to regulation by multiple state utility commissions or other entities engaged in utility regulation, collectively referred to as public utility commissions ("PUCs"). Federal, state and local governments also regulate environmental, health and safety, and water quality and water accountability matters. The Company reports the results of the services provided by its utilities in the Regulated Businesses segment. Operating revenues for the Regulated Businesses were \$3,505 million for 2022, \$3,384 million for 2021 and \$3,255 million for 2020, accounting for 92%, 86% and 86%, respectively, of the Company's total operating revenues for the same periods.

Presented in the table below is a geographic summary of the Regulated Businesses' operating revenues and the number of customers the Company serves, by type of service, for and as of the year ended December 31, 2022:

		Operating Revenues (in millions)							Number of Customers (in thousands)			
	Water (a)		Wastewater		Total		% of Total	Water	Wastewater	Total	% of Total	
New Jersey	\$	858	\$	51	\$	909	25.9 %	663	59	722	20.9 %	
Pennsylvania		714		105		819	23.4 %	679	97	776	22.5 %	
Missouri		367		16		383	10.9 %	480	22	502	14.6 %	
Illinois		310		39		349	10.0 %	297	71	368	10.7 %	
California		281		4		285	8.1 %	189	3	192	5.6 %	
Total—Top Five States (b)		2,530		215		2,745	78.3 %	2,308	252	2,560	74.2 %	
Other (c)		733		27		760	21.7 %	853	36	889	25.8 %	
Total Regulated Businesses	\$	3,263	\$	242	\$	3,505	100.0 %	3,161	288	3,449	100.0 %	

- (a) Includes other operating revenues consisting primarily of miscellaneous utility charges, fees and rents.
- (b) The Company's "Top Five States" are determined based upon operating revenues.
- (c) Includes the Company's utility operations in the following states: Georgia, Hawaii, Indiana, Iowa, Kentucky, Maryland, Tennessee, Virginia and West Virginia and other revenue attributable collectively to the Regulated Businesses. The Company completed the sale of its New York subsidiary on January 1, 2022 and the sale of its Michigan subsidiary on February 4, 2022.

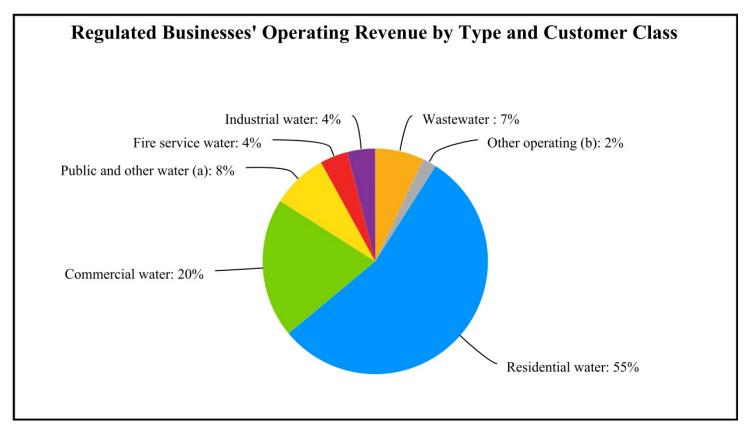
Customers

The Company's Regulated Businesses have a large and geographically diverse customer base. A customer is defined as a person, business, municipality or any other entity that purchases the Company's water or wastewater services as of the last business day of a reporting period. One single customer may purchase the Company's services for use by multiple individuals or businesses. Examples of these customers are homes, apartment complexes, businesses and governmental entities.

The vast majority of the Company's regulated water customers are metered, which allows the Company to measure and bill for its customers' water usage, typically on a monthly basis. The Company employs a variety of methods of customer meter reading to monitor consumption. These methods range from meters with mechanical registers where consumption is manually recorded by meter readers, to meters with electronic registers capable of transmitting consumption data to proximity devices or via radio frequency to mobile or fixed network data collectors. The Company's wastewater customers are billed either a flat rate or based upon their water consumption.

Residential customers make up a substantial portion of the Company's customer base in all of the states in which it operates. The Company also serves (i) commercial customers, such as food and beverage providers, commercial property developers and proprietors, and energy suppliers, (ii) fire service customers, where the Company supplies water through its distribution systems to public fire hydrants for firefighting purposes and to private fire customers for use in fire suppression systems in office buildings and other facilities, (iii) industrial customers, such as large-scale manufacturers, mining and production operations, (iv) public authorities, such as government buildings and other public sector facilities, including schools and universities, and (v) other utilities and community water and wastewater systems in the form of bulk contracts for the supply of water or the treatment of wastewater for their own customers.

The following chart depicts the allocation of the Company's Regulated Businesses' operating revenue of \$3,505 million by type, including a breakout of the total water services revenues by class of customer, for the year ended December 31, 2022:



- (a) Includes water revenues from public authorities and other utilities and community water systems under bulk contracts.
- (b) Includes other operating revenues consisting primarily of miscellaneous utility charges, fees and rents.

Presented in the table below is the number of water and wastewater customers the Company served by class as of December 31, 2022, 2021 and 2020, which represents approximately 14 million people served as of December 31, 2022:

	2022		202	:1	2020		
(In thousands)	Water	Wastewater	Water	Wastewater	Water	Wastewater	
Residential	2,870	270	2,972	245	2,948	236	
Commercial	219	17	225	15	225	15	
Fire service	51	_	52	_	50	_	
Industrial	4	_	4	_	4	_	
Public and other (a)	17	1_	16	1	17	1	
Total (b)	3,161	288	3,269	261	3,244	252	

- (a) Includes public authorities and other utilities and community water and wastewater systems under bulk contracts, which are accounted for as a single customer in the table above, generally result in service to multiple
- (b) The Company completed the sale of its New York subsidiary on January 1, 2022 and the sale of its Michigan subsidiary on February 4, 2022.

Customer growth in the Company's Regulated Businesses is primarily from (i) adding new customers to its customer base through acquisitions of water and/or wastewater utility systems, (ii) population growth in its authorized service areas, and (iii) sale of water to other water utilities and community water systems.

Capital Investment

The Company plans to invest between \$30 billion and \$34 billion over the next 10 years for capital improvements, including acquisitions, to its Regulated Businesses' water and wastewater infrastructure, largely for pipe replacement and upgrading aging water and wastewater treatment facilities. The Company has proactively improved its pipe renewal rate from a 250-year replacement cycle in 2009 to an expected 110-year replacement cycle by 2027, which it anticipates will enable the Company to replace nearly 2,100 miles of mains and collection pipes between 2023 and 2027. In addition, from 2023 to 2027, the Company's capital investment in treatment plants, storage tanks and other key, above-ground facilities is expected to increase, further seeking to address infrastructure renewal, resiliency, water quality, operational efficiency, technology and innovation, and emerging regulatory compliance needs. Additionally, the Company continues to invest significantly in resiliency projects to address the impacts of climate and weather variability by hardening its assets.

Regulation and Rate Making

The operations of the Company's Regulated Businesses are generally subject to regulation by PUCs in the states in which they operate, with the primary responsibility of the PUCs being the promotion of the overall public interest by balancing the interest of customers and utility investors. Specific authority might differ from state to state, but in most states, PUCs review and approve rates charged to customers, accounting treatments, long-term financing programs and cost of capital, operation and maintenance ("O&M") expenses, capital expenditures, taxes, affiliated transactions and relationships, reorganizations, mergers and acquisitions, along with imposing certain penalties or granting certain incentives. Regulatory policies vary from state to state and can change over time. These policies will affect the timing, as well as the extent, of recovery of expenses and the realized return on invested capital.

Periodic changes in customer rates generally occur through the filing of a rate case by the utility with the PUC. The timing of rate case filings is typically determined by either periodic requirements in the regulatory jurisdiction or by the utility's need to increase its revenue requirement to recover capital investment costs, changes in operating revenues, operating costs or other market conditions. The Company attempts to minimize "regulatory lag," which is the time between the occurrence of an event that triggers a change in the utility's revenue requirement and the recognition in rates of that change.

The Company's Regulated Businesses support regulatory practices at the PUCs and state legislatures that mitigate the adverse impact of regulatory lag. Presented in the table below are examples of approved regulatory practices:

Regulatory Practices Description **States Allowed** Infrastructure replacement surcharge Allows rates to change periodically, outside a general rate case proceeding, to reflect recovery of capital investments made to replace infrastructure necessary IA, IL, IN, KY, MO, NJ, PA, TN, VA, WV to sustain safe and reliable services for the Company's customers. These mechanisms typically involve periodic filings and reviews to ensure transparency. mechanisms CA, HI, IA, IL, IN, KY, PA A "test year" is a period used for setting rates, and a future test year describes the first 12 months that new rates are proposed to be effective. The use of a Future test year future test year allows current or projected revenues, expenses and capital investments to be collected on a more timely basis. A historical test year sets rates using data from a 12-month period that ends prior to a general rate case filing. A hybrid test year allows an update to historical MD, MO, NJ, WV Hybrid test year data for "known and measurable" changes that occur subsequent to the historical test year. Utility plant recovery mechanisms Allows recovery of the full return on utility plant costs during the construction period, instead of capitalizing an allowance for funds used during construction CA, IL, KY, PA, TN, VA 'AFUDC"). In addition, some states allow the utility to seek pre-approval of certain capital projects and associated costs. In this pre-approval process, the PUC may assess the prudency of such projects. Expense mechanisms Allows changes in certain operating expenses, which may fluctuate based on conditions beyond the utility's control, to be recovered outside of a general rate CA, HI, IL, IN, MD, MO, NJ, case proceeding or deferred until the next general rate case proceeding. Adjusts rates periodically to ensure that a utility recovers the revenues authorized in its general rate case, regardless of sales volume, including recognition of CA, IL Revenue stability mechanisms declining sales resulting from reduced consumption, while providing an incentive for customers to use water more efficiently. CA, IA, IL, IN, KY, MD, MO, NJ, PA, VA, WV Consolidated tariffs Use of a unified rate structure for water systems owned and operated by a single utility, which may or may not be physically interconnected. The consolidated tariff pricing structure may be used fully or partially in a state, and is generally used to moderate the price impact of periodic fluctuations in local costs, while lowering administrative costs for customers. Pennsylvania and West Virginia also permit a blending of water and wastewater revenue A regulator's willingness to defer recognition of financial impacts when setting rates for utilities. All Deferred accounting

The Company pursues enhancements to these regulatory practices to facilitate efficient recovery of its costs and capital investments and to continue to provide safe, clean, reliable and affordable services to its customers. The ability to seek regulatory treatment using the regulatory practices described above does not guarantee that the PUCs will accept the Company's proposal in the context of a particular rate case, and these regulatory practices may reduce, but not eliminate, regulatory lag associated with traditional rate making processes. It is also the Company's strategy to expand the use of these mechanisms in areas where they may not currently apply and enhance certain mechanisms where they already exist.

Acquisitions and Strategic Growth

The U.S. water and wastewater industries include investor-owned systems as well as municipal systems that are owned and operated by local governments or governmental subdivisions. According to the U.S. Environmental Protection Agency ("EPA"), as of 2017, approximately 84% of the water market is served by municipal systems and approximately 98% of the country's wastewater systems are government owned. The EPA also estimates, as of 2017, that there are over 50,000 community water systems and over 15,000 community wastewater systems in the United States, with approximately 80% of the community water systems serving a population of 3,000 or less.

A fundamental aspect of the Company's growth strategy is to pursue acquisitions of water and/or wastewater systems in geographic proximity to areas where the Company operates its Regulated Businesses, see Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations for additional information. The proximity of acquisition opportunities to the Company's regulated footprint allows it to integrate and manage the acquired systems and operations primarily using the Company's existing management (although the Company typically retains the majority, if not all, of the employees of the acquired systems) and to achieve operational efficiencies and prioritize capital investment needs. The Company's current customer mix of 92% water and 8% wastewater also presents strategic opportunities for wastewater growth and consolidation, allowing the Company to add wastewater customers where it already serves water customers. The Company intends to continue to expand its regulated footprint geographically by acquiring water and wastewater systems in its existing markets and, if appropriate, pursuing acquisition opportunities in certain domestic markets where the Company does not currently operate its Regulated Businesses. Before entering new regulated markets, the Company will evaluate the business and regulatory climates to ensure that it will have the opportunity to achieve an appropriate rate of return on its investment while maintaining its high standards for providing safe, reliable and affordable services to its customers. The Company will also evaluate whether there is a line of sight to grow to sufficient scale in a new regulated market so that it can attain efficiencies after entering a new domestic market.

Increasingly stringent environmental, health and safety, cybersecurity and water quality and water accountability regulations, the amount of infrastructure in need of significant capital investment, financial challenges and industry legislation are several elements, among others, that may drive more municipalities to consider selling their water and wastewater assets.

Sale of New York American Water Company, Inc.

On January 1, 2022, the Company completed the sale of its New York subsidiary to Liberty Utilities (Eastern Water Holdings) Corp. ("Liberty"), an indirect, wholly owned subsidiary of Algonquin Power & Utilities Corp. Under the terms of the Stock Purchase Agreement, dated November 20, 2019, as amended, by and among the Company's New York subsidiary and Liberty (the "Stock Purchase Agreement"), Liberty purchased from the Company all of the capital stock of the Company's New York subsidiary for a purchase price of \$608 million in cash. The sale was approved by the New York State Department of Public Service on December 16, 2021. The Company's regulated New York operations had approximately 127,000 customers in the State of New York. See Note 5—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements for additional information.

Industry Legislation

On November 15, 2021, the Infrastructure Investment and Jobs Act (the "IIJA") was signed into law and provides for up to \$55 billion to aid in improving the country's ailing water infrastructure, including \$23.4 billion for drinking water and wastewater, \$15 billion for lead service line replacement (through the drinking water state revolving fund), and \$10 billion for the treatment of per- and polyfluoroalkyl substances ("PFAS") and other contaminants of emerging concern. The IIJA also included a low-income assistance program, in which eligible low-income customers who receive their water from public and private entities may participate. The Company has leveraged these funds throughout its service areas to benefit its customers.

In December 2020, Congress passed, and the President signed into law, a \$900 billion COVID-19 relief and \$1.4 trillion U.S. government appropriations package for 2021, which included \$638 million for a low-income water assistance program and \$2.8 billion for capitalization grants under the Clean Water and Drinking Water state revolving funds.

In 2017, New Jersey enacted the Water Quality Accountability Act (the "WQAA"), which sets operational standards for all water utilities in New Jersey, including municipal and investor-owned utilities with more than 500 service connections. This law imposes requirements in areas such as asset management, water quality reporting, remediation of notices of violation, and hydrant and valve maintenance. The WQAA requires the most senior water manager, or either the executive director for municipal utility authorities or the mayor or chief executive officer for municipally owned public water systems, to certify that the system meets the requirements under the WQAA. Enhanced WQAA legislation includes additional enforcement requirements for disclosure of results, requires the sale of systems for prolonged violations and imposes new cybersecurity requirements and asset management plans. The new amendments, which provide for both civil and criminal penalties for falsification of documents, were signed by the Governor with an effective date of November 8, 2021.

In 2018, Indiana passed a law to set minimum operational expectations for all water and wastewater utilities in the state, including municipal and investor-owned utilities. The law requires water and wastewater utilities to conduct rate analyses, develop capital asset management plans and conduct cybersecurity and water loss audits.

In 2020, Missouri enacted the Water Safety and Security Act, which requires small and medium-sized water providers to create cybersecurity, valve inspection and hydrant inspection programs.

The Company's regulated subsidiaries in California, Illinois, Indiana, Iowa, Kentucky, Maryland, Missouri, New Jersey, Pennsylvania, Tennessee, Virginia and West Virginia have access to utility valuation legislation and regulation for private sector investment in public sector water and wastewater systems. The Company supports full optionality for municipalities, including state legislation that enables the consolidation of the largely fragmented water and wastewater industries through third-party fair market valuations of purchased property. Fair market value assessment of water and wastewater systems is an alternative to the traditional depreciated original cost method of valuation, which allows the Company to offer municipalities a purchase price for their system assets that is reflective of the assets' fair market value, while providing the Company with increased opportunity to recover the purchase price over the life of the purchased system assets, subject to PUC approval. In 2021, the Tennessee Public Utility Commission implemented acquisition valuation rules that include a methodology to value water and wastewater assets based upon the new replacement cost of the assets less the depreciation, in addition to other valuation methodology options.

Consolidated tariffs use a unified rate structure for systems owned and operated by a single utility, which may or may not be physically interconnected. Consolidated tariff pricing moderates the impact of periodic fluctuations in local costs and promotes a more universal water infrastructure investment in a jurisdiction. As a result, consolidated tariffs can make it easier to incorporate new systems into an existing utility, support economies of scale for even the smallest of systems and prioritize capital needs across the jurisdiction. Overall, the Company believes that consolidated tariffs bring cost-effective, high-quality services to a larger number of customers. Eleven of the Company's regulated jurisdictions currently have some form of consolidated tariff pricing, including California, Illinois, Indiana, Iowa, Kentucky, Maryland, Missouri, New Jersey, Pennsylvania, Virginia and West Virginia.

Competition

The Company's Regulated Businesses generally do not face direct competition in their existing markets because (i) the Company operates in those markets pursuant to franchises, charters, certificates of public convenience and necessity or similar authorizations (collectively, "CPCNs") issued by state PUCs or other authorities, and (ii) the high cost of constructing a new water and wastewater system in an existing market creates a significant barrier to market entry. However, the Company's Regulated Businesses do face competition from governmental agencies, other investor-owned utilities, large industrial customers with the ability to provide their own water supply/treatment process and strategic buyers that are entering new markets and/or making strategic acquisitions. When pursuing acquisitions, the Company's largest investor-owned competitors, based on a comparison of operating revenues and population served, include Essential Utilities, Inc., American States Water Company and California Water Service Group. From time to time, the Company also faces competition from infrastructure funds, multi-utility companies and others, such as Algonquin Power and Utilities Corp., Eversource Energy, SouthWest Water Company and Corix Infrastructure, Inc.

Condemnation and Eminent Domain

All or portions of the Regulated Businesses' utility assets could be acquired by state, municipal or other government entities through one or more of the following methods: (i) eminent domain (also known as condemnation); (ii) the right of purchase given or reserved by a municipality or political subdivision when the original CPCN was granted; and (iii) the right of purchase given or reserved under the law of the state in which the utility subsidiary was incorporated or from which it received its CPCN. The acquisition consideration related to such a proceeding initiated by a local government may be determined consistent with applicable eminent domain law, or may be negotiated or fixed by appraisers as prescribed by the law of the state or the jurisdiction of the particular CPCN.

As such, the Regulated Businesses are periodically subject to condemnation proceedings in the ordinary course of business. For example, the Monterey water service system assets (the "Monterey system assets") of the Company's California subsidiary ("Cal Am") are the subject of a potential condemnation action by the Monterey Peninsula Water Management District (the "MPWMD") stemming from a November 2018 public ballot initiative. In 2019, the MPWMD issued a preliminary valuation and cost of service analysis report, finding in part that (1) an estimate of the Monterey system assets' total value plus adjustments would be approximately \$513 million, (2) the cost of service modeling results indicate significant annual reductions in revenue requirements and projected monthly water bills, and (3) the acquisition of the Monterey system assets by the MPWMD would be economically feasible. In 2020, the MPWMD certified a final environmental impact report, analyzing the environmental impacts of the MPWMD's project to (1) acquire the Monterey system assets through the power of eminent domain, if necessary, and (2) expand its geographic boundaries to include all parts of this system.

In February 2021, the MPWMD filed an application with the Local Agency Formation Commission of Monterey County ("LAFCO") seeking approval to become a retail water provider and annex approximately 58 parcels of land into the MPWMD's boundaries. In June 2021, LAFCO's commissioners voted to require a third-party independent financial study as to the feasibility of an acquisition by the MPWMD of the Monterey system assets. In December 2021, LAFCO's commissioners denied the MPWMD's application to become a retail water provider, determining that the MPWMD does not have the authority to proceed with a condemnation of the Monterey system assets. On April 1, 2022, the MPWMD filed a lawsuit against LAFCO challenging its decision to deny the MPWMD's application seeking approval to become a retail water provider. For more information on the lawsuit against LAFCO, see Item 3— Legal Proceedings—Proposed Acquisition of Monterey System Assets — Local Area Formation Commission Litigation. By letter dated October 3, 2022, the MPWMD notified Cal Am of a decision to appraise the Monterey system assets and requesting access to a number of Cal Am's properties and documents to assist the MPWMD with such an appraisal. Cal Am responded by letter on October 24, 2022, denying the request for access, stating that the MPWMD does not have the right to appraise Cal Am's system without LAFCO approval to become a retail water provider.

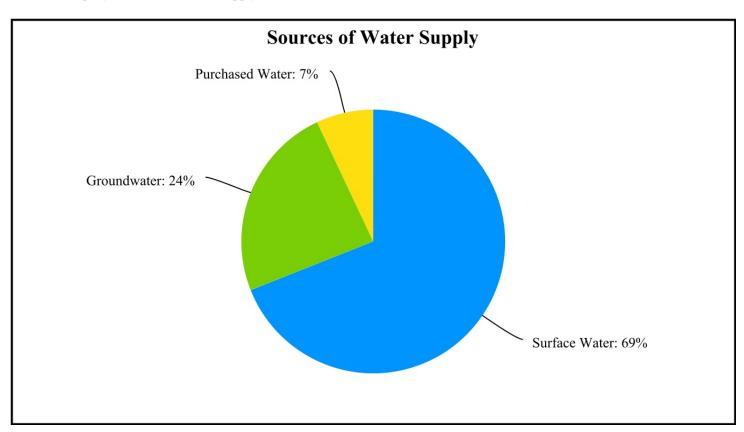
Also, five municipalities in the Chicago, Illinois area (approximately 30,300 customers in total) formed a water agency and filed an eminent domain lawsuit against the Company in January 2013, seeking to condemn the water pipeline that serves those five municipalities. During a valuation trial held in January 2023, the parties settled the lawsuit and the water agency dismissed the eminent domain case, and as a result the Company will retain the pipeline. As part of the dismissal, the Company's Illinois subsidiary and another subsidiary entered into a settlement agreement with the water agency agreeing to, among other things, maintain through December 31, 2027 the utility-specific wholesale water rate passed through to customers of the pipeline, such that the rate, exclusive of other pass-through charges, remains no higher than the current rate.

Furthermore, the law in certain jurisdictions in which the Regulated Businesses operate provides for eminent domain rights allowing private property owners to file a lawsuit to seek just compensation against a public utility, if a public utility's infrastructure has been determined to be a substantial cause of damage to that property. In these actions, the plaintiff would not have to prove that the public utility acted negligently. In California, for example, lawsuits have been filed in connection with large-scale natural events such as wildfires. Some of these lawsuits have included allegations that infrastructure of certain utilities triggered the natural event that resulted in damage to the property. In some cases, the PUC has allowed certain costs or losses incurred by the utility to be recovered from customers in rates, but in other cases such recovery in rates has been disallowed. Also, the utility may have obtained insurance that could respond to some or all of such losses, although the utility would be at risk for any losses not ultimately subject to rate or insurance recovery or losses that exceed the limits of such insurance.

Water Supply and Wastewater Services

The Company's Regulated Businesses generally own the physical assets used to store, pump, treat and deliver water to its customers and collect, treat, transport and recycle wastewater. Typically, the Company does not own the water, which is held in public trust and is allocated to the Company through contracts, permits and allocation rights granted by federal and state or multi-state agencies or through the ownership of water rights pursuant to local law. The Company is dependent on defined sources of water supply and obtains its water supply from surface water sources such as reservoirs, lakes, rivers and streams; from groundwater sources, such as wells and aquifers; and water purchased from third-party water suppliers. The level of water treatment the Company applies varies significantly depending upon the quality of the water source and customer stipulations. Surface water sources typically require significant treatment, while groundwater sources often require chemical treatment only.

Presented in the chart below are the Company's sources of water supply as of December 31, 2022:



Presented in the table below are the percentages of water supply by source type for the Company's Top Five States for the year ended December 31, 2022:

	Surface Water	Ground Water	Purchased Water
New Jersey	74%	22%	4%
Pennsylvania	91%	7%	2%
Missouri	78%	21%	1%
Illinois	54%	35%	11%
California	_	68%	32%

The Company's ability to meet the existing and future water demands of its customers depends on an adequate water supply. Drought, governmental restrictions, overuse of sources of water, the protection of threatened species or habitats, contamination or other factors may limit the availability of ground and surface water. The Company employs a variety of measures in an effort to obtain adequate sources of water supply, both in the short-term and over the long-term. The geographic diversity of the Company's service areas may mitigate some of the economic effects on the water supply associated with weather extremes the Company might encounter in any particular service territory. For example, in any given summer, some areas may experience drier than average weather, which may reduce the amount of source water available, while other areas the Company serves may experience wetter than average weather.

The Company evaluates quality, quantity, growth needs and alternate sources of water supply as well as transmission and distribution capacity to provide water service to its customers. Water supply is seasonal in nature and weather conditions can have a pronounced effect on supply. In order to ensure that the Company has adequate water supply, it uses long-term planning processes and maintains contingency plans to minimize the potential impact on service caused by climate variability and a wide range of weather fluctuations. The Company reviews current climate science and global models related to temperature, precipitation and sea level rise on an ongoing basis. Where actionable forecasts are available, the Company will use this information in its comprehensive planning studies and asset management plans. These studies and plans, which are used by the Company to develop its asset management and system reliability strategies, assess the climate risk and resiliency of the Company's water and wastewater systems over short-, medium- and long-term time horizons, and include evaluations of the availability of water supplies and system capacity against a number of different factors, projections and estimates.

In connection with supply planning for most surface or groundwater sources, the Company employs models to determine safe yields under different rainfall and drought conditions. Surface and ground water levels are routinely monitored so that supply capacity deficits may, to the extent possible, be predicted and mitigated through demand management and additional supply development. In California, where the state has been experiencing a multi-year drought, the Company utilizes multiple water supply options including numerous ground water wells in multiple aquifers as well as various long-term purchase water agreements with regional water suppliers to optimize supplies while assuring resiliency during dry years. An example of the Company's use of long-term planning to ensure that it has adequate water supply is its involvement in the Monterey Peninsula Water Supply Project (the "Water Supply Project") in California. The Water Supply Project includes the construction of a desalination plant, to be owned by the Company's California subsidiary, and the construction of wells that would supply water to the desalination plant. In addition, the Water Supply Project also includes the California subsidiary's purchase of water from a groundwater replenishment project (the "GWR Project") between Monterey One Water (formerly known as the Monterey Regional Water Pollution Control Agency) and the MPWMD. The Water Supply Project is intended, among other things, to fulfill obligations of the California subsidiary to eliminate unauthorized diversions from the Carmel River as required under orders of the California State Water Resources Control Board (the "SWRCB"). For more information, see Item 3—Legal Proceedings—Alternative Water Supply in Lieu of Carmel River Diversions and Note 16—Commitments and Contingencies—Contingencies—Alternative Water Supply in Lieu of Carmel River Diversions.

Wastewater services involve the collection of wastewater from customers' premises through sewer lines. The wastewater is then transported through a sewer network to a treatment facility, where it is treated to meet required regulatory standards for wastewater before being returned to the environment. The solid waste by-product of the treatment process is disposed of or recycled in accordance with applicable standards and regulations.

Seasonality

Customer demand for the Company's water service is affected by weather and tends to vary with temperature and amount and frequency of rainfall. Customer demand is generally greater during the warmer months, primarily due to increased water usage for irrigation systems and other outdoor water use. As such, the Company typically expects its operating revenues to be the highest in the third quarter of each year. Weather that is hotter and/or drier than average generally increases operating revenues, whereas, weather that is cooler and/or wetter than average generally suppresses customer water demand and can reduce water operating revenues. Two of the Company's jurisdictions, California and Illinois, have adopted revenue stability mechanisms which permit the Company to collect state PUC-authorized revenue for a given period that is not tied to the volume of water sold during that period, thereby lessening the impact of weather variability. See —Regulation and Rate Making for additional information regarding revenue stability mechanisms.

Other

Other primarily includes the MSG business, which enters into long-term contracts with the U.S. government to provide water and wastewater services on various military installations. The Company also has four contracts with municipal customers to operate and manage water and wastewater facilities and provide other related services through its Contract Services Group ("CSG"). Other also includes CSG, corporate costs that are not allocated to the Company's Regulated Businesses, interest income related to the seller promissory note and income from the revenue share agreement from the sale of HOS, eliminations of inter-segment transactions and fair value adjustments related to acquisitions that have not been allocated to the Regulated Businesses segment. Previously, the Company provided home services primarily to residential and smaller commercial customers through its former HOS business, which was sold on the Closing Date. As a result of the sale of HOS, the categories which were previously shown as "Market-Based Businesses" and "Other" have been combined and are shown as Other. The businesses included within Other are not subject to regulation by state PUCs and the services provided generally do not require significant capital investment. Operating revenues for Other were \$287 million for 2022, \$546 million for 2021 and \$522 million for 2020, accounting for 8%, 14% and 14%, respectively, of the Company's total operating revenues for the same periods.

Military Services Group

MSG operates on 18 military installations under 50-year contracts with the U.S. government as part of its Utilities Privatization Program. The scope of these contracts generally includes the operation and maintenance of the installation's water and wastewater systems and a capital program focused on asset replacement and, in certain instances, systems expansion. The replacement of assets assumed when a contract is awarded to MSG is completed either through a discrete set of projects executed in the first five years of the contract or through the long-term recapitalization program performed over the life of the contract. Traditionally, both of these programs are funded from the contract fee. At times, new assets are required to support the installation's mission, and the construction of these assets is funded by the U.S. government as separate modifications or amendments to the contract. The capital for these assets historically has not been funded through the Company's debt or equity issuances; rather, the Company has used limited working capital for short-term needs under these contracts. In April 2018, the U.S. Army instituted a requirement that a bidder must offer financing in its proposal for these new capital projects under existing contracts, but the U.S. Army's implementation of this requirement on existing contracts has limited the need for such financing. However, recent U.S. Army and Navy Utilities Privatization solicitations have included requirements for the successful bidder to finance discrete initial capital projects over either a five- or ten-year period after project completion. Four of MSG's current contracts require such capital project financing, which the Company is currently addressing through internal sources of liquidity.

The contract price for four of MSG's contracts with the U.S. government is subject to redetermination two years after commencement of operations, and every three years thereafter. Price redetermination is a contract mechanism to periodically adjust the service fee in the next period, to reflect changes in contract obligations and anticipated market conditions. The remaining 14 contracts with the U.S. government are subject to annual price adjustments under a mechanism called "Economic Price Adjustment." All 18 contracts could be terminated, in whole or in part, prior to the end of the 50-year term for convenience of the U.S. government, or as a result of default or non-performance by the MSG subsidiary performing the contract. In either event, pursuant to termination provisions applicable to all of these contracts, MSG would be entitled to recover allowable costs that it may have incurred under the contract, plus the contract profit margin on incurred costs. MSG's backlog of revenue associated with its contracts with the U.S. government is approximately \$6.9 billion, with an average remaining contract term of 40 years.

Sale of Homeowner Services Group

Prior to the Closing Date, the Company provided various warranty protection programs and other home services primarily to residential and smaller commercial customers through its HOS operations. On the Closing Date, the Company sold all of the equity interests in its HOS subsidiaries to an indirect, wholly owned subsidiary of funds advised by Apax Partners LLP, a global private equity advisory firm (the "Buyer"), for total consideration of approximately \$1.275 billion. See Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations and Note 5—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements for additional information.

Competition

MSG faces competition from a number of service providers, including American States Water Company and Veolia Environnement S.A.

Environmental, Health and Safety, Water Quality and Other Regulation

The Company's water and wastewater operations, including the services provided by its Regulated Businesses, MSG and CSG, are subject to extensive federal, state and local laws and regulations governing the protection of the environment, health and safety, the provision of water and wastewater services, particularly with respect to the quality of water the Company delivers to its customers, and the manner in which it collects, treats, discharges, recycles and disposes of wastewater. In the United States, these regulations are developed under federal legislation including the Safe Drinking Water Act, the Reduction of Lead in Drinking Water Act and the Clean Water Act, and under a variety of applicable state laws. Environmental, health and safety, and water quality regulations are complex and may vary from state to state in those instances where a state has adopted a standard that is more stringent than the federal standard. For example, while the EPA has announced the intention to propose drinking water regulations for two PFAS compounds (perfluorooctanoic acid, or PFOA, and perfluorooctane sulfonic acid, or PFOS) and issued non-enforceable lifetime Health Advisory Levels for PFOA, PFOS and two other PFAS compounds, the New Jersey Department of Environmental Protection has already established enforceable drinking water standards for three PFAS compounds (PFOA, PFOS, and perfluorononanoic acid, or PFNA) and the Pennsylvania Department of Environmental Protection also recently announced enforceable drinking water standards for PFOA and PFOS in advance of the federal EPA proposed regulations. The Company is also subject to various federal, state, and local laws and regulations governing the storage of hazardous materials, the management and disposal of hazardous and solid wastes, discharges to air and water, the cleanup of contaminated sites, dam safety and other matters relating to the protection of the environment and health and safety. PUCs also set conditions and standards for the water and wastewater services t

The Company maintains an environmental program that includes responsible business practices focused on compliance with environmental laws and regulations and the effective use of natural resources, recognizing that drinking water standards have generally, over time, increased in number and become increasingly more stringent. As newer or stricter standards are introduced, the Company's capital and operating costs needed to comply with them will likely increase. The Company incurs substantial costs associated with compliance with the environmental, health and safety, and water quality standards to which its operations are subject and the Company invests in technology solutions for enhanced detection and monitoring of water quality issues. The Company estimates that it will make capital expenditures of approximately \$800 million over the next five years, and \$195 million in 2023 for environmental control facilities, which the Company defines for this purpose as any project (or portion thereof) that involves the preservation of air, water or land. The Company believes that its operations are materially in compliance with, and in many cases surpass, minimum standards required by applicable environmental laws and regulations.

The Company's operations also involve the use, storage and disposal of hazardous substances and wastes. For example, the Company's water and wastewater treatment facilities store and use chlorine and other chemicals that generate wastes that require proper handling and disposal under applicable environmental requirements. The Company also could incur remedial costs in connection with any contamination relating to its operations or facilities or its off-site disposal of waste. The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA"), authorizes the EPA, and comparable state laws authorize state environmental authorities, to issue orders and bring enforcement actions to compel responsible parties to investigate and take remedial actions at any site that is determined to present an actual or potential threat to human health or the environment because of an actual or threatened release of one or more hazardous substances. Parties that generated or transported hazardous substances to such sites, as well as current and former owners and operators of such sites, may be deemed liable, without regard to fault, under CERCLA or comparable state laws. Although the Company is not aware of any material cleanup or decontamination obligations, the discovery of contamination or the imposition of such obligations in the future could result in additional costs to the Company's facilities and operations are also subject to requirements under the U.S. Occupational Safety and Health Act and inspections thereunder.

Safe Drinking Water Act

The Safe Drinking Water Act and related regulations establish national quality standards for drinking water. The EPA has issued rules governing the levels of numerous, naturally occurring and manufactured chemical and microbial contaminants and radionuclides allowable in drinking water, and continues to propose new rules. These rules also prescribe testing requirements for detecting regulated contaminants, the treatment systems that may be used for removing those contaminants, and other requirements. To date, the EPA has set standards for over 90 contaminants and water quality indicators for drinking water, and there is a process in place to make a regulatory determination on at least five additional compounds every five years.

The process of developing new drinking water standards is long and complex, but the Company actively participates with the EPA and other water industry groups by sharing research and water quality operational knowledge. See —Research and Development—Contaminants of Emerging Concern for additional information.

The Company is within the EPA's time frame for compliance with standards and rules developed under the regulation of the Safe Drinking Water Act, which includes sample collection, data analysis, and, in some instances engineering planning and implementation of treatment enhancements. Further, the EPA is actively considering regulations for a number of contaminants, including strontium, hexavalent chromium, fluoride, nitrosamines, some pharmaceuticals and certain volatile organic compounds. The Company does not anticipate that any such regulations, if enacted, will require implementation in 2023.

Although it is difficult to project the ultimate costs of complying with the above or other pending or future requirements, the Company expects current cost requirements under the Safe Drinking Water Act and other similar laws to be recoverable through the regulatory process and therefore compliance costs are not expected to have a material impact on its operations or financial condition. In addition, capital expenditures and operating costs to comply with environmental mandates have been traditionally recognized by PUCs as appropriate for inclusion in establishing rates. As a result, the Company expects to recover the operating and capital costs resulting from these pending or future requirements.

Lead and Copper Rule and Reduction of Lead in Drinking Water Act

In 1991, the EPA published the Lead and Copper Rule ("LCR") to control lead and copper in drinking water and, since that time, has issued minor revisions in 2000, 2004 and 2007, enhancing monitoring, reporting and public education requirements. In 2011, Congress enacted the Reduction of Lead in Drinking Water Act regarding the use and introduction into commerce of lead pipes, plumbing fittings for fixtures, solder and flux. While these advances have made an impact in reducing lead exposure in drinking water, legacy lead plumbing materials, primarily in building plumbing, still remain in many communities. The failure of certain water systems in the United States to comply with the requirements of the LCR has received recent media attention and scrutiny, and in certain cases, has led to a number of investigations and the imposition of significant penalties and sanctions against the operators of those systems and others. As part of its ongoing water main replacement and service line renewal projects, the Company has started to replace lead service lines ("LSLs") in accordance with current scientific guidance. Also, the Company utilizes appropriate corrosion control techniques as necessary to comply with current water quality regulatory requirements. On December 21, 2021, the EPA announced next steps to strengthen the regulatory framework on lead in drinking water, including implementing the Lead and Copper Rule Revisions ("LCRR") and indicated their intent to finalize a forthcoming Lead and Copper Rule Improvements ("LCRI") prior to October 16, 2024, the initial compliance date in the LCRR. The Company is executing an implementation strategy to comply with the initial LCRR requirement to complete a lead service line inventory. Capital expenditures and operating costs associated with the LCRI will be determined once the EPA finalizes the rule, but as previously noted, costs associated with compliance with federal water quality regulations have been traditionally recognized by PUCs as appropriate for inclusion in es

The Company currently estimates that less than 5% of the service lines within its regulated service territories contain lead on either the Company or customer portion of the service line. The Company is replacing LSLs as part of its ongoing water main replacement and service line renewal projects. The Company's goal is to work with the communities it currently serves to replace a significant majority of presently known LSLs in most of its service areas by the end of 2030, at an estimated additional investment range of \$600 million to \$1.2 billion. The Company believes this will be attainable for most of its service areas where public policy is supportive of this goal. The IIJA was signed into law in November 2021 and provides for up to \$15 billion for lead service line replacement through drinking water state revolving funds. The Company is awaiting further guidance on eligibility, the application process and the distribution of these funds. With regard to future acquisitions, the Company will work with those communities as part of the acquisition process to set LSL removal goals appropriate for those systems. The prioritization of LSL removal is dependent on several factors, including the Company's planned water main and service line renewal projects, adjacent projects by municipalities or other utilities, LCR compliance monitoring results, and cooperation with its customers with respect to replacing the customer-owned portion of the LSL as necessary. In certain cases, these and other factors may result in a shorter or longer time frame for replacement. Because replacing the external LSL in its entirety is advised by several water industry organizations including the U.S. National Drinking Water Advisory Council, the Lead Service Line Replacement Collaborative, and the American Water Works Association, the Company's preferred approach is to replace the entire external LSL if lead is found on either the Company or customer portion of the service line; full LSL replacement is also consistent with the LCRR. The L

Clean Water Act

The Clean Water Act regulates discharges from drinking water and wastewater treatment facilities into lakes, rivers, streams and groundwater. In addition to requirements applicable to the Company's wastewater collection systems, its operations require discharge permits under the National Pollutant Discharge Elimination System ("NPDES") permit program established under the Clean Water Act, which must be renewed every five years. Pursuant to the NPDES permit program, the EPA and implementing states set maximum discharge limits for wastewater effluents and overflows from wastewater collection systems. Discharges that exceed the limits specified under NPDES permits can lead to the imposition of fines and penalties, and persistent non-compliance could lead to significant fines and penalties and other compliance costs. In addition, the difficulty of obtaining and complying with NPDES permits, and renewing expiring permits, may impose time and cost burdens on the Company's operations. From time to time, discharge violations occur at the Company's facilities, some of which result in fines. The Company does not expect any such violations or fines to have a material impact on its results of operations or financial condition. The EPA has identified leveraging wastewater discharge permitting and application of biosolids, or sewage sludge, containing PFAS as areas of focus in its PFAS Strategic Roadmap. Individual states may also take action in these areas. As indicated previously, capital expenditures and operating costs to comply with environmental mandates have been traditionally recognized by PUCs as appropriate for inclusion in establishing rates. As a result, the Company expects to recover the operating and capital costs resulting from any new requirements in these areas.

Research and Development

The Company's Research and Development Program

The Company maintains an industry-leading research and development ("R&D") program that is designed to enhance its services, support its compliance activities, improve service quality and operational effectiveness, and provide environmental leadership. For more than three decades from its inception, American Water's R&D program has evolved into an industry-leading effort and has achieved numerous advancements in the science of drinking water, wastewater, and desalination. Through laboratory and industry resources and the team's expertise, efforts are focused on contaminants of emerging concern, including but not limited to COVID-19, PFAS, Legionella, cyanotoxin-forming algal blooms, a variety of pathogens (for example, Cryptosporidium, Giardia, enteric viruses, and various bacteria), microbial indicators and disinfection byproducts. The Company's R&D personnel are located at the Company's corporate headquarters and at two laboratory testing facilities in New Jersey and Illinois, the latter housing its quality control and testing laboratory, which supports the Company's R&D activities through testing and analysis.

The Company continues to leverage its expertise and collaborates with the EPA and state agencies to help establish effective environmental, health and safety, and water quality standards and regulations. This relationship includes the sharing of the Company's research, such as its treatment and distribution system optimization research and its national water quality monitoring data. The Company's engagement with the EPA provides it with early insight into emerging regulatory issues and initiatives, thereby allowing the Company to anticipate and to accommodate its future compliance requirements. The Company also frequently engages with the Centers for Disease Control and Prevention, other state environmental agencies, and national and international water research foundations. The Company believes that continued R&D activities are critical for providing safe, reliable and affordable services, as well as maintaining its leadership position in the industry, which provides the Company with a competitive advantage as it seeks business and operational growth.

Contaminants of Emerging Concern

Contaminants of emerging concern include numerous chemicals such as PFAS, pharmaceuticals, personal care products, pesticides, herbicides, antibiotic resistant bacteria (ARB), antibiotic resistant genes (ARG), endocrine disrupting compounds, microplastics and industrial chemicals, as well as certain naturally occurring microbes, such as bacteria, viruses and parasites, which have been detected in drinking water supplies, for which the risk to the public's health is not fully understood and/or has not been assessed. Technological advances have only recently made it possible to detect many of these contaminants at trace levels. The ability to detect contaminants, even at trace levels, has invited discussion about these contaminants among regulators and government agencies, which in turn shapes the public's perception of drinking water quality.

The Chemicals Abstract Service Registry contains over 203 million registered chemicals, with an estimated 1,400 species of disease-causing microbes that can affect humans. The Company is continually investigating new substances and contaminants, employing a team of scientists, engineers and public health professionals to identify threats to its water supply, to act on emerging regulations and new health advisories, and to evaluate the benefits of alternative or advanced treatment technologies. The Company utilizes water quality testing equipment and implements new and emerging technologies to help detect potential water supply contamination issues. Examples of the Company's efforts include:

- monitoring impacts of environmental pathogen loads and removal through wastewater systems;
- characterizing factors that contribute to the formation of potentially carcinogenic disinfection by-products to define best practices for their mitigation;

- advancing the science on holistic management strategies to improve distribution system water quality further;
- using its research findings to communicate information to its customers regarding potential actions to limit occurrences of Legionella in their buildings; in this regard, the Centers for Disease Control and Prevention statistics indicate that water-associated disease from Legionella is on the rise, with exposure typically associated with customerowned plumbing systems in large buildings;
- defining a framework to support management or possible future regulation of opportunistic pathogens;
- developing expanded monitoring methods for short-chain and fluorinated replacement PFAS and piloting treatment techniques;
- systematically investigating PFAS removal by treatment processes in a wide range of water matrices;
- leading a PFAS risk communication strategy for the water sector;
- using innovative technologies to detect and manage algal blooms to help prevent taste and odor events and cyanotoxins before they get to the water treatment plant;
- monitoring of taste and odor issues that impact customer satisfaction using expanded analytical methods to detect compounds, and evaluating and recommending treatment practices;
- implementing water source assessment tools, including sensors and data analytics, to evaluate and track chemical storage and aid in the identification of source water contamination events;
- developing methodology and advanced measurement techniques for contaminants of emerging concern to investigate transport, occurrence and treatment; and
- implementing activated carbon, biofiltration and ion exchange treatment to seek to control contaminants of emerging concern.

Service Company and Security

American Water Works Service Company, Inc. ("Service Company") is a wholly owned subsidiary of the Company that provides support and operational services to the Company and its affiliates. These services are predominantly provided to the Company's Regulated Businesses under contracts that have been approved by PUCs, where necessary, and are also provided to the MSG and CSG businesses as requested or may otherwise be necessary. Services provided by Service Company may include accounting and finance, administration, business development, communications, compliance, education and training, engineering, health and safety, human resources, information systems, internal audit, investor relations, legal and governance, operations, procurement, R&D, rates and regulatory support, security, risk management and insurance, treasury, and water quality. Service Company also provides customer support to the Company's Regulated Businesses, which includes call handling, billing, a major accounts program and other related services. Services are provided by Service Company at cost, enabling the Company's operating subsidiaries to fulfill their responsibilities in a cost-effective manner, while providing them access to in-depth, functional expertise.

The Company's security team provides oversight and policy guidance on physical, cyber and information security, as well as business continuity, throughout its operations. It is responsible for designing, implementing, monitoring and supporting effective physical and technical security controls for the Company's physical assets, business systems and operational technologies. Risk assessments are conducted periodically to evaluate the effectiveness of existing security controls and serve as the basis for additional safeguards, security controls and measures. Operational and technical security controls are deployed and integrated as safeguards against unauthorized access to the Company's information systems. These controls are aimed at (i) assuring the continuity of business processes that are dependent upon automation, (ii) maintaining the integrity of the Company's data, (iii) supporting regulatory and legislative compliance requirements, and (iv) maintaining safe and reliable service to the Company's customers. The Company engages in partnerships with U.S. federal, state and local law enforcement agencies to coordinate and improve the security of its water delivery systems and to safeguard its water supply and operations.

Environmental, Social Responsibility and Governance

The Company considers environmental, social responsibility and governance ("ESG") principles fundamental to its corporate strategy and values. Integration of these principles into the Company's daily operations emphasizes its belief that "how" a company operates is just as important as "what" a company does.

Delivering a reliable supply of safe, clean and affordable water to customers and treating wastewater has been fundamental to the Company's business for decades. Within every community in which the Company operates, there is an opportunity to make a sustainable positive impact on the community, reflect the communities served with diverse and skilled employees, and maintain the governance and diligence to meet or exceed service expectations for decades to come.

Key Highlights

Demonstrated ESG Leadership

- The Company's values and actions have achieved prestigious recognition by many leading firms devoted to recognizing companies that demonstrate ESG leadership.
- The Company was ranked fifth in the Energy and Utilities industry category within Newsweek's 2023 list of America's Most Responsible Companies and ranked 19th within Barron's list of the 100 Most Sustainable Companies in 2022.
- The Company was included in the Bloomberg Gender Equality Index for the fifth consecutive year, was recognized as a top-scoring company, for the fourth consecutive year, on the Disability Equality Index (DEI)®, as well as a Military Friendly Employer and Supplier.
- The Company earned the U.S. Department of Homeland Security SAFETY Act Designation for its internal enterprise security program, which includes risk management processes, personnel training and emergency exercises, and security oversight activities. The Company was the first U.S. water and wastewater company and third utility to earn this designation.

Environmental and Sustainability

• Emissions for the Company's Regulated Businesses

- The Company established medium- and long-term goals that are science-based and aligned with the Paris Agreement, for scope 1 (direct) and scope 2 (indirect, derived from the Company's purchase of power) greenhouse gas emissions reductions.
- The goals aim to reduce absolute scope 1 and 2 emissions by 50% by 2035 (from a 2020 baseline year) and achieve net zero scope 1 and scope 2 emissions by 2050.
- These goals complement the Company's existing short-term goal of reducing absolute scope 1 and 2 greenhouse gas emissions by more than 40% by 2025 (from a 2007 baseline year).
- The Company has also estimated certain of its scope 3 greenhouse gas emissions, including Categories 1 (Purchased Goods and Services), 2 (Capital Goods), 3 (Fuel and Energy Related Activities) and 6 (Business Travel).

• Water Quality & Wastewater

- The Company employs a team of R&D scientists dedicated to partnering with water research organizations on water quality and technology-based source water monitoring.
- The Company received 11 drinking water Notices of Violation ("NOVs") in 2022, two of which were related to water quality and maximum contaminant level exceedances. These metrics are determined by counting the overall number of drinking water NOVs and drinking water NOVs related to maximum contaminant level exceedances received by the Company in accordance with internally established procedures, which may exclude NOVs related to newly-acquired systems and associated with third-party violations, among others.
- The Company invested approximately \$2.3 billion in renewing and improving assets of the Regulated Businesses in 2022 and expects to invest between \$12.5 billion to \$13 billion over the next five years. Nearly 70% of the Company's capital plan is dedicated to infrastructure renewal and improvement, 10% to 12% is allocated to resiliency, and the balance is invested in water quality, operational efficiency, system expansion and other categories.

• <u>Policy Leadership</u>

- The Company collaborates and partners with federal and state agencies to support effective environmental, health and safety, and water quality and affordability standards and regulations.
- The Company participates in many industry organizations at the local, state and national level, including: The National Association of Water Companies (NAWC), American Water Works Association (AWWA) and Edison Electric Institute (EEI).

Social Responsibility

Customers

- The Company's average monthly residential water bills were approximately \$57 in 2022, or 0.77% of the median household income, based on data from the U.S. Census Bureau's American Community Survey. The Company is focused on keeping customer bills affordable compared to income, driving a culture of continuous improvement, diligent cost management, and technology enhancements that help drive affordability.
- The Company supports low-income customer assistance programs across 12 states: California, Illinois, Indiana, Iowa, Kentucky, Maryland, Missouri, New Jersey, Pennsylvania, Tennessee, Virginia and West Virginia.
- To better reflect the customers that the Company serves, the Company increased spend with diverse suppliers and small businesses in 2022 by more than 35% compared to last year.
- For 2022, the Company achieved an aggregate residential customer satisfaction rating in the top half among the Company's industry peer group. We measure performance on Customer Experience through our performance on the J.D. Power U.S. Water Utility Residential Customer Satisfaction Study. The study measures the satisfaction of residential water customers of the 90 largest water utilities in the United States and considers six factors to score companies on a 1,000-point scale: quality and reliability; price; conservation; billing and payment; communications; and customer service.

<u>Employees</u>

- During 2022, over 117,000 hours of safety training, including physical security and cybersecurity training, were completed by the Company's employees, as well as a mandatory Code of Ethics training requirement.
- The Company has made significant progress toward its zero injuries goal, reducing workplace injuries by 52% since 2017. Through year-end 2022, the Company has further reduced its OSHA recordable injury rate ("ORIR") to 0.85, the lowest in the Company's recorded history, which is approximately two times better than the water industry average.
- During 2022, approximately 83% of the Company's job requisitions had a diverse candidate pool, with approximately 46% of transfers or promotions filled by diverse individuals.

Communities

• More than \$900,000 was donated in 2022 by the Company's employees and the American Water Charitable Foundation (AWCF), a 501(c)(3) private foundation established by American Water in 2010, of which over \$430,000 was provided by employees through workplace giving campaigns including the United Way, Water For People and other volunteering giving campaigns that supported more than 1,600 public charities nationwide. These efforts were in addition to the \$2.3 million given by the AWCF through the Keep Communities Flowing Grant Program - more than \$3 million combined.

• <u>Stakeholder Engagement</u>

• In 2022, the Company completed a materiality assessment to align ESG efforts with stakeholder priorities. Participants included, among others, regulators, investors, customers, employees, and a member of the Company's Board of Directors. The results of the assessment will be included in the Company's 2021-2022 Sustainability Report, which will be published in 2023.

Governance

• Board and Committees

- The Board of Directors and each of its standing committees are led by an independent, non-executive chair.
- The Board of Directors met 15 times in 2022.
- The Board of Directors' Safety, Environmental, Technology and Operations (SETO) Committee, which oversees several key ESG matters, met four times in 2022.
- The Board of Directors reflects gender, racial and experiential diversity. As of December 31, 2022, approximately 64% of the Company's directors voluntarily self-identified as diverse based on gender, race, disability and military veteran status.
- The Company's average director tenure was approximately 7 years as of December 31, 2022.

• The members of the Company's Board of Directors have demonstrated expertise, including, among others, experience in utility operations, regulatory matters, sustainability, customer service, cybersecurity, the military, financial services and capital markets, service as a public company CEO, CFO and/or board member, and management of global operations.

ESG-Related Disclosures and Transparency

- The Company issued its annual ESG Data Summary on its website, covering sustainability performance for key metrics within the 2022 calendar year.
- In addition, the Company issued its second annual Inclusion, Diversity & Equity Report and launched a new diversity website, which describes the Company's inclusion and diversity strategies, practices, policies and programs from across the business. New disclosures include:
 - EEO-1 data for 2020 and 2021;
 - Summary of results and conclusions from the Company's third-party pay equity studies and internal labor market analyses; and
 - Two new people-related goals in the 2022 Annual Performance Plan ("APP") meant to increase representation of women and increase ethnic and racial diversity among employees at American Water, adding to existing APP sustainability goals.
- The Company discloses on its website its Political Contributions Policy, and, on an annual basis, information related to its political contributions, payments to tax-exempt organizations and trade associations, and lobbying expenditures.

Human Capital Resources

Overview

The Company's people are a critical part of its business, and the Company's investment in its people begins with the recruitment of qualified and diverse talent and continues throughout employment. The Company's employee value proposition, called weCARE, is a central part of the Company's human capital resources mission and focuses on employee experience as an influencer of an employee's opinions and emotional response about the Company as an employer.

Additionally, the Company believes that representing the communities in which it serves plays a key role in its ability to serve its customers and improves its talent. To support this proposition, the Company promotes an inclusive culture where its employees are given the opportunity to develop to their fullest potential and understand that they directly contribute to the Company's ability to operate, grow, and serve its customers. The Company also believes that investing in the safety, health and well-being of its employees is a key component of its people and culture goals, and that these investments allow employees to generate great ideas, provide quality customer service and make a difference in the lives of the Company's customers.

Employee Health and Safety

A longstanding value and strategy of the Company is safety. In this regard, the Company continues to focus on the safety of its employees and contractors so that they may return home from work in the same, or better, condition than when they arrived. The Company strives for all employees to feel emotionally safe, live a healthy lifestyle and be physically safe at work and at home. The Company assesses occupational health and safety to measure performance across the entire organization, with the ultimate goal of achieving zero incidents, injuries and fatalities for the Company's employees and contractors.

To uphold the Company's commitment to safety, the Company's employees completed over 117,000 hours of employee safety training, including physical security and cybersecurity training, during 2022. Additionally, through frequent labor-management meetings, the Company encourages open exchanges to explore new ways to further enhance safety on the job. All employees are empowered to demonstrate safety leadership by taking the time they need to complete a task safely and to use "Stop Work Authority" — the power to stop working immediately whenever they believe a task is unsafe — to personally mitigate the hazard or issue or collaborate with management to create a safe situation. The Company believes that this Stop Work Authority is so important that it is stated on the back of every employee's identification badge.

For 2022, the Company had its lowest ORIR injury rate in its recorded history, achieving an 18.8% reduction in injuries compared to 2021, taking into account a 7% decrease in labor hours due to the sales of HOS and the Company's New York subsidiary. Also, the number of Days Away Restricted or Transferred ("DART") injuries decreased by 36.1% compared to 2021. This decrease shows a significant improvement in those injuries that have a higher severity. For 2022, the Company's ORIR was 0.85 (52 injuries) and its DART rate was 0.37 (23 injuries), compared to an ORIR of 0.97 (64 injuries) and a DART rate of 0.54 (36 injuries) in 2021.

In 2022, American Water teams led by promoting safety leading indicator activities, including pre-job safety briefings and near miss reporting, and by achieving internal Certified Safe Worker designations. Near miss reports, where employees report potential hazards or incidents in a safe and secure manner, increased by 20% in 2022 over 2021, and 97% of near miss incident corrective actions were completed, with nearly 90% completed within 30 days. The Company utilizes near miss reporting and timely corrective actions as key measurements of employee engagement and safety performance.

The commitment to safety as a strategic imperative also includes building a culture of well-being where all employees can feel emotionally safe and live a healthy lifestyle. Through well-being education, the Company is able to encourage employees to take preventative actions and increase participation in annual well-care exams and cancer screenings, which increased by over 4% during 2022, compared to 2021.

Employee and Workplace Reintegration

As an essential business that provides water and wastewater services, during 2022, the Company continued to focus on the care and safety of its employees, contractors, vendors and others who work at or visit the Company's worksites. The Company launched its employee and workplace reintegration plan to bring its employees safely back to the workplace and in its field operations in the wake of easing of COVID-19-related restrictions by federal, state and local governmental and health authorities. The Company instituted greater workplace flexibility, including hybrid work opportunities, where feasible. The Company supported these reintegration efforts by keeping employees' safety, health and emotional well-being as a top priority and by continuing to follow guidance from the U.S. Centers for Disease Control and Prevention, as well as federal, state and local health authorities. The Company also continued to provide employees with temporary medical and emotional health benefits as needed during 2022. To keep employees informed on the changing conditions during reintegration and to support their emotional well-being, the Company held several all-employee podcasts featuring medical and emotional health speakers who discussed the status of the pandemic, provided updates on vaccine and booster activity, and led sessions focused on workforce and personal change management related to reintegration.

Inclusion, Diversity and Equity

During 2022, the Company continued to focus on creating a culture through its promotion of inclusion, diversity and equity. At all levels, the Company strives to understand, respect, value and provide equal opportunity to each employee, and to foster an environment where employees' differences are embraced and celebrated. The Company holds as an essential concept the right of employees to proudly share their ideas and unique perspectives in an environment built on mutual respect, equity and inclusion. The Company is committed to diversity among its workforce, executive and senior management leadership teams, by reflecting the diversity of the communities in which the Company serves. The Company expects all leaders to lead with inclusion, diversity and equity.

In 2022, the Company included in its APP new workforce diversity performance goals designed to increase the representation of women and ethnic and racial diversity in the Company's workforce. The goals measure the percentage of female and racial/ethnic diversity among the Company's workforce based on voluntary self-identification. In addition, the Company continues to hold its leaders accountable for developing a diverse workforce by maintaining management level representation goals.

In addition, in 2022, the Company introduced its DiversityatAW.com website to provide transparency and communicate progress on the Company's workforce diversity initiatives. This web site currently includes, among other information, the Company's ID&E report, its EEO-1 data for 2021, key employee diversity metrics (which are updated quarterly), and a discussion of the Company's pay equity study and internal labor market analysis.

During 2022, 83.1% of the Company's hiring candidate pools were diverse. Additionally, for 2022, approximately 46.4% of the Company's internal employee transfers and promotions were filled with a diverse individual, reflecting the Company's commitment to employee development and career growth as well as the Company's focus on diversity, inclusion and equity. For purposes of these metrics, diversity refers to gender, race, ethnicity, disability, veteran/military spouse status, and LGBTQ+ status, all based on voluntary, self-identified employee information.

The Company maintains active memberships with groups such as Hiring our Heroes, Military Spouse Employment Partnership, American Corporate Partners, CEO Action for Diversity and Inclusion, Disability: IN, Paradigm for Parity, and Out and Equal, to further enhance its ability to recruit and retain diverse employees. Among this year's recognitions, the Company was designated as a 2022 Military Friendly® Silver Employer and recognized by Military Times for its industry-leading efforts on hiring and supporting U.S. military veterans.

The Company was also a top scorer in the 2022 Disability Equality Index for the fourth consecutive year and was recognized by U.S. Veterans Magazine as a veteran-friendly company and as an organization with a veteran-friendly supplier diversity program. The Company also received the 2022 DiversityInc Top Utility recognition for 2022.

In keeping with the Company's values, the Company does not tolerate discrimination, harassment or retaliation by or toward any employee, vendor, customer or other person in its workplace. All employees are required to complete anti-harassment, workplace respect and dignity, unconscious bias and inclusion and diversity training. In addition, annual Code of Ethics training is provided to all employees, which includes instructions on using the Company's anonymous hotline for reporting potential Code of Ethics violations.

The Company's four Employee Business Resource Groups ("EBRGs"), which represent diverse employee demographics (Women, African American/Black, LGBTQ+ and Disabilities/Caregivers), strive to create measurable and long-lasting positive impacts on employees' careers, as well as the Company's culture and communities in which it serves. EBRG members participate in community events throughout the year, which highlight the importance of supporting community partnerships. For example, employees participated in the annual Juneteenth Unity Walk that supported the National Alliance on Mental Illness, an organization that provides advocacy, education, and support for, and public awareness of, mental illness.

Total Rewards

American Water's health and well-being programs are approached holistically by offering the following benefits, among others: medical, prescription, dental, vision, disability, a retirement savings plan, and life insurance coverage, as well as a health and wellness program and a menu of additional voluntary benefits. The Company's Total Rewards programs are designed to reflect many aspects of employee health and well-being, cultivate an inclusive workforce, and motivate, attract and retain talent to seek to achieve the Company's strategic business priorities.

As part of Total Rewards, the Company provides a comprehensive compensation and benefit program designed to recognize the vital roles the Company's employees play. Further, all the Company's employees, including those who are union-represented, participate in the APP, to promote alignment between performance-based compensation and the Company's short-term performance goals. As part of its commitment to providing an inclusive and equitable culture for all employees, the Company regularly reviews pay equity to make sure pay decisions are based on the responsibilities, talents and skills of our employees, rather than, factors such as gender, race or ethnicity.

All employees who average 30 hours or more per week receive full-time benefits. Approximately 90% of all benefit eligible employees are enrolled in the Company's healthcare benefits. Full-time employees pay approximately 16% of the total cost of medical, dental and vision coverage. Additional medical benefits include coverage for applied behavior analysis, autism treatment, transgender services and hearing aids, as well as a fertility assistance benefit. The Company also offers additional employment benefits, including holiday, vacation and sick time, which are at levels generally greater than or equal to those offered by other companies in the utility industry.

Every five years, the Company negotiates national health and welfare benefits with its union-represented employees. On November 30, 2022, a five-year extension of the Company's national benefits agreement with its union-represented employees was reached and ratified, effective through July 2028. See —Workforce Data below for more information. The extension agreement includes, among other things, a revised benefit cost sharing allocation, six weeks of paid family leave, an increase in the target payout under the APP for covered employees, and coverage for infertility treatment beginning in plan year 2025.

Talent Development

The Company partners with business leaders to understand the key behaviors and competencies required to operate safely and effectively, and to foster professional growth with the goal to create and deploy programs designed to attract, motivate, develop and retain talented employees, and foster a learning culture. The Company also requires every employee, including its union-represented employees, to complete a minimum of 25 hours of training each year. Approximately 96.7% of active full-time employees hired before October 1, 2022, met this requirement for 2022, with over 302,000 hours of total training completed during the year. In addition to required role-based training, managers assist employees to identify professional development opportunities, utilizing a framework of on-the-job learning, social learning, to help them reach their full potential and grow their careers.

Developing talent to provide a pathway to executive leadership is a critical priority for the Company. During 2022, the Company engaged in succession planning activities for the Company's business-critical and business-impact positions. These succession plans aid in providing continued leadership for the growth and future of the Company's business, while also seeking to promote diversity, retention and development. In addition to succession of executive and senior leadership roles, in 2022, the Company initiated talent reviews, which served to identify critical skills and competency areas as well as top and emerging talent with a focus on diversity, and supported a discussion of strengths, gaps and development plans. Talent reviews were conducted for a select group of employees, including employees who are being assessed for senior leadership or other critical roles.

Employee Experience

The Company has established its weCARE employee value proposition that focuses on employee experience as an influencer of an employee's opinions and emotional response about the Company as an employer. weCARE is composed of five elements: deeper connections; personal growth; shared purpose; flexibility; and well-being. weCARE represents the Company's commitment to value its employees and build a safe, healthy and inclusive culture where every employee knows their value and is appreciated for their talents and commitment to supporting the Company's success. The Company offers employees programs covering each of the five components of weCARE. The Company is committed to improving the employee experience by listening to employees through focus group discussions and employee surveys, among other tools. To that end, the Company captures employee feedback, which helps the Company understand how employees are feeling and permits appropriate refinement of the Company's employee programs, benefits and support.

In early 2022, the Company introduced a new development role of Culture Champion. Each Culture Champion is responsible for partnering with their local leadership and managing and communicating local activities and actions that seek to advance the Company's culture.

Workforce Data

As of December 31, 2022, the Company had approximately 6,500 employees. For 2022, the Company's employee turnover rate, which the Company defines as the ratio of the number of separated employees to the 12-month average headcount during 2022, was 12.3%, down from 13.1% in 2021. American Water seeks to reduce regrettable employee turnover by assessing the effectiveness of weCARE and through its efforts to foster the Company's employee experience.

As of December 31, 2022, approximately 47% of the Company's workforce was represented by unions, which include 75 collective bargaining agreements with 14 different unions. In 2022, the Company entered into three new collective bargaining agreements that cover approximately 215 employees, and renegotiated all 21 collective bargaining agreements that were set to expire during the year. During 2023, 18 of the Company's collective bargaining agreements will expire in accordance with their terms and the Company expects to be able to negotiate these agreements during the year. In addition, on November 30, 2022, a five-year extension of the Company's national benefits agreement was ratified through July 31, 2028. This agreement covers approximately 3,000 of the Company's union-represented employees and their families and provides them with healthcare and other benefits. The Company also collaborates with union leadership on topics such as safety, customer, technology and employee benefits in forums such as the Joint Healthcare Committee, National Labor Management Committee and the annual Labor Management Conference.

Board Oversight

The Executive Development and Compensation Committee (ED&CC) of the Board of Directors establishes and reviews the Company's overall compensation philosophy and oversees the compensation and benefits plans and programs for its executive officers. The ED&CC oversees the process of planning for executive officer succession. It also provides oversight of the Company's inclusion, diversity and equity programs and initiatives. Further, the ED&CC is responsible for reviewing and assessing, at least annually, the Company's culture and related culture engagement, its organizational and leadership development plans and programs, and its programs designed to identify, attract and retain high-potential employees.

Information About Our Executive Officers

Presented in the table below are the name, age, offices held and business experience for each of the Company's executive officers, as of February 15, 2023:

Name	Age	Office and Experience
M. Susan Hardwick	60	President and Chief Executive Officer. Ms. Hardwick has served as President and Chief Executive Officer of the Company since February 2, 2022. She joined the Company in June 2019 as the Company's Executive Vice President—Finance and served as the Company's Chief Financial Officer from July 2019 until May 16, 2022. From December 7, 2021 until January 31, 2022, Ms. Hardwick also served as Interim Chief Executive Officer. Prior to joining the Company, Ms. Hardwick served as the Executive Vice President and Chief Financial Officer of Vectren Corporation, which was sold to CenterPoint Energy, Inc., an electric and natural gas utility, on February 1, 2019. Ms. Hardwick joined Vectren Corporation in January 2000 and served in a variety of positions, including: Vice President, Controller and Assistant Treasurer; Senior Vice President, Finance; Senior Vice President, Chief Financial Officer; and Executive Vice President and Chief Financial Officer. Prior to joining Vectren, Ms. Hardwick was Assistant Corporate Comptroller at Cinergy Corp. She began her career with Arthur Andersen & Co. Ms. Hardwick is a Certified Public Accountant. Since September 2020, Ms. Hardwick has served on the Board of Directors of New Jersey Resources Corporation, a diversified energy services company, where she is currently serving a three-year term expiring in 2024, and since January 1, 2021, she has served as a member of its Audit Committee.
James H. Gallegos	62	Executive Vice President and General Counsel. Mr. Gallegos joined the Company on April 1, 2022 as its Executive Vice President and General Counsel. Prior to joining the Company, since February 2020, Mr. Gallegos served as the Executive Vice President, General Counsel and Corporate Secretary of Alliant Energy Corporation, a regulated, investor-owned public utility holding company, and its two utility subsidiaries (collectively, "Alliant Energy"). From February 2015 to February 2020, Mr. Gallegos served as Senior Vice President, General Counsel and Corporate Secretary of Alliant Energy. Prior to that, Mr. Gallegos served in various positions with U S WEST, Inc., which merged with Qwest Communications International Inc. in 2000.
John C. Griffith	56	Executive Vice President and Chief Financial Officer. Mr. Griffith joined the Company on May 16, 2022 as its Executive Vice President and Chief Financial Officer. Prior to joining the Company, since 2014, Mr. Griffith served as Managing Director, Mergers and Acquisitions, for Bank of America Securities' Global Regulated Utilities and Renewable Energy practice. Prior to joining Bank of America Securities, from 2008 to 2014, Mr. Griffith served as the Chief Executive Officer of HighWave Energy, a renewable fuels start-up company, and from 1995 to 2008, he served in various capacities of increasing responsibility with Merrill Lynch & Co.
Melanie M. Kennedy	49	Executive Vice President, Chief Human Resources Officer. Ms. Kennedy has served as the Company's Executive Vice President, Chief Human Resources Officer since December 2021, and as Senior Vice President, Chief Human Resources Officer from December 2020 to December 2021. Prior to that, she served as the Company's Senior Vice President, Human Resources from March 2017 to December 2020. From August 2014 through February 2017, Ms. Kennedy served as the Company's Vice President, Human Resources, and from August 2012 to August 2014, she served as Director, Human Resources in the Company's Northeast Division. Ms. Kennedy initially joined the Company in 2007, and before that time, she practiced law for nine years.
Cheryl Norton	58	Executive Vice President and Chief Operating Officer. Ms. Norton has over 30 years of employment with the Company serving in various roles, including operational leadership, environmental stewardship, laboratory management and research. She has been serving as the Company's Executive Vice President and Chief Operating Officer since March 2021 and served as its Senior Vice President, Chief Environmental Officer from March 2020 to March 2021. She was also the Company's Senior Vice President, Eastern Division and President of its New Jersey subsidiary from March 2019 to March 2021. Prior to that, Ms. Norton served as President of the Company's Missouri subsidiary from November 2015 to March 2019, and President of its Kentucky subsidiary from January 2011 until November 2015. In addition, Ms. Norton also serves as a member of the Board of Directors of the Water Research Foundation.

Each executive officer is elected annually by the Board of Directors and serves until their respective successor has been elected and qualified or their earlier death, resignation or removal.

Available Information

The Company is subject to the reporting requirements of the Exchange Act. The Company files or furnishes annual, quarterly and current reports, proxy statements and other information with the SEC. Readers may obtain a copy of the Company's Annual Reports on Form 10-K, its Quarterly Reports on Form 10-Q or its Current Reports on Form 8-K, or any amendments to them, that are filed with or furnished to the SEC, free of charge, from the Investor Relations section of the Company's website, *https://ir.amwater.com*, as soon as reasonably practicable after the Company files or furnishes the information to the SEC.

The Company maintains a website at https://amwater.com. Information contained on the Company's website, including its Sustainability Report, its Inclusion, Diversity & Equity Annual Report, and other reports or documents, including the information and data on the Company's diversity website https://Diversityataw.com, shall not be deemed incorporated into, or to be a part of, this report, and any website references included herein are not intended to be made through active hyperlinks. The Company recognizes its website as a key channel of distribution to reach public investors and as a means of disclosing information to comply with SEC Regulation FD.

The American Water corporate governance guidelines and the charters for each of the standing committees of the Board of Directors, together with the American Water Code of Ethics and additional information regarding the Company's corporate governance, are available on its Investor Relations website, https://ir.amwater.com, and will be made available, without charge, in print to any shareholder who requests such documents from its Investor Relations Department, American Water Works Company, Inc., 1 Water Street, Camden, NJ, 08102.

ITEM 1A. RISK FACTORS

We operate in a market and regulatory environment that involves significant risks, many of which are beyond our control. In addition to the other information included or incorporated by reference in this Annual Report on Form 10-K, the following material factors should be considered in evaluating our business and future prospects. Any of the following risks, either alone or taken together, could materially and adversely affect our business, financial position, results of operations, cash flows and liquidity.

Risks Related to Our Industry and Business Operations

Our Regulated Businesses are subject to extensive regulation by state PUCs and other regulatory agencies, which significantly affects our business, financial condition, results of operations and cash flows. Our Regulated Businesses also may be subject to fines, penalties and other sanctions for an inability to meet these regulatory requirements.

Our Regulated Businesses provide water and wastewater services to our customers through subsidiaries that are subject to regulation by state PUCs. This regulation affects the rates we charge our customers and has a significant impact on our business and operations. Generally, the state PUCs authorize us to charge rates that they determine are sufficient to recover our prudently incurred operating expenses, including, but not limited to, operating and maintenance costs, depreciation, financing costs and taxes, and provide us with the opportunity to earn an appropriate rate of return on invested capital.

Our ability to successfully implement our business plan and strategy depends on the rates authorized by the various state PUCs. We periodically file rate increase applications with state PUCs. The ensuing administrative process may be lengthy and costly. Our rate increase requests may or may not be approved, or may be partially approved, and any approval may not occur in a timely manner. Moreover, a PUC may not approve a rate request in an amount that is sufficient to:

- cover our cost of operations, including: purchased water; chemicals; and fuel, power and other commodities used in our operations;
- cover our operational labor and labor-related expenses, including without limitation costs and expenses associated with our pension and other post-employment benefits;
- enable us to recover our investment; and
- provide us with an opportunity to earn an appropriate rate of return on our investment.

Approval by the PUCs is also required in connection with other aspects of our Regulated Businesses, which are required to have numerous permits, approvals and certificates from the PUCs that regulate their businesses and authorize acquisitions, dispositions, debt and/or equity financing, and, in certain cases, affiliated transactions. Some state PUCs are empowered to impose financial penalties, fines and other sanctions for non-compliance with applicable rules and regulations. Although we believe that each utility subsidiary has obtained or sought renewal of the material permits, approvals and certificates necessary for its existing operations, we are unable to predict the impact that future regulatory activities may have on our business.

In any of these cases, our business, financial condition, results of operations, cash flows and liquidity may be adversely affected. Even if the rates approved are sufficient, we face the risk that we will not achieve the rates of return on our invested capital to the extent permitted by state PUCs. This could occur if certain conditions exist, including, but not limited to, (i) water usage is less than the level anticipated in establishing rates, (ii) customers increase their conservation efforts, (iii) we experience unusual or emergent situations, events or conditions (including with respect to the COVID-19 pandemic), or (iv) our investments or expenses prove to be higher than the levels estimated in establishing rates. It may be difficult to predict the outcome or impact of these events on us or the actions that may be taken by the PUCs or other governmental authorities in response thereto.

Our operations and the quality of water we supply are subject to extensive and increasingly stringent environmental, water quality and health and safety laws and regulations, including with respect to contaminants of emerging concern, compliance with which could impact both our operating costs and capital expenditures, and violations of which could subject us to substantial liabilities and costs, as well as damage to our reputation.

Our water and wastewater operations are subject to extensive federal, state and local laws and regulations. These requirements include, among others, CERCLA, the Clean Water Act, the Safe Drinking Water Act, the LCRR and other federal and state requirements. For example, state PUCs and environmental regulators set conditions and standards for the water and wastewater services we deliver. If we deliver water or wastewater services to our customers that do not comply with regulatory standards, or otherwise violate environmental laws, regulations or permits, or other health and safety and water quality regulations, we could incur substantial fines, penalties or other sanctions or costs, as well as damage to our reputation. In the most serious cases, regulators could reduce requested rate increases or force us to discontinue operations and sell our operating assets to another utility or to a municipality. Given the nature of our business which, in part, involves providing water service for human consumption, any potential non-compliance with, or violation of, environmental, water quality and health and safety laws or regulations would likely pose a more

significant risk to us than to a company not similarly involved in the water and wastewater industry.

In addition, CERCLA authorizes the EPA to issue orders and bring enforcement actions to compel responsible parties to investigate and take remedial actions with respect to actual or threatened releases of hazardous substances, and can impose joint and several liability, without regard to fault, on responsible parties for the costs thereof. We are also required to obtain various environmental permits from regulatory agencies for our operations.

We incur substantial operating and capital costs on an ongoing basis to comply with environmental, water quality and health and safety laws and regulations. These laws and regulations and their enforcement, have become more stringent over time, and new or stricter requirements could increase our costs. Although we may seek to recover ongoing compliance costs in our Regulated Businesses through customer rates, there can be no guarantee that the various state PUCs or similar regulatory bodies that govern our Regulated Businesses would approve rate increases that would enable us to recover such costs or that such costs will not materially and adversely affect our financial condition, results of operations, cash flows and liquidity.

We may also incur liabilities if, under environmental laws and regulations, we are required to investigate and clean up environmental contamination, including potential releases of hazardous chemicals, such as chlorine, which we use to treat water, or at off-site locations where we have disposed of residual waste or caused an adverse environmental impact. The discovery of previously unknown conditions, or the imposition of cleanup obligations in the future, could result in significant costs and could adversely affect our financial condition, results of operations, cash flows and liquidity. Such remediation costs may not be covered by insurance and may make it difficult for us to secure insurance at acceptable rates in the future.

Attention is being given to contaminants of emerging concern, including, without limitation, chemicals and other substances that currently do not have any regulatory standard in drinking water or have been recently created or discovered (including by means of scientific achievements in the analysis and detection of trace amounts of substances). Examples of sources of contaminants include, but are not limited to, newly created chemical compounds (including, for example, manufactured nanomaterials); human and veterinary products; perfluorinated and polyfluorinated compounds; bacteria, microbes, viruses (including COVID-19), amoebae and other pathogens; and residual by-products of disinfection. We rely upon governmental agencies to set appropriate regulatory standards to protect the public from these and other contaminants, and our role is to provide service that meets these standards, if any. In some of our states, PUCs may disapprove of cost recovery, in whole or in part, for implementation of treatment infrastructure for a contaminant in the absence of a regulatory standard. Furthermore, given the rapid pace at which these contaminants are being created and/or discovered, we may not be able to detect and/or mitigate all such substances in our drinking water system or supplies, which could have a material adverse impact on our financial condition, results of operations and reputation. In addition, we believe these contaminants may form the basis for additional or increased federal or state regulatory initiatives and requirements in the future, which could significantly increase the cost of our operations.

Limitations on availability of water supplies or restrictions on our use of water supplies because of government regulation or action may adversely affect our access to sources of water, our ability to supply water to customers or the demand for our water services.

Our ability to meet the existing and future demand of our customers depends on the availability of an adequate supply of water. As a general rule, sources of public water supply, including rivers, lakes, streams, groundwater aquifers and recycled water sources, are held in the public trust and are not generally owned by private interests. As a result, we typically do not own the source water that we use in our operations, and the availability of our water supply is established through allocation rights (determined by legislation or court decisions) and passing-flow requirements set by governmental entities or by entering into water purchase agreements. These requirements, which can change from time to time, and vary by state or region, may adversely impact our water supply. Supply issues, such as drought, overuse of sources of water, the protection of threatened species or habitats, contamination or other factors may limit the availability of ground and surface water. If we are unable to secure available or alternative sources of water, our business, financial condition, results of operations and cash flows could be adversely affected.

For example, in our Monterey County, California operations, we are seeking to augment our sources of water supply, principally to comply with the cease and desist orders issued by the SWRCB in July 1995 and October 2009 (the "1995 Order," the "2009 Order" and, as amended in July 2016, the "2016 Order" and, collectively, the "Orders") that require Cal Am to significantly decrease its diversions from the Carmel River in accordance with a reduction schedule that terminated on December 31, 2021. See Item 3—Legal Proceedings—Alternative Water Supply in Lieu of Carmel River Diversions, which includes additional information regarding this matter. We are also required to augment our Monterey County sources of water supply to comply with the requirements of the Endangered Species Act. For 2022, Cal Am complied with the diversion limitations contained in the 2016 Order, but continued compliance with these limitations in 2023 and future years may be impacted by a number of factors, including without limitation continued drought conditions in California and the exhaustion of water supply reserves, and will require successful development of alternate water supply sources sufficient to meet customer demand. While the Company cannot currently predict the likelihood or result of any adverse outcome associated with these matters, further attempts to comply with the Orders may result in material

additional costs or obligations, including fines and penalties against Cal Am in the event of noncompliance with the Orders, which could have a material adverse effect upon us and our business, results of operations and cash flows.

Service disruptions caused by severe weather conditions, climate variability patterns or natural or other disasters may disrupt our operations or reduce the demand for our water services, which could adversely affect our financial condition, results of operations, cash flows and liquidity.

Service interruptions due to severe weather, climate variability patterns and natural or other events are possible across all our businesses. These include, among other things, storms, freezing conditions, high wind conditions, hurricanes, tornadoes, earthquakes, landslides, drought, wildfires, coastal and intercoastal floods or high water conditions, including those in or near designated flood plains, pandemics (including COVID-19) and epidemics, severe electrical storms, sinkholes and solar flares. Weather and other natural events such as these may affect the condition or operability of our facilities, limiting or preventing us from delivering water or wastewater services to our customers, or requiring us to make substantial capital expenditures to repair any damage. Tariffs in place or cost recovery proceedings with respect to our Regulated Businesses may not provide reimbursement to us, in whole or in part, for any of these impacts.

Government restrictions on water use may also result in decreased use of water services, even if our water supplies are sufficient to serve our customers, which may adversely affect our financial condition, results of operations and cash flows. Seasonal and other drought conditions, including, for example, those currently being experienced in California, that may impact our water services are possible across all of our service areas. Governmental restrictions imposed in response to a drought may apply to all systems within a region independent of the supply adequacy of any individual system. Responses may range from voluntary to mandatory water use restrictions, rationing restrictions, water conservation regulations, and requirements to minimize water system leaks. While expenses incurred in implementing water conservation and rationing plans may generally be recoverable provided the relevant PUC determines they were reasonable and prudent, we cannot be certain that any such expenses incurred will, in fact, be fully recovered. Moreover, reductions in water consumption, including those resulting from installation of equipment or changed consumer behavior, may persist even after a drought has ended and restrictions are lifted, which could adversely affect our business, financial condition, results of operations and cash flows.

Climate variability may cause increased volatility in weather and may impact water usage and related revenue or require additional expenditures, all of which may not be fully recoverable in rates or otherwise.

The issue of climate variability is receiving increasing attention nationally and worldwide. There is consensus among climate scientists that there will be worsening of weather volatility in the future associated with climate variability. Many climate variability predictions present several potential challenges to water and wastewater utilities, including us, such as:

- increased frequency and duration of droughts;
- increased precipitation and flooding;
- increased frequency and severity of storms and other weather events;
- challenges associated with changes in temperature or increases in ocean levels;
- potential degradation of water quality;
- decreases in available water supply and changes in water usage patterns;
- increases in disruptions in service;
- increased costs to repair damaged facilities; or
- increased costs to reduce risks associated with the increasing frequency and severity of natural events, including to improve the resiliency and reliability of our water and wastewater treatment and conveyance facilities and systems.

Because of the uncertainty of weather volatility related to climate variability, we cannot predict its potential impact on our business, financial condition, results of operations, cash flows and liquidity. Furthermore, laws and regulations have been enacted or proposed that seek to reduce or limit greenhouse gas emissions and require or would require additional reporting and monitoring, and these regulations may become more pervasive or stringent in light of changing governmental agendas and priorities, although the exact nature and timing of these changes is uncertain. Although some or all potential expenditures and costs associated with the impact of climate variability and related laws and regulations on our Regulated Businesses could be recovered through rates, infrastructure replacement surcharges or other regulatory mechanisms, there can be no assurance that state PUCs would authorize rate increases to enable us to recover such expenditures and costs, in whole or in part.

The current regulatory rate setting process may result in a significant delay, also known as "regulatory lag," from the time that we invest in infrastructure improvements, incur increased operating expenses as a result of inflation or other factors, incur increased cost of capital, including as a result of increasing short- and long-term rates, or experience declining water usage, to the time at which we can seek to address these events in rate case applications; our inability to mitigate or minimize regulatory lag could adversely affect our business.

There is typically a delay, known as "regulatory lag," between the time our Regulated Businesses make a capital investment or incur an operating expense increase and the time when those costs are reflected in rates. In addition, billings permitted by state PUCs typically are, to a considerable extent, based on the volume of water usage in addition to a minimum base rate. Thus, we may experience regulatory lag between the time our revenues are affected by declining usage and the time we are able to adjust the rate per gallon of usage to address declining usage. Our inability to mitigate or reduce regulatory lag could have an adverse effect on our financial condition, results of operations, cash flows and liquidity.

We endeavor to mitigate or reduce regulatory lag by pursuing constructive regulatory practices. For example, two of our states have approved revenue stability mechanisms that adjust rates periodically to ensure that a utility's revenue will be sufficient to cover its costs regardless of sales volume, including recognition of declining sales resulting from reduced consumption, while providing an incentive for customers to use water more efficiently. In addition, 10 of our state PUCs permit rates to be adjusted outside of the general rate case application process through surcharges that address certain capital investments, such as replacement of aging infrastructure. These surcharges are adjusted periodically based on factors such as project completion or future budgeted expenditures, and specific surcharges are eliminated once the related capital investment is incorporated in new PUC approved rates. Furthermore, in setting rates, nine of our state PUCs allow us to use future test years, which extend beyond the date a rate request is filed to allow for current or projected revenues, expenses and investments to be reflected in rates on a more timely basis. Other examples of such regulatory practices include expense mechanisms that allow us to increase rates for certain cost increases that are beyond our control, such as purchased water costs, property or other taxes, or power, conservation, chemical or other expenditures. These mechanisms enable us to adjust rates in less time after costs have been incurred than would be the case under a general rate case application process without the mechanisms.

While these mechanisms have mitigated or reduced regulatory lag in several of our regulated states, we continue to seek approval of regulatory practices to mitigate or reduce regulatory lag in those jurisdictions that have not approved them. Furthermore, PUCs may fail to adopt new surcharges and existing mechanisms may not continue in their current form, or at all, or we may be unable or become ineligible to continue to utilize certain of these mechanisms in the future. Although we intend to continue our efforts to seek state PUC approval of constructive regulatory practices to mitigate or reduce regulatory lag, our efforts may not be successful, or even if partially successful, our business, financial condition, results of operations, cash flows and liquidity may be materially and adversely affected.

Changes in laws and regulations can significantly and materially affect our business, financial condition, results of operations, cash flows and liquidity.

The impact of any future revisions or changes in interpretations of existing regulations or the adoption of new laws and regulations applicable to our Regulated Businesses is uncertain. Changes in laws or regulations, the imposition of additional laws and regulations, changes in enforcement practices of regulators, government policies or court decisions can materially affect our operations, results of operations and cash flows. Certain of the individuals who serve as regulators are elected or political appointees. Therefore, elections which result in a change of political administration or new appointments may also result in changes of the individuals who serve as regulators and changes in the policies of the regulatory agencies that they serve. New laws or regulations, new interpretations of existing laws or regulations, changes in agency policy, including those made in response to shifts in public opinion, or conditions imposed during the regulatory hearing process could have the following consequences, among others:

- making it more difficult for us to increase our rates and, as a consequence, to recover our costs or earn our expected rates of return;
- changing the determination of the costs, or the amount of costs, that would be considered recoverable in rate cases and other regulatory proceedings;
- restricting our ability to terminate our services to customers who owe us money for services previously provided or limiting our bill collection efforts;
- requiring us to provide water or wastewater services at reduced rates to certain customers;
- limiting or restricting our ability to acquire water or wastewater systems, purchase or dispose of assets, or issue long-term debt or equity, or making it less cost-effective for us to do so:
- negatively impacting, among other things: (i) tax rates or positions or the deductibility of expenses under federal or state tax laws, (ii) the availability or amount of, or our ability to comply with the terms and conditions of, tax credits or tax

abatement benefit, (iii) the amount of taxes owed, (iv) the timing of tax effects on rates or (v) the ability to utilize our net operating loss carryforwards;

- changing regulations that affect the benefits we expected to receive when we began offering services in a particular area;
- increasing the associated costs of, or difficulty complying with, environmental, health, safety, consumer privacy, water quality, and water quality accountability laws and regulations to which our operations are subject;
- changing or placing additional limitations on change in control requirements relating to any concentration of ownership of our common stock;
- making it easier for governmental entities to convert our assets to public ownership via condemnation, eminent domain or other similar process, or for governmental agencies or private plaintiffs to assess liability against us for damages under these or similar processes;
- increasing the costs or difficulty of complying with proposed changes to federal contractor affirmative action audits;
- placing limitations, prohibitions or other requirements with respect to the sharing of information and participation in transactions by or between a regulated subsidiary and us or our other affiliates, including Service Company and any of our other subsidiaries;
- restricting or prohibiting our extraction of water from rivers, streams, reservoirs or aquifers; and
- revoking or altering the terms of a CPCN issued to us by a state PUC or other governmental authority.

Regulatory and environmental risks associated with the collection, treatment and disposal of wastewater may impose significant costs and liabilities.

The wastewater collection, treatment and disposal operations of our subsidiaries are subject to substantial regulation and involve environmental risks. If collection, treatment or disposal systems fail, overflow, or do not operate properly, untreated or inadequately treated wastewater or other contaminants could spill onto nearby properties or into nearby streams and rivers, causing damage to persons or property, injury to aquatic life and economic damages. This risk is most acute during periods of substantial rainfall or flooding, which are the main causes of sewer overflow and system failure. Liabilities resulting from such damage could adversely and materially affect our business, financial condition, results of operations and cash flows. Certain of our wastewater systems have commercial and industrial customers that are subject to specific limitations on the type, character and strength of the wastewater they are permitted to discharge into our systems. The failure by these commercial and industrial customers to comply with their respective discharge requirements could, in turn, negatively impact our operations, damage our facilities or cause us to exceed applicable discharge limitations and requirements. Liabilities resulting from such exceedance events could adversely and materially affect our business, financial condition, results of operations and cash flows.

A loss of one or more large industrial or commercial customers could have a material adverse impact upon the results of operations of one or more of our Regulated Businesses.

Adverse economic conditions may cause our customers, particularly industrial and large commercial customers, to curtail operations. A curtailment of operations by such a customer typically results in reduced water usage by that customer. In more severe circumstances, the decline in usage could be permanent. Any decrease in demand resulting from difficult economic conditions affecting these customers could adversely affect our financial condition and results of operations. Tariffs in place with respect to our Regulated Businesses may not reimburse us, in whole or in part, for any of these impacts.

Our Regulated Businesses require significant capital expenditures and may suffer if we fail to secure appropriate funding to make investments, experience increases in short- and long-term interest rates or if we experience delays in completing major capital expenditure projects.

The water and wastewater utility business is capital intensive. We invest significant amounts of capital to add, replace and maintain property, plant and equipment, and to improve aging infrastructure. In 2022, we invested \$2.3 billion in net Company-funded capital improvements. The level of capital expenditures necessary to maintain the integrity of our systems will continue into the future and, we believe, will increase. We expect to fund capital improvement projects using cash generated from operations (including, among other things, a portion of the net proceeds from the sale of HOS) borrowings under our revolving credit facility and commercial paper programs and issuances of long-term debt and equity. We may not be able to access our revolving credit facility or the commercial paper, long-term debt and equity capital markets, when necessary or desirable to fund capital improvements on favorable terms or at all. If we are not able to obtain sufficient financing, we may be unable to maintain our existing property, plant and equipment, fund our capital investment strategies or expand our rate base to enable us to meet our growth targets. Even with adequate financial resources to make required capital expenditures, we face the additional risk that we will not complete our major capital projects on time, as a result of supply chain interruptions, construction delays, permitting delays, labor shortages or other disruptions, environmental restrictions, legal and regulatory challenges, or other obstacles. Each of these outcomes could adversely affect our business, financial condition, results of operations and cash flows.

Aging infrastructure may lead to service disruptions, property damage and increased capital expenditures and O&M expenses and other costs, all of which could negatively impact our financial results.

We have risks associated with aging infrastructure, including water and sewer mains, pumping stations and water and wastewater treatment facilities. Additionally, we may have limited information regarding buried and newly acquired assets, which could challenge our ability to conduct efficient asset management and maintenance practices. Assets that have aged beyond their expected useful lives may experience a higher rate of failure. Failure of aging infrastructure could result in increased capital expenditures and O&M expenses and other costs, and negatively impact our future O&M efficiency ratio. In addition, failure of aging infrastructure may result in property damage, and in safety, environmental and public health impacts. To the extent that any increased costs or expenditures are not fully recovered in rates, our results of operations, liquidity and cash flows could be negatively impacted.

Seasonality could adversely affect the volume of water sold and our revenues.

The volume of water we sell during the warmer months, typically in the summer, is generally greater than during other months, due primarily to increased water usage for irrigation systems, swimming pools, cooling systems and other applications. Throughout the year, and particularly during typically warmer months, the volume of water sold tends to vary with temperature, rainfall levels and rainfall frequency. In the event that temperatures during the typically warmer months are cooler than normal, or if there is more rainfall than normal, the amount of water we sell may decrease and adversely affect our revenues.

Two of our jurisdictions, California and Illinois, currently have revenue stability mechanisms that permit us to recover the revenues authorized in a general rate case, regardless of sales volume. Revenue stability mechanisms are designed to recognize declining sales resulting from reduced consumption, while providing an incentive for customers to use water more efficiently. In those jurisdictions that have not adopted a revenue stability mechanism, our operating results could continue to be affected by seasonality.

Contamination of water supplies or our water service provided to our customers could result in service limitations and interruptions and exposure to substances not typically found in potable water supplies, and could subject us and our subsidiaries to reductions in usage and other responsive obligations, government enforcement actions, damage to our reputation and private litigation.

The water supplies that flow into our treatment plants or are delivered through our distribution system, or the water service that is provided to our customers, may be subject to contamination, including, among other items, contamination from naturally-occurring compounds, chemicals in groundwater systems, pollution resulting from manufactured sources (such as perchlorate, perfluorinated and polyfluorinated compounds, methyl tertiary butyl ether, 1,4-dioxane, lead and other materials, or chemical spills or other incidents that result in contaminants entering the water source), and possible terrorist attacks or other similar incidents. In addition, new categories of contaminants continue to emerge in the water industry. If one of our water supplies or the water service provided to our customers is contaminated, depending on the nature of the contamination, we may have to take responsive actions that could include, among other things (1) limiting use of the water supply under a "Do Not Use" protective order that enables continuation of basic sanitation and essential fire protection, or (2) interrupting the use of that water supply, in whole or in part, potentially impacting basic sanitation and fire protection needs. If service is disrupted, our financial condition, results of operations, cash flows, liquidity and reputation may be adversely affected. In addition, we may incur significant costs in order to treat the contaminated source through the expansion of our current treatment facilities or the development of new sources of supply or new treatment methods. We may be unable to recover costs associated with treating or decontaminating water supplies through insurance, customer rates, tariffs or contract terms, and any recovery of these costs that we are able to obtain through regulatory proceedings or otherwise may not occur in a timely manner. Moreover, we could be subject to claims for damages arising from government enforcement actions or toxic tort or other lawsuits related to interruptions of water servic

Since we are engaged in the business of providing water service to our customers, contamination of the water supply, or the water service provided to our customers, could result in substantial injury or damage to our customers, employees or others and we could be exposed to substantial claims and litigation. Such claims could relate to, among other things, personal injury, loss of life, business interruption, property damage, pollution, and environmental damage and may be brought by our customers or third parties. Litigation and regulatory proceedings are subject to inherent uncertainties and unfavorable rulings can and do occur. We may not be protected from these claims or negative impacts of these claims in whole or in part by tariffs or other contract terms. Negative impacts to our reputation may occur even if we are not liable for any contamination or other environmental damage or the consequences arising out of human exposure to contamination or hazardous substances within the water supply or distributed finished drinking water. In addition, insurance coverage may not cover all or a portion of these losses, and are subject to deductibles and other limitations. Pending or future claims against us could have a material adverse impact on our business, financial condition, results of operations and cash flows.

We are subject to adverse publicity and reputational risks, which make us vulnerable to negative customer perception and could lead to increased regulatory oversight or sanctions.

Our business and operations have a large direct and indirect customer base and, as a result, we are exposed to public criticism regarding, among other things, the reliability of water service, wastewater and related or ancillary services, the quality of water provided, and the amount, timeliness, content, accuracy and format of bills that are provided for such services. Adverse publicity and negative consumer sentiment arising out of our operations may render legislatures and other governing bodies, state PUCs and other regulatory authorities, and government officials less likely to view us in a favorable light, and may cause us to be susceptible to less favorable legislative, regulatory and economic outcomes, as well as increased regulatory or other oversight and more stringent regulatory or economic requirements. Unfavorable regulatory and economic outcomes may include the enactment of more stringent laws and regulations governing our operations and less favorable economic terms in our agreements related to MSG, as well as fines, penalties or other sanctions or requirements. The imposition of any of the foregoing could have a material negative impact on us and our financial condition, results of operations and cash flows.

The failure of, or the requirement to repair, upgrade or dismantle, any of our dams may adversely affect our financial condition, results of operations, cash flows and liquidity.

The properties of our Regulated Businesses segment include 73 dams, the majority of which are earthen dams. The failure of any of these dams could result in personal injury and property damage, including without limitation downstream property damage, for which we may be liable. The failure of a dam would also adversely affect our ability to supply water in sufficient quantities to our customers and could adversely affect our financial condition and results of operations. Any losses or liabilities incurred due to a failure of one of our dams might not be covered by insurance policies or be recoverable in rates, and such losses may make it difficult for us to secure insurance at acceptable rates in the future.

We also are required from time to time to decommission, repair or upgrade the dams that we own. The cost of such repairs or upgrades can be and has been material. The federal and state agencies that regulate our operations may adopt rules and regulations requiring us to dismantle our dams, which also could entail material costs. Although in most cases the PUC has permitted recovery of expenses and capital investment related to dam rehabilitation, we might not be able to recover costs of repairs, upgrades or dismantling through rates in the future. The inability to recover these costs or delayed recovery of the costs as a result of regulatory lag can affect our financial condition, results of operations, cash flows and liquidity.

Any failure of our network of water and wastewater pipes, water mains and water reservoirs could result in losses and damages that may affect our financial condition and reputation.

Our operating subsidiaries distribute water and collect wastewater through an extensive network of pipes, water mains and storage systems located across the United States. A failure of major pipes, mains or reservoirs could result in injuries, property and other damage for which we may be liable. The failure of major pipes, mains and reservoirs may also result in the need to shut down some facilities or parts of our network in order to conduct repairs. Such failures and shutdowns may limit our ability to supply water in sufficient quantities to our customers and to meet the water and wastewater delivery requirements prescribed by government regulators, including state PUCs with jurisdiction over our operations, and adversely affect our financial condition, results of operations, cash flows, liquidity and reputation. Any business interruption or other losses might not be covered by insurance policies or be recoverable in rates, and such losses may make it difficult for us to secure insurance at acceptable rates in the future. Moreover, to the extent such business interruptions or other losses are not covered by insurance, they may not be recovered through rate adjustments.

An important part of our growth strategy is the acquisition of water and wastewater systems, which involves risks, including competition for acquisition opportunities from other regulated utilities, governmental entities and other buyers, which may hinder or limit our ability to grow our business.

An important element of our growth strategy is the acquisition and optimization of water and wastewater systems in order to broaden our current, and move into new, service areas. We may not be able to acquire other systems or businesses if we cannot identify suitable acquisition opportunities or reach mutually agreeable terms with acquisition candidates, and whether or not any particular acquisition is successfully completed, these activities are expensive and time consuming and are subject to the availability of capital and personnel resources to complete such acquisitions.

Further, competition for acquisition opportunities from other regulated utilities, governmental entities and other strategic and financial buyers may hinder our ability to expand our business. As consolidation activity increases in the water and wastewater industries and competition for acquisitions continues to increase, the prices for suitable acquisition candidates may increase and limit our ability to expand through acquisitions.

The negotiation and execution of potential acquisitions as well as the integration of acquired systems or businesses with our existing operations could require us to incur significant costs, cause diversion of our management's time and resources and have a material adverse impact on our results of operations. Future acquisitions by us could result in, among other things:

- unanticipated capital expenditures;
- unanticipated acquisition-related expenses;
- incurrence or assumption of debt, contingent liabilities and environmental liabilities and obligations, including liabilities that were unknown or undisclosed at the time of acquisition;
- failure to recover acquisition adjustments or premiums due to unfavorable decisions by PUCs and other governmental authorities;
- failure to maintain effective internal control over financial reporting;
- recording goodwill and other intangible assets at values that ultimately may be subject to impairment charges;
- fluctuations in quarterly and/or annual results;
- failure to realize anticipated benefits and synergies, such as cost savings and revenue enhancements; and
- difficulties in integrating or assimilating acquired systems' operations, personnel, benefits, services and systems and water quality, cybersecurity and infrastructure protection measures.

Some or all of these items could have a material adverse effect on our business. The systems and businesses we acquire in the future may not achieve anticipated revenue, return on equity or profitability, or other perceived synergies, and any difficulties we encounter in the integration process could interfere with our operations, reduce our net income and profitability or adversely affect our internal control over financial reporting.

Our Regulated Businesses are subject to condemnation and other proceedings through eminent domain or other similar authorized process, which could materially and adversely affect their results of operations and financial condition.

Municipalities and other government subdivisions have historically been involved in the provision of water and wastewater services in the United States, and organized efforts may arise from time to time in one or more of the service areas in which our Regulated Businesses operate to convert our assets to public ownership and operation through exercise of the governmental power of eminent domain, or another similar authorized process. A municipality, other government subdivision or a citizen group may seek to acquire our assets through eminent domain or such other process, either directly or indirectly as a result of a citizen petition.

For example, in November 2018, Monterey, California ballot Measure J, which was added by a citizens group, was certified as having been approved by a public vote, requiring the MPWMD to conduct a study and submit a written plan concerning the feasibility of a potential purchase of the Monterey system assets without an additional public vote. The public vote led to the issuance by the MPWMD of (i) a preliminary report finding, among other things, that the acquisition of the Monterey system assets by the MPWMD would be economically feasible, and (ii) a final environmental impact report analyzing the environmental impacts of such an acquisition through the power of eminent domain. See Item 1—Business—Regulated Businesses—Condemnation and Eminent Domain and Item 3—Legal Proceedings—Proposed Acquisition of Monterey System Assets — Local Area Formation Commission Litigation, which includes additional information regarding these matters.

Furthermore, the law in certain jurisdictions in which our Regulated Businesses operate provides for eminent domain rights allowing private property owners to file a lawsuit to seek just compensation against a public utility, if the public utility's infrastructure has been determined to be a substantial cause of damage to that property. In these actions, the plaintiff would not have to prove that the public utility acted negligently. In California, lawsuits have been filed in connection with large-scale natural events such as wildfires. Some of these lawsuits have included allegations that infrastructure of certain utilities triggered the natural event that resulted in damage to the property. In some cases, the PUC has disallowed recovery in rates of losses incurred by these utilities as a result of such lawsuits.

Contesting an exercise of condemnation, eminent domain or other similar process, or responding to a citizen petition, may result in costly legal proceedings and may divert the attention of management. Moreover, our efforts to resist the condemnation, eminent domain or other process may not be successful, which may require us to sell the operations at issue in a condemnation proceeding or to pay a private property owner compensation for the property damage suffered. If a municipality or other government subdivision succeeds in acquiring the assets of one or more of our Regulated Businesses through eminent domain or other process, there is a risk that we will not receive adequate compensation for the business, that we will not be able to keep the compensation, or that we will not be able to divest the business without incurring significant charges. Any of these outcomes may have a material adverse effect on our business, results of operations, financial condition, cash flows and liquidity.

We may be subject to physical and cyber attacks.

As operators of critical infrastructure, we may face a heightened risk of physical and cyber attacks from internal or external sources. Our water and wastewater systems may be vulnerable to disability or failures as a result of physical or cyber attacks, acts of

war or terrorism, vandalism or other causes. Our operational and technology systems throughout our businesses may be vulnerable to unauthorized external or internal access, due to hacking, viruses, acts of violence, war or terrorism, and other causes. Unauthorized access to confidential information located or stored on these systems could negatively and materially impact our reputation, customers, employees, suppliers and other third parties. Further, third parties, including vendors, suppliers and contractors, who perform certain services for us or administer and maintain our sensitive information, could also be targets of cyber attacks and unauthorized access to their operational or technology systems. While we have instituted safeguards to protect our operational and technology systems, those safeguards may not always be effective due to the evolving nature of cyber attacks and cyber vulnerabilities. We cannot guarantee that such protections will be completely successful in the event of a cyber attack.

If, despite our security measures, a significant physical attack or cyber breach occurred, our operations could be disrupted, property damaged, and customer and other confidential information lost or stolen; we could experience substantial loss of revenues, response costs and other financial loss; we could suffer a loss of management time, attention and resources from our regular business operations; we may be subject to increased regulatory requirements; and we may experience litigation and damage to our reputation, any of which could have a negative impact on our business, results of operations and cash flows. Experiencing a physical or cyber security incident could also cause us to be non-compliant with applicable laws and regulations or contracts that require us to report cybersecurity incidents or breaches or securely maintain confidential data, causing us to incur costs related to legal claims or proceedings and regulatory fines or penalties. These types of events, either impacting our facilities or the industry in general, could also cause us to incur additional security and insurance related costs. In addition, in the ordinary course of business, we collect and retain sensitive information, including personally identifiable information, about our customers and employees. In many cases, we outsource administration of certain functions to vendors that have been and will continue to be targets of cyber attacks. Any theft, loss or fraudulent use of customer, employee or proprietary data as a result of a cyber attack on us or a vendor could also subject us to significant litigation, liability and costs, as well as adversely impact our reputation with customers and regulators, among others.

We have obtained insurance to provide coverage for a portion of the losses and damages that may result from a physical attack, cyber attack or a security breach, but such insurance is subject to a number of exclusions and may not cover the total loss or damage caused by an attack or a breach. Furthermore, the market for cybersecurity insurance is relatively new and coverage available for cybersecurity events will likely evolve as the industry matures. In the future, adequate insurance may not be available at rates that we believe are reasonable, and the costs of responding to and recovering from a physical attack, cyber attack or security breach incident may not be covered by insurance or recoverable in rates.

Our business is subject to complex and evolving federal, state and local laws and regulations regarding consumer privacy and the protection or transfer of data relating to individuals, which could result in, among other things, public disclosure of incidents, private or governmental claims or litigation against us, changes to our business practices, monetary penalties, reputational harm and increased cost of operations.

Laws and regulations are changing and increasing rapidly with respect to data and consumer privacy, security and protection. We are subject to an increasing number of complex and continually evolving data and consumer privacy, security and protection laws and regulations administered by various federal, state and local governments, including, for example, the California Consumer Privacy Act of 2018, together with its amendments and implementing regulations, the Virginia Consumer Data Protection Act and the Cyber Incident Reporting for Critical Infrastructure Act of 2022. New laws and regulations may require us to disclose incidents to authorities, regulators and/or the public, when we otherwise may not have been required to disclose such incidents under previous laws and regulations, and such disclosures could negatively and materially impact our reputation, customers, employees, suppliers and other third to disclose information. In addition, the Federal Trade Commission and state attorneys general are applying federal and state consumer protection laws to impose standards on the collection, use and dissemination of data. Moreover, we expect that current laws, regulations and industry standards concerning privacy, data protection and information security in the United States will continue to evolve and increase, and we cannot determine the impact that compliance with such future laws, regulations or standards will have on us or on our business. Any failure or perceived failure by us to comply with current or future federal, state, or local data or consumer privacy or security laws, regulations, policies, guidance, industry standards, or legal obligations, or any incident resulting in unauthorized access to, or the acquisition, release, or transfer of, personally identifiable information or other data relating to our customers, employees and others, may result in private or governmental enforcement actions, litigation or other claims against us, fines and penalties, or adverse perception or publicity about us an

condition, results of operations, cash flows and liquidity.

We may sustain losses that exceed or are excluded from our insurance coverage or for which we are self-insured.

We maintain insurance coverage, some of which may be self-insured, as part of our overall legal and risk management strategy to minimize potential liabilities arising from our Regulated Businesses, as well as the operations of MSG and CSG. Our insurance programs have varying coverage limits, exclusions and maximums, and insurance companies may seek to deny claims we might make. Generally, our insurance policies cover property damage, worker's compensation, employer's liability, general liability, cybersecurity, terrorism risks and automobile liability. Each policy includes deductibles or self-insured retentions and policy limits for covered claims. As a result, we may sustain losses that exceed or that are excluded from our insurance coverage, or for which we are self-insured and must therefore utilize our own financial resources to cover such losses. Although in the past we have been generally able to obtain insurance coverage related to our business, there can be no assurance that we can secure all necessary or appropriate insurance in the future, or that such insurance can be economically secured. For example, catastrophic events can result in decreased coverage limits, more limited coverage, increased premium costs or deductibles.

We rely on technology to facilitate the management of our business as well as our customer and supplier relationships, and a failure or disruption of implemented technology could materially and adversely affect our business.

Technology is an integral part of our business and operations, and any failure or disruption of the technology or related systems we implement could significantly limit our ability to manage and operate our business effectively and efficiently, which, in turn, could cause our business and competitive position to suffer and adversely affect our results of operations. We use technology systems to, among other things, bill customers, process orders, provide customer service, manage certain plant operations and construction projects, create and manage our financial records and other operational data, track assets, remotely monitor our plants and facilities, and manage human resources, supply chain, inventory, and accounts receivable collections. As a specific example, we depend on water meters to record and communicate the amount of water our customers use, which information in turn is used to generate customer bills, and in recent years, we have experienced greater than expected performance failures with certain water meters used in the Regulated Businesses. When failures occur, we work with meter manufacturers to determine and address the cause of such failures. While these and other failures that we have experienced have not to date had a material adverse effect on our operations, there can be no assurance that efforts to address performance failures or other issues we may experience with water meters or other implemented technology will be successful in the future and that these or future failures of water meters or other technological issues will not have a material adverse effect on us.

Although we do not believe that the technology we have implemented or may in the future implement is at a materially greater risk of failure than that used by other similar organizations, our technology and operations that use or rely on technology remain vulnerable to damage or interruption from, among other things: failure or interruption of the technology or its related systems; loss or failure of power, internet, telecommunications or data network systems; and operator error or improper operation by, the negligent or improper supervision of, or the intentional acts of, employees, contractors and other third parties. Any or all of these events could have a material adverse impact on our business, results of operations, financial condition and cash flows.

An inability to successfully develop and implement new technologies poses substantial risks to our business and operational excellence strategies, which could have a material adverse effect on our business and financial results.

A significant part of our long-term strategic plan focuses on safety, operational excellence, cost and expense efficiency (including O&M expense efficiency), water quality and affordability, asset and capital management and the customer experience. For example, we have made and plan to continue to make significant investments in developing, deploying, integrating and maintaining customer-facing technologies, applications to support field service and customer service operations, water source sensor and evaluation technologies, meter data management and analytics, and intelligent automation technologies. There can be no assurance that we will be successful in designing, developing, deploying, integrating or maintaining these new technologies. Because these efforts can be long-term in nature, these new technologies may be more costly or time-consuming than expected to design, develop, integrate and complete and may not ultimately deliver the expected or desired benefits upon completion. While we have and will continue to seek to recover costs and earn a return on capital expenditures with respect to the costs and expenses of development and deployment of these new technologies in our Regulated Businesses, there can be no assurance that we will be able to do so in every instance or at all, and our inability to do so may adversely affect our ability to achieve intended cost and expense, including O&M expense, efficiencies or other key performance results and, ultimately, could materially and adversely impact our business, financial condition, results of operations and cash flows.

Our inability to efficiently upgrade and improve our operational and technology systems, or implement new systems, could result in higher than expected costs or otherwise adversely impact our internal controls environment, operations and profitability.

Upgrades and improvements to computer systems and networks, or the implementation of new systems, may require substantial amounts of management's time and financial resources to complete, and may also result in system or network defects or operational errors due to multiple factors, including employees' ability to effectively use the new or upgraded system. We continue to implement technology to improve our business processes and customer interactions, and have installed new, and upgraded existing, technology

systems. Any technical or other difficulties in upgrading and improving existing or implementing new technology systems may increase costs beyond those anticipated and have an adverse or disruptive effect on our operations and reporting processes, including our internal control over financial reporting. We may also experience difficulties integrating current systems with new or upgraded systems, which may impact our ability to serve our customers effectively or efficiently. Although we make efforts to minimize any adverse impact on our controls, business and operations, we cannot assure that all such impacts have been or will be mitigated, and any such impacts could harm our business (individually or collectively) and have a material adverse effect on our results of operations, financial condition and cash flows.

Disruptions in our supply chain related to goods, such as pipe, chemicals, power and other fuel, equipment, water and other raw materials, and services, could adversely impact our operations and our ability to serve our customers, as well as our financial results.

Our ability to serve our customers and operate our business in compliance with regulatory requirements is dependent upon purchasing or securing necessary goods and services from our suppliers and vendors. These items include but are not limited to contracted services, chemicals, pipe, valves, hydrants, fittings, equipment (including personal protective equipment), water, and power and other fuel. Examples of supply chain disruptions include reduced quantities of goods available in the marketplace, delays in manufacturing or shipping goods, labor shortages at our suppliers or vendors, natural or other disasters and operational impacts to some of our suppliers or vendors. Disruptions in our supply chain related to goods and services have occurred and we anticipate will continue to occur into the foreseeable future. For example, a recent fire at a plant owned by the sole supplier of permanganate in the Western Hemisphere has severely limited the U.S. supply of potassium and sodium permanganate, two chemicals used by water utilities to treat water. The Company is seeking to utilize alternative methods of treatment and to manage its existing supplies of permanganate, but any inability to source sufficient quantities of these chemicals or utilize alternative chemicals may have a material adverse effect on the Company's ability to comply with applicable environmental and regulatory requirements.

Supply chain disruptions may cause us to be unable to purchase or otherwise obtain needed goods or services at a reasonable price or at all, and may significantly increase the price of goods and services we may obtain from suppliers and vendors. This, in turn, may adversely impact our operations and our ability to serve our customers in compliance with regulatory requirements, as well as our associated results of operations, cash flows and financial condition. While we attempt to plan for and have contingencies in place to address supply chain disruptions, our mitigation efforts may not be successful or may have further negative impacts on us.

Our business has inherently dangerous work sites. If we fail to maintain safe work sites, we may experience workforce or customer injuries or loss of life, and be exposed to financial losses, including penalties and other liabilities.

Safety is a core value and a strategy at American Water. Our safety performance and progress to our ultimate desired goal of zero injuries are critical to our ability to carry out our operations effectively and to serve our customers, and thereby, to support our reputation. We maintain health and safety practices to protect our employees, customers, contractors, vendors and the public. Eliminating all hazards all of the time is extremely challenging, but through strict adherence to our health and safety practices, and empowering employees to be safety leaders who are instructed to and expected to stop work if deemed "unsafe," we believe we can achieve an injury-free workplace.

At our business sites, including construction and maintenance sites, our employees, contractors and others are often in close proximity to large mechanical operating equipment, moving vehicles, pressurized water, electric and gas utility lines, below grade trenches and vaults, electrical and pneumatic hazards, fall from height hazards, suspended loads, hazardous chemicals and other regulated materials. On many sites, we are responsible for safety and, accordingly, must implement important safety procedures and practices above governmental regulatory requirements. As an essential business that provides water and wastewater services, we are focused on the health and safety of our employees, contractors, vendors, customers and others who work at or visit our worksites. If the procedures we implement are ineffective or are not followed by our employees or others, or we fail to implement procedures, our employees, contractors and others may experience illness, or minor, serious or fatal injuries. Unsafe work sites have the potential to increase employee turnover, expose us to litigation and raise our operating costs. Any of the foregoing could result in financial losses, which could have a material adverse impact on our business, financial condition, results of operations and cash flows.

In addition, our operations can involve the delivery, handling, storage, use and disposal of hazardous chemicals, which, if improperly delivered, handled, stored, used or disposed of, could result in serious injury, death, environmental damage or property damage, and could subject us to penalties or other liabilities. We are also subject to various environmental, transportation and occupational health and safety regulations. Although we maintain functional employee groups whose primary purpose is to implement effective environmental health and safety work procedures and practices throughout our organization, including construction sites and operating facilities, the failure to comply with these regulations or procedures could subject us to liability.

Work stoppages and other labor relations matters could adversely affect our results of operations and the ability to serve our customers.

As of December 31, 2022, approximately 47% of our workforce was represented by unions, and we had 75 collective bargaining agreements in place with 14 different unions representing our unionized employees. These collective bargaining agreements, 18 of which will expire during 2023, are subject to periodic renewal and renegotiation. We may not be able to successfully renew or renegotiate these labor contracts, or enter into new agreements, on terms that are acceptable to us. Any negotiations or dispute resolution processes undertaken in connection with our labor contracts could be delayed or affected by labor actions or work stoppages. Labor actions, work stoppages or the threat of work stoppages, and our failure to obtain favorable labor contract terms during renegotiations, may disrupt our operations, negatively impact the ability to serve our customers, and result in higher labor costs, which could adversely affect our reputation, financial condition, results of operations, cash flows and liquidity. While we have developed contingency plans to be implemented as necessary if a work stoppage or strike does occur, a strike or work stoppage may have a material adverse impact on our financial position, results of operations and cash flows.

Financial, Economic and Market-Related Risks

Our indebtedness could adversely affect our business and limit our ability to plan for or respond to changes in our business, and we may be unable to generate sufficient cash flows to satisfy our liquidity needs.

As of December 31, 2022, our aggregate long-term and short-term debt balance (including preferred stock with mandatory redemption requirements) was \$12.4 billion, and our working capital (defined as current assets less current liabilities) was in a deficit position. Our indebtedness could have important consequences, including:

- limiting our ability to obtain additional financing to fund future working capital requirements or capital expenditures;
- exposing us to interest rate risk with respect to the portion of our indebtedness that bears interest at variable rates;
- limiting our ability to pay dividends on our common stock or make payments in connection with our other obligations;
- impairing our access to the capital markets for debt and equity;
- requiring that an increasing portion of our cash flows from operations be dedicated to the payment of the principal and interest on our debt, thereby reducing funds available for future operations, dividends on our common stock or capital expenditures;
- limiting our ability to take advantage of significant business opportunities, such as acquisition opportunities, and to react to changes in market or industry conditions; and
- placing us at a competitive disadvantage compared to those of our competitors that have less debt.

During 2022, we utilized existing sources of liquidity, such as our current cash balances, cash flows from operations and borrowings under our commercial paper program, to meet our short-term liquidity requirements. We believe that existing sources of liquidity will be sufficient to meet our cash requirements for the foreseeable future. In order to meet our capital expenditure and other operational needs, however, we may be required to borrow additional funds under the revolving credit facility. In the event of a sustained market deterioration, we may need to obtain additional sources of liquidity, which would require us to evaluate available alternatives and take appropriate actions. Moreover, additional borrowings may be required to repay or refinance outstanding indebtedness. Debt maturities and sinking fund payments in 2023, 2024 and 2025 will be \$281 million, \$476 million and \$598 million, respectively. We can provide no assurance that we will be able to access the debt or equity capital markets on favorable terms, if at all, to repay or refinance this debt. Moreover, as new debt is added to our current debt levels, the related risks we now face could intensify, limiting our ability to repay or refinance existing debt on favorable terms.

We have in the past entered into, and in the future may enter into, financial derivative instruments, including without limitation, interest rate swaps, forward starting swaps and U.S. Treasury lock agreements. See Item 7A—Quantitative and Qualitative Disclosures About Market Risk. However, these efforts may not be effective to fully mitigate interest rate risk, and may expose us to other risks and uncertainties, including quarterly "mark to market" valuation risk associated with these instruments, that could negatively and materially affect our financial condition, results of operations and cash flows.

Our ability to pay our expenses and satisfy our debt service obligations depends in significant part on our future performance, which will be affected by the financial, business, economic, competitive, legislative (including tax initiatives and reforms, and other similar legislation or regulation), regulatory and other risk factors described in this section, many of which are beyond our control. If we do not have sufficient cash flows to pay the principal and interest on our outstanding debt, we may be required to refinance all or part of our existing debt, reduce capital investments, sell assets, borrow additional funds or sell additional equity. In addition, if our business does not generate sufficient cash flows from operations, or if we are unable to incur indebtedness sufficient to enable us to fund our liquidity needs, we may be unable to plan for or respond to changes in our business, which could cause our financial condition, operating results and prospects to be affected materially and adversely.

Our inability to access the debt or equity capital or financial markets or other events could affect our ability to meet our long-term commitments or liquidity needs at reasonable cost, which could adversely affect our financial condition and results of operations.

In addition to cash from operations, during 2022, we relied primarily on a revolving credit facility, which was increased from \$2.25 billion to \$2.75 billion in October 2022, a commercial paper program, which was increased from \$2.10 billion to \$2.60 billion in October 2022, and the debt capital markets, to satisfy our liquidity needs. The revolving credit facility currently expires in accordance with its terms in October 2027. Historically, we have regularly used our commercial paper program rather than the revolving credit facility as a principal source of short-term borrowing due to the generally more attractive rates we generally could obtain in the commercial paper market. As of December 31, 2022, there were no outstanding borrowings under the revolving credit facility, \$1,177 million of commercial paper outstanding and \$78 million in outstanding letters of credit. There can be no assurance that we will be able to continue to access this commercial paper program or revolving credit facility, when, as and if desired, or that the amount of capital available thereunder will be sufficient to meet all of our liquidity needs at a reasonable, or any, cost.

Our ability to comply with covenants in our revolving credit facility and our other consolidated indebtedness is subject to various risks and uncertainties, including events beyond our control. For example, under the terms of the revolving credit facility, our consolidated debt cannot exceed 70% of our consolidated capitalization, as determined under the terms of the facility. If our equity were to decline or debt were to increase to a level that causes us to exceed this limit, lenders under the facility would be entitled to refuse any further extension of credit and to declare all of the outstanding debt thereunder immediately due and payable. Events that could cause a reduction in equity include, without limitation, a significant write-down of our goodwill. To avoid such a default, a waiver or renegotiation of this covenant would be required, which would likely increase funding costs and could result in additional covenants that would restrict our operational and financing flexibility. Even if we are able to comply with this or other covenants, the limitations on our operational and financial flexibility could harm our business by, among other things, limiting our ability to incur indebtedness or reduce equity in connection with financings or other corporate opportunities that we may believe would be in our best interests or the interests of our shareholders to complete.

In order to meet our capital expenditure needs, we intend to issue a combination of short-term and long-term debt securities and/or additional equity shares of common stock. Disruptions in the debt or equity capital markets or changes in our credit ratings or other events could limit our ability to access capital on terms favorable to us or at all. While the lending banks that participate in the revolving credit facility have to date honored their commitments under those facilities, disruptions in the credit markets, changes in our credit ratings, or deterioration of the banking industry's financial condition could discourage or prevent lenders from meeting their existing lending commitments, extending the terms of such commitments, or agreeing to new commitments. In such a case, we may not be able to access the commercial paper, debt or equity capital markets, or other sources of potential liquidity, in the future on terms acceptable to us or at all. Furthermore, our inability to maintain, renew or replace commitments under our revolving credit facility could materially increase our cost of capital and adversely affect our financial condition, results of operations and liquidity. Short- or long-term disruptions or volatility in the debt or equity capital and credit markets as a result of economic, legislative, political or other uncertainties, including as a result of changes in U.S. tax and other laws, reduced financing alternatives, or failures of significant financial institutions could adversely affect our access to the capital necessary to provide adequate liquidity for our business. Significant volatility or disruptions in the debt or equity capital or credit markets, or financial institution failures, could require us to take measures to conserve cash until the market stabilizes or until alternative financing can be arranged. Such measures could include delaying or deferring capital expenditures, reducing or suspending dividend payments, and reducing other discretionary expenditures. Finally, even absen

The occurrence of any of these circumstances could expose us to increased interest or other expense, require us to institute cash or liquidity conservation measures or otherwise adversely and materially affect our business, financial condition, results of operations, cash flows and liquidity, which may limit or impair our ability to achieve our strategic, business and operational goals and objectives.

Parent company may be unable to meet its ongoing and future financial obligations and to pay dividends on its common stock if its subsidiaries are unable to pay upstream dividends or repay funds.

Parent company is a holding company and, as such, it has no substantive operations of its own. Substantially all of our consolidated assets are held by subsidiaries. Parent company's ability to meet its financial obligations and to pay dividends on its common stock is primarily dependent on the net income and cash flows of its subsidiaries and their ability to pay upstream dividends or repay indebtedness to parent company. Prior to paying dividends to parent company, our regulated subsidiaries must comply with applicable regulatory restrictions and financial obligations, including, for example, debt service and preferred and preference stock dividends, as well as applicable corporate, tax and other laws and regulations and agreements, and our covenants and other agreements. Our subsidiaries are separate legal entities and have no obligation to pay or upstream dividends to parent company. A failure or inability of any of these subsidiaries to pay such dividends or repay intercompany obligations could have a material adverse impact on our liquidity and parent company's ability to pay dividends on its common stock and meet its other obligations.

We have a significant amount of goodwill and intangible and other assets, and we may be required to record impairments or changes in fair value to these assets, which may negatively affect our financial condition and results of operations.

Our assets as of December 31, 2022 included \$1.1 billion of goodwill and \$347 million of total assets measured and recorded at fair value on a recurring basis. The goodwill is primarily associated with the acquisition of American Water by an affiliate of our previous owner in 2003. Goodwill represents the excess of the purchase price the purchaser paid over the fair value of the net tangible and other intangible assets acquired. Goodwill is recorded at fair value on the date of an acquisition and is reviewed annually or more frequently if changes in circumstances indicate the carrying value may not be recoverable. As required by the applicable accounting rules, in the past, we have taken significant non-cash charges to operating results for impairments to goodwill or other intangible assets, and have recorded changes in fair value of financial instruments and other assets. We may be required to recognize in the future an impairment of goodwill or a change in fair value of financial instruments or certain other assets due to market conditions, other factors related to our performance or the performance of an acquired business, or other circumstances that may impact the fair value of a financial instrument or the other asset. See Note 18—Fair Value of Financial Information in the Notes to the Consolidated Financial Statements for information on the fair value of financial and other assets. These market conditions could include a decline over a period of time of our stock price, a decline over a period of time in valuation multiples of comparable water utilities, market price performance of our common stock that compares unfavorably to our peer companies, decreases in control premiums, or other circumstances. A decline in the results forecasted in our business plan due to events such as changes in rate case results, capital investment budgets or interest rates, could also result in an impairment or change occurred, which may negatively affect our financial condition, results of operations and total capitalization.

Market volatility and other conditions may impact the value of benefit plan assets and liabilities, as well as assumptions related to the benefit plans, which may require us to provide significant additional funding.

The performance of the capital markets affects the values of the assets that are held in trust to satisfy significant future obligations under our pension and postretirement benefit plans. The value of these assets is subject to market fluctuations and volatility, which may cause investment returns to fall below our projected return rates. A decline in the market value of our pension and postretirement benefit plan assets as of the measurement date or a change in the projection of the future return on plan assets can increase the funding requirements under our pension and postretirement benefit plans. Additionally, our pension and postretirement benefit plan liabilities are sensitive to changes in interest rates. Interest rates have experienced volatility and are subject to potential further adjustments based on the actions of the U.S. Federal Reserve, and others. If interest rates are lower at the current measurement date than the prior measurement date, our liabilities would increase, potentially increasing benefit expense and funding requirements. Further, changes in assumptions, such as increases in life expectancy assumptions and increasing trends in health care costs may also increase our funding requirements. Future increases in pension and other postretirement costs as a result of reduced plan assets may not be fully recoverable in rates, in which case our results of operations and financial position could be negatively affected. In addition, market factors can affect assumptions we use in determining funding requirements with respect to our pension and postretirement plans. For example, a relatively modest change in our assumptions regarding discount rates can materially affect our calculation of funding requirements. To the extent that the discount rate used in our assumptions is reduced, our benefit obligations could be materially increased, which could adversely affect our financial position, results of operations and cash flows.

Additional Risks Related to Other Businesses

Parent company provides performance guarantees with respect to certain of the obligations of our Other businesses, including financial guarantees or deposits, which may adversely affect parent company if the guarantees are successfully enforced.

Under the terms of certain agreements under which our Other businesses, primarily MSG, provide water and wastewater services to municipalities and federal governmental entities, parent company provides guarantees of specified performance obligations, including financial guarantees or deposits. In the event these obligations are not performed, the entity holding the guarantees may seek to enforce the performance commitments against parent company or proceed against the deposit. In that event, our financial condition, results of operations, cash flows and liquidity could be adversely affected. At December 31, 2022, we had remaining performance commitments, as measured by remaining contract revenue, totaling approximately \$6.9 billion related to MSG's contracts, and this amount is likely to increase if the number of military bases served by MSG increases. The presence of these commitments may adversely affect our financial condition and make it more difficult for us to secure financing on attractive terms.

MSG's operations are subject to various risks associated with doing business with the U.S. government.

MSG enters into contracts with the U.S. government for the operation and maintenance of water and wastewater systems, which contracts may be terminated, in whole or in part, prior to the end of the 50-year term for convenience of the U.S. government or as a result of default or non-performance by the subsidiary performing the contract. In addition, the contract price for each of these military contracts is typically subject to either an annual economic price adjustment, or a price redetermination two years after commencement

of operations and every three years thereafter. Annual economic price adjustment is an inflation index-based contract price increase mechanism. Price redetermination is a contract mechanism to periodically adjust the service fee in the next period to reflect changes in contract obligations and market conditions. Any early contract termination or unfavorable annual economic price adjustment or price redetermination could adversely affect our financial condition, results of operations and cash flows. Moreover, entering into contracts with the U.S. government subjects us to a number of operational and compliance risks, including dependence on the level of government spending and compliance with and changes in governmental procurement and security regulations. We are subject to potential government investigations of our business practices and compliance with government procurement and security regulations, which are complex, and compliance with these regulations can be expensive and burdensome. If we were charged with wrongdoing as a result of an investigation, we could be suspended or debarred from bidding on or receiving awards of new contracts with the U.S. government or our existing contracts could be terminated, which could have a material adverse effect on our results of operations and cash flows.

General Risk Factors

New accounting standards or changes to existing accounting standards could materially impact how we report our results of operations, cash flows and financial condition.

Our Consolidated Financial Statements are prepared in accordance with GAAP. The SEC, the Financial Accounting Standards Board or other authoritative bodies or governmental entities may issue new pronouncements or new interpretations of existing accounting standards that may require us to change our accounting policies or critical accounting estimates. These changes are beyond our control, can be difficult to predict and could materially impact how we report our results of operations, cash flows and financial condition. We could be required to apply a new or revised standard retroactively, which could also adversely affect our previously reported results of operations, cash flows and financial condition.

Undetected errors in internal controls and information reporting could result in the disallowance of cost recovery and noncompliant disclosure.

Our internal controls, accounting policies and practices and internal information systems are designed to enable us to capture and process transactions and information in a timely and accurate manner in compliance with GAAP, taxation requirements, federal securities laws and regulations and other laws and regulations applicable to us. We have also implemented corporate governance, internal control and accounting policies and procedures in connection with the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act") and relevant SEC rules, as well as other applicable regulations. Such internal controls and policies have been and continue to be closely monitored by our management and Board of Directors to ensure continued compliance with these laws, rules and regulations. Management is also responsible for establishing and maintaining internal control over financial reporting and is required to assess annually the effectiveness of these controls. While we believe these controls, policies, practices and systems are adequate to verify data integrity, unanticipated or unauthorized actions of employees or temporary lapses in internal controls due to shortfalls in oversight or resource constraints could lead to undetected errors that could result in the disallowance of cost recovery and non-compliant disclosure and reporting. The consequences of these events could have a negative impact on our results of operations, cash flows and financial condition. The inability of management to certify as to the effectiveness of these controls due to the identification of one or more material weaknesses in these controls could also harm our reputation, increase financing costs or adversely affect our ability to access the capital markets.

Our continued success is dependent upon our ability to attract, hire and retain highly qualified, skilled and/or diverse talent.

The success of our business is dependent upon our ability to attract, hire and retain highly qualified, skilled and/or diverse talent, including engineers, licensed operators, water quality and management professionals who have the desired experience and expertise. Similar to other organizations, the Company may have challenges implementing its human capital management and employee succession plans to attract and retain such talent based on a number of factors including, among others, market conditions, retirements and geography. If we are unable to meet these human capital resource challenges, our business, financial condition, results of operations and cash flows may be materially and adversely impacted.

Our business may be adversely affected by the intentional misconduct of our employees and contractors.

Our Code of Ethics requires employees and contractors to make decisions ethically and in compliance with applicable law and regulatory requirements, and our Code of Ethics and its underlying policies, practices and procedures. All employees are required to complete training on and review the Code of Ethics on an annual basis, and violations of the Code of Ethics could result in disciplinary actions up to, and including, termination. Despite these efforts to prevent misconduct, it is possible for employees or contractors to engage in intentional misconduct and violate laws and regulations through, among other things, theft, fraud, misappropriation, bribery, corruption and engaging in conflicts of interest or related person transactions, or otherwise committing serious breaches of our Code of Ethics and our policies, practices and procedures. Intentional misconduct by employees or contractors could result in substantial liability, higher costs, increased regulatory scrutiny and significant reputational harm, any of which could have a material adverse effect on our financial condition, results of operations and cash flows.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

The Company's properties consist primarily of (i) water and wastewater treatment plants, (ii) mains and pipes used for transmission, distribution and collection of water and wastewater, (iii) wells and other sources of water supply, such as reservoirs, (iv) water and wastewater pumping stations, (v) meters and fire hydrants, (vi) general structures, including buildings, dams and treated water storage facilities, (vii) land and easements, (viii) vehicles, (ix) software rights, and (x) other equipment and facilities, the majority of which are used directly in the operation of its systems. Substantially all of the Company's properties are owned by its subsidiaries, with a large percentage subject to liens of its mortgage bonds. A wholly owned subsidiary of parent company owns the Company's corporate headquarters, located in Camden, New Jersey, and the Company and its operating subsidiaries lease office space, equipment and furniture from certain of the Company's wholly owned subsidiaries. These properties are utilized by the Company's directors, officers and staff in the conduct of the business.

The properties of the Company's Regulated Businesses consist mainly of approximately:

- 80 surface water treatment plants;
- 490 groundwater treatment plants;
- 175 wastewater treatment plants;
- 53,500 miles of transmission, distribution and collection mains and pipes;
- 1,100 groundwater wells;
- 1,700 water and wastewater pumping stations;
- 1,100 treated water storage facilities; and
- 73 dams.

The Company has ongoing infrastructure renewal programs in all states in which its Regulated Businesses operate. These programs consist of both the rehabilitation of existing mains and equipment, and the replacement of mains and equipment that have been damaged or have reached, or are near, the end of their useful service lives. The properties within Other consist mainly of office furniture and IT equipment. Approximately 51% of all properties that the Company owns are located in New Jersey and Pennsylvania.

The Company maintains property insurance against loss or damage to its properties by fire or other perils, subject to certain exceptions. For insured losses, the Company is self-insured to the extent that any losses are within the policy deductible or exceed the amount of insurance maintained.

The Company believes that its properties are generally maintained in good operating condition and in accordance with current standards of good water and wastewater industry practice.

ITEM 3. LEGAL PROCEEDINGS

Set forth below is information related to the Company's material pending legal proceedings as of February 15, 2023, other than ordinary routine litigation incidental to the business, required to be disclosed in this Annual Report on Form 10-K. The information below should be read together with Note 16—Commitments and Contingencies in the Notes to the Consolidated Financial Statements. In accordance with the SEC's disclosure rules, the Company has elected to disclose environmental proceedings involving the Company and a governmental authority if the amount of potential monetary sanctions, exclusive of interest and costs, that the Company reasonably believes will result from such proceeding is \$1 million or more

Alternative Water Supply in Lieu of Carmel River Diversions

Compliance with SWRCB Orders to Reduce Carmel River Diversions

Under the 2009 Order, Cal Am is required, among other things, to decrease significantly its yearly diversions of water from the Carmel River according to a set reduction schedule. See Item 1—Business—Regulated Businesses—Water Supply and Wastewater Services and Item 1A—Risk Factors. The 2009 Order responded to claims that Cal Am had not sufficiently implemented actions to terminate its unpermitted diversions of water from the Carmel River as required by the 1995 Order issued by the SWRCB. In July 2016, at the request of Cal Am and several Monterey County government agencies, the SWRCB issued the 2016 Order approving a deadline of December 31, 2021 for Cal Am's compliance with the 2009 Order.

The 2009 Order includes a condition prohibiting Cal Am from diverting water from the Carmel River for new service connections or for any increased use of water at existing service addresses resulting from a change in zoning or use. In 2011, the California Public Utilities Commission (the "CPUC") issued a decision directing modifications in Cal Am's tariffs to recognize the moratorium mandated by the 2009 Order, and directing Cal Am to seek written guidance from the SWRCB with respect to any unresolved issues of interpretation or implementation of this condition. In 2012, the Deputy Director of the SWRCB sent a letter to Cal Am providing an interpretation as to the calculation of a baseline to determine increases in use of water at existing service addresses. In March 2018, the MPWMD adopted a resolution directing Cal Am to interpret the baseline in a manner that conflicts with the SWRCB's written interpretation. In May 2018, Cal Am notified the MPWMD and the SWRCB that it intends to seek declaratory relief concerning the conflicting regulatory interpretations under the 2009 Order. In an attempt to resolve these conflicting interpretations prior to seeking judicial intervention, Cal Am has met with the MPWMD and the SWRCB several times. The SWRCB agreed to circulate revisions to its 2012 interpretive letter, which would be subject to a public comment period. Any failure to follow the MPWMD's resolution or the SWRCB's written interpretation, despite these conflicting interpretations, could potentially result in fines, penalties and other actions against Cal Am.

Following issuance by the Coastal Commission in November 2022 of a coastal development permit, as described below, Cal Am continues to work constructively with all appropriate agencies to obtain the remaining required permits for the Water Supply Project. However, there can be no assurance that the Water Supply Project in its current configuration will be completed on a timely basis, if ever. For the year ended December 31, 2022, Cal Am has complied with the diversion limitations contained in the 2016 Order. Continued compliance with the diversion limitations in 2023 and future years may be impacted by a number of factors, including without limitation continued drought conditions in California and the exhaustion of water supply reserves, and will require successful development of alternate water supply sources sufficient to meet customer demand. The 2009 Order and the 2016 Order remain in effect until Cal Am certifies to the SWRCB, and the SWRCB concurs, that Cal Am has obtained a permanent supply of water to substitute for past unauthorized Carmel River diversions. While the Company cannot currently predict the likelihood or result of any adverse outcome associated with these matters, further attempts to comply with the 2009 Order and the 2016 Order in the future may result in material additional costs and obligations to Cal Am, including fines and penalties against Cal Am in the event of noncompliance with the 2009 Order and the 2016 Order.

Monterey Peninsula Water Supply Project

CPUC Final Approval of Water Supply Project

Cal Am's ability to move forward on the Water Supply Project is and has been subject to extensive administrative review by the CPUC and other government agencies, obtaining necessary permits, and intervention from other parties. In 2016, the CPUC unanimously approved a final decision to authorize Cal Am to enter into a water purchase agreement for the GWR Project and to construct a pipeline and pump station facilities and recover up to the incurred \$50 million in associated costs plus AFUDC, subject to meeting certain criteria.

In 2018, the CPUC unanimously approved another final decision finding that the Water Supply Project meets the CPUC's requirements for a CPCN and an additional procedural phase was not necessary to consider alternative projects. The CPUC's 2018 decision concludes that the Water Supply Project is the best project to address estimated future water demands in Monterey, and, in addition to the cost recovery approved in its 2016 decision, adopts Cal Am's cost estimates for the Water Supply Project, which amounted to an aggregate of \$279 million plus AFUDC at a rate representative of Cal Am's actual financing costs. The 2018 final decision specifies the procedures for recovery of all of Cal Am's prudently incurred costs associated with the Water Supply Project upon its completion, subject to the frameworks included in the final decision related to cost caps, O&M costs, financing, ratemaking and contingency matters. The reasonableness of the Water Supply Project costs will be reviewed by the CPUC when Cal Am seeks cost recovery for the Water Supply Project. Cal Am is also required to implement mitigation measures to avoid, minimize or offset significant environmental impacts from the construction and operation of the Water Supply Project and comply with a mitigation monitoring and reporting program, a reimbursement agreement for CPUC costs associated with that program, and reporting requirements on plant operations following placement of the Water Supply Project in service. Cal Am has incurred \$206 million in aggregate costs as of December 31, 2022, related to the Water Supply Project, which includes \$51 million in AFUDC.

In September 2021, Cal Am, Monterey One Water and the MPWMD reached an agreement on Cal Am's purchase of additional water from an expansion to the GWR Project, which is not expected to produce additional water until 2024 at the earliest. The amended and restated water purchase agreement for the GWR Project expansion is subject to review and approval of the CPUC, and in November 2021, Cal Am filed an application with the CPUC that sought review and approval of the amended and restated water purchase agreement. Cal Am also requested rate base treatment of the additional capital investment for certain Cal Am facilities required to maximize the water supply from the expansion to the GWR Project and a related Aquifer Storage and Recovery Project, totaling approximately \$81 million. This requested amount was in addition to, and consistent in regulatory treatment with, the prior \$50 million of cost recovery for facilities associated with the original water purchase agreement, which was approved by the CPUC in its unanimous 2016 final decision.

On December 5, 2022, the CPUC issued a final decision that authorizes Cal Am to enter into the amended water purchase agreement, and specifically to increase pumping capacity and reliability of groundwater extraction from the Seaside Groundwater Basin. The final decision sets the cost cap for the proposed facilities at approximately \$62 million. Cal Am may seek recovery of amounts above the cost cap in a subsequent rate filing or general rate case. Additionally, the final decision authorizes AFUDC at Cal Am's actual weighted average cost of debt for most of the facilities.

On December 30, 2022, Cal Am filed with the CPUC an application for rehearing of the CPUC's December 5, 2022 final decision. Cal Am is requesting inclusion in the cost cap all infrastructure costs for the GWR Project expansion that were not included in the final decision. Cal Am believes that the December 5, 2022 final decision is contrary to the CPUC's precedent and that obtaining recovery of these infrastructure costs is a key component of the GWR Project expansion and Cal Am's ability to meet the future water supply needs of its customers in Monterey. This application remains pending.

While Cal Am believes that its expenditures to date have been prudent and necessary to comply with the 2009 Order and the 2016 Order, as well as the CPUC's 2016 and 2018 final decisions, Cal Am cannot currently predict its ability to recover all of its costs and expenses associated with the Water Supply Project and there can be no assurance that Cal Am will be able to recover all of such costs and expenses in excess of the \$112 million in aggregate construction costs, plus applicable AFUDC, previously approved by the CPUC in its 2016 and December 2022 final decisions. See Note 16—Commitments and Contingencies in the Notes to the Consolidated Financial Statements for further discussion.

Coastal Development Permit Application

In 2018, Cal Am submitted a coastal development permit application (the "Marina Application") to the City of Marina (the "City") for those project components of the Water Supply Project located within the City's coastal zone. Members of the City's Planning Commission, as well as City councilpersons, have publicly expressed opposition to the Water Supply Project. In May 2019, the City issued a notice of final local action based upon the denial by the Planning Commission of the Marina Application. Thereafter, Cal Am appealed this decision to the Coastal Commission, as permitted under the City's code and the California Coastal Act. At the same time, Cal Am submitted an application (the "Original Jurisdiction Application") to the Coastal Commission for a coastal development permit for those project components located within the Coastal Commission's original jurisdiction. After Coastal Commission staff issued reports recommending denial of the Original Jurisdiction Application, noting potential impacts on environmentally sensitive habitat areas and wetlands and possible disproportionate impacts to communities of concern, in September 2020, Cal Am withdrew the Original Jurisdiction Application in order to address the staff's environmental justice concerns. The withdrawal of the Original Jurisdiction Application did not impact Cal Am's appeal of the City's denial of the Marina Application, which remains pending before the Coastal Commission. In November 2020, Cal Am refiled the Original Jurisdiction Application.

On October 5, 2022, Cal Am announced a phasing plan for the proposed desalination plant component of the Water Supply Project. The desalination plant and slant wells originally approved by the CPUC would produce up to 6.4 million gallons of desalinated water per day. Under the phased approach, the facilities would initially be constructed to produce up to 4.8 million gallons per day of desalinated water, enough to meet anticipated demand through about 2030, and would limit the number of slant wells initially constructed. As demand increases in the future, desalination facilities would be expanded to meet the additional demand. The phased approach seeks to meet near-term demand by allowing for additional supply as it becomes needed, while also providing an opportunity for regional future public participation and was developed by Cal Am based on feedback received from the community.

On November 18, 2022, the Coastal Commission approved the Marina Application and the Original Jurisdiction Application with respect to the phased development of the proposed desalination plant, subject to compliance with a number of conditions, all of which Cal Am expects to satisfy. Cal Am continues to seek the remaining permits necessary to construct the Water Supply Project.

On December 29, 2022, the City, Marina Coast Water District ("MCWD"), MCWD's groundwater sustainability agency ("GSA"), and the MPWMD jointly filed a petition for writ of mandate in Monterey County Superior Court against the Coastal Commission, alleging that the Coastal Commission violated the California Coastal Act and the California Environmental Quality Act in issuing a coastal development permit to Cal Am for construction of the MPWSP slant wells. Cal Am is named as a real party in interest. This matter remains pending.

Subject to the impact or resolution of this litigation, construction of the desalination plant is expected to begin in 2024 and the desalination plant is estimated to be in-service by the end of 2027.

Desalination Plant Development Permit

The proposed desalination plant for the Water Supply Project is to be located in an unincorporated portion of Monterey County, California, on a site owned by CEMEX, Inc. ("CEMEX"), and requires a combined development permit from Monterey County prior to commencement of construction. In April 2019, Monterey County's Planning Commission voted to approve the permit. In July 2019, the Board of Supervisors heard appeals filed by MCWD and a public advocacy group, at which time it denied the appeals and

approved the permit. In August 2019, MCWD filed a petition in Monterey County Superior Court challenging Monterey County's approval of Cal Am's combined development permit application and seeking injunctive relief to enjoin Monterey County and Cal Am from commencing construction of the desalination plant. In October 2019, after a hearing, the court denied, without prejudice, MCWD's motion for a preliminary injunction, but issued a stay of Monterey County's approval of the combined development permit, precluding commencement of physical construction of the desalination plant, but allowing Cal Am to continue to obtain permits needed for the desalination plant's construction. In January 2021, the court issued its decision granting in part and denying in part MCWD's petition. The court found that Monterey County did not completely comply with all of the requirements necessary to approve the combined development permit and set aside its approval so that Monterey County could come into compliance. The court denied all of MCWD's other claims. The court also lifted its stay on physical construction at the plant site.

In May 2021, Cal Am filed a notice of appeal as to the Monterey County Superior Court's January 2021 decision, seeking to challenge the court's decision on Monterey County's statement of overriding considerations. Monterey County filed a notice of appeal as to the same issue in May 2021. In June 2021, MCWD filed cross-appeals on its claims that had been denied by the court. These appeals remain pending.

Proposed Zoning Changes at CEMEX Site for Slant Wells

In August 2018, the City circulated a public review draft of proposed amendments to its local coastal program and zoning ordinance, and placed the matter for consideration on the Planning Commission's agenda for its September 2018 meeting. The proposed amendments would change zoning at the CEMEX site to open space and restrict future uses, including with respect to Cal Am's planned use of the site for the slant wells for the Water Supply Project. Any change to the City's local coastal program must ultimately be approved by the Coastal Commission. Cal Am, CEMEX and the Coastal Commission each submitted letters opposing the proposed amendments. At its November 2018 meeting, the Planning Commission adopted a resolution recommending that the Marina City Council consider approving the amendments.

In December 2018, the Marina City Council considered the proposed amendments. Cal Am, CEMEX and the Coastal Commission again submitted letters opposing the proposed changes, but the City Council unanimously adopted a resolution amending its local coastal plan and a draft amendment to its zoning ordinance. Changes to the ordinance require a second reading before becoming final, which occurred at the City's December 2018 meeting. The changes to the local coastal plan must be submitted to the Coastal Commission for approval and are not effective until such approval is obtained.

Test Slant Well Permitting

A preliminary step to building the Water Supply Project desalination plant is the construction and operation of a test slant well to confirm the suitability of the property on which intake wells will be located to draw water from under Monterey Bay. In November 2014, the Coastal Commission approved coastal development permits for the test slant well, enabling Cal Am to construct and operate the test slant well. Effective February 28, 2018, test slant well pumping ceased, except for minimal maintenance pumping activities, in accordance with Cal Am's coastal development permits. Because Cal Am may use the test slant well as one of the slant wells for the Water Supply Project, Cal Am sought and obtained from the Coastal Commission permit amendments to allow the test slant well to remain in place and be maintained until February 28, 2024. A required lease obtained from the California State Lands Commission, as amended, expired on December 16, 2022. Cal Am has filed an applications for extension of the State Lands Commission lease. This application remains pending.

Water Supply Project Land Acquisition and Slant Well Site Use

In July 2017, the Coastal Commission adopted a consent agreement and cease and desist order requiring sand mining operations on the property owned by CEMEX on which intake wells for the Water Supply Project will be located, to cease by the end of 2020 and the property to be sold to either a non-profit or governmental entity. The consent agreement strictly limits future use of the property but preserves Cal Am's existing property rights and allows uses consistent with existing easements and other rights of record. A permanent easement granted by CEMEX to Cal Am was recorded in June 2018 to allow Cal Am access to the property and to construct, operate and maintain the Water Supply Project intake wells. in November 2019, the City notified CEMEX that, based on this permanent easement and Cal Am's proposed use of the site for the intake wells, CEMEX has breached or will soon breach a prior 1996 annexation agreement (to which Cal Am was not a party). The City states that it intends to seek declaratory relief from CEMEX and Cal Am ordering that Cal Am's extraction is limited to 500 acre-feet per year of groundwater, that Cal Am cannot export extracted water out of the basin, and that the permanent easement granted by CEMEX to Cal Am is void. CEMEX has denied the City's claims and requested indemnification from Cal Am under the terms of the permanent easement. Cal Am and CEMEX believe that there is no valid limitation under the annexation agreement on Cal Am's right to pump brackish groundwater and seawater at the site for desalination and use by Cal Am's customers.

In May 2020, the City filed a lawsuit in Monterey County Superior Court, naming Cal Am and CEMEX as defendants, and MCWRA and MCWD as real parties in interest. The lawsuit, as amended, alleges a claim for breach of contract against CEMEX and seeks declaratory relief to void the permanent easement and prohibiting extraction of water by Cal Am's slant wells at the CEMEX

site in excess of 500 acre-feet per year and the export of such water outside the groundwater basin. In November 2020, Cal Am, CEMEX and MCWRA filed demurrers, which were overruled by the court at a hearing held in February 2021.

In August 2020, MCWD filed a cross-complaint in the May 2020 lawsuit against Cal Am, CEMEX and MCWRA, alleging claims for specific performance of certain provisions of the 1996 annexation agreement related to the property owned by CEMEX on which intake wells for the Water Supply Project will be located, as well as claims of water rights, nuisance and unreasonable water use, and seeking additional declaratory relief. Following various rulings on demurrers filed by Cal Am, CEMEX and MCWRA, in February 2021, the court sustained, without leave to amend, the demurrer to MCWD's nuisance claim and overruled the remainder of the demurrers. In October 2021, the court granted a motion filed by Cal Am related to MCWD's cross-complaint, which motion requested a referral of certain issues related to MCWD's water rights and unreasonable use claims to the SWRCB for its expert advisory opinion. The SWRCB has scheduled hearings on the referred issues before its Administrative Hearing Officer, which took place in the fourth quarter of 2022 and are set to continue into early 2023. The Monterey County Superior Court has set a trial date of October 23, 2023, for the City's lawsuit.

Challenges Related to Compliance with California's Sustainable Groundwater Management Act

Under California's Sustainable Groundwater Management Act ("SGMA") enacted in 2015, groundwater basins designated by the state as critically overdrafted must be managed by a GSA by 2020 in accordance with an approved groundwater sustainability plan ("GSP") designed to achieve sustainability by 2040. Under the SGMA, GSAs have broad powers to achieve sustainability including, but not limited to, regulating groundwater extraction by imposing fees on groundwater extractions and controlling groundwater extractions by regulating, limiting or suspending extractions from wells. The 400-acre CEMEX site overlies a small portion of the 180/400 Subbasin of the Salinas Valley Groundwater Basin; the 84,000-acre 180/400 Subbasin has been designated by the state as critically overdrafted, mainly due to seawater intrusion into the subbasin.

In late 2016, the Salinas Valley Basin Groundwater Sustainability Agency (the "SVBGSA") was formed as a joint powers authority to become the GSA for the Salinas Valley Groundwater Basin and prepare a GSP. In April 2018, the City filed a notice to become the GSA for the CEMEX site, creating an overlap with the SVBGSA's filing for the 180/400 Subbasin. In 2016, the SVBGSA commenced preparation of a GSP covering the entire 180/400 subbasin, including the CEMEX site, but in August 2019 the City filed a notice that it intends to prepare its own GSP for the CEMEX site with the intent to severely limit or prohibit groundwater pumping at that site. The State Department of Water Resources ("SDWR") has taken the position that until the overlap is resolved, it will not accept the GSP from either agency, placing the subbasin at risk of being placed in a probationary status and subject to state management. In December 2019, the County of Monterey filed its own notice to become the exclusive GSA at the CEMEX site in order to resolve the overlap, which is permitted under SGMA. SDWR accepted Monterey County's filing in December 2019, and now lists Monterey County as the exclusive GSA for the site.

In December 2019, the City filed a lawsuit in Monterey County Superior Court challenging Monterey County's filing, and SDWR's acceptance of the filing, as the exclusive GSA for the CEMEX site. The City has named Monterey County and its Board of Supervisors, its GSA, and SDWR and its director as defendants, and the SVBGSA and its Board of Directors as real parties. The City seeks to invalidate Monterey County's filing, as well as injunctive relief to preserve the City's status as a GSA for the site. To protect its interest in the matter, Cal Am filed an application to intervene in this lawsuit, which was granted. Monterey County filed cross-claims against the City and SDWR. After a hearing, in August 2021, the court denied the claims brought by the City and granted Monterey County's cross-claims, finding that the City's GSA notice was untimely, the Monterey County GSA was the exclusive GSA for the CEMEX site, and the SVBGSA's GSP was properly adopted for the entire 180/400 subbasin, including the CEMEX site. In November 2021, the City appealed this decision, and in December 2021, Monterey County appealed the court's decision as to the finding that the City's action creating a GSA was not void.

In September 2020, Cal Am filed a separate but related complaint in Monterey County Superior Court challenging the validity of actions taken by the City and its GSA in adopting a groundwater sustainability plan for the CEMEX site, and the validity of the provisions of such plan. Due to the overlap of issues in the City's lawsuit with those in the validation action, the parties stipulated to a stay of the validation action pending determination of the claims in the City's action, which was approved by the court in December 2020.

In February 2021, the City filed a separate but related *in rem* reverse validation complaint challenging the adoption by Monterey County of a GSP for the CEMEX site. This complaint remains pending. Currently, both validation actions remain stayed during the pendency of the City's appeals.

Proposed Acquisition of Monterey System Assets — Local Area Formation Commission Litigation

In November 2018, voters in Monterey, California passed "Measure J," which decided that the MPWMD should conduct a feasibility study concerning the potential purchase of Cal Am's Monterey system assets, and, if feasible, to proceed with a purchase of

those assets without an additional public vote. This service territory represents approximately 40,000 customers. See Item 1—Business—Regulated Businesses—Condemnation and Eminent Domain for more information on this matter.

In February 2021, the MPWMD filed an application with LAFCO seeking approval to become a retail water provider and annex approximately 58 parcels of land into the MPWMD's boundaries. In December 2021, LAFCO's commissioners denied the MPWMD's application to become a retail water provider, determining that the MPWMD does not have the authority to operate the Monterey system assets, a result that precludes the MPWMD from proceeding with a condemnation thereof. On April 1, 2022, the MPWMD filed a lawsuit against LAFCO challenging its denial. On June 17, 2022, the court granted, with conditions, a motion by Cal Am to intervene in the MPWMD's lawsuit against LAFCO. On December 13, 2022, the court sustained in part, and denied in part, demurrers that had been filed by LAFCO seeking to dismiss the MPWMD's lawsuit. This matter remains pending.

West Virginia Elk River Freedom Industries Chemical Spill

See Note 16—Commitments and Contingencies—West Virginia Elk River Freedom Industries Chemical Spill in the Notes to Consolidated Financial Statements for information regarding the final court approval of the global settlement with respect to the January 2014 Freedom Industries, Inc. chemical spill.

Dunbar, West Virginia Water Main Break Class Action Litigation

On the evening of June 23, 2015, a 36-inch pre-stressed concrete transmission water main, installed in the early 1970s, failed. The water main is part of the West Relay pumping station located in the City of Dunbar, West Virginia and owned by West Virginia-American Water Company, the Company's West Virginia subsidiary ("WVAWC"). The failure of the main caused water outages and low pressure for up to approximately 25,000 WVAWC customers. In the early morning hours of June 25, 2015, crews completed a repair, but that same day, the repair developed a leak. On June 26, 2015, a second repair was completed and service was restored that day to approximately 80% of the impacted customers, and to the remaining approximately 20% by the next morning. The second repair showed signs of leaking but the water main was usable until June 29, 2015, to allow tanks to refill. The system was reconfigured to maintain service to all but approximately 3,000 customers while a final repair was being completed safely on June 30, 2015. Water service was fully restored on July 1, 2015, to all customers affected by this event.

On June 2, 2017, a complaint captioned *Jeffries, et al. v. West Virginia-American Water Company* was filed in West Virginia Circuit Court in Kanawha County on behalf of an alleged class of residents and business owners who lost water service or pressure as a result of the Dunbar main break. The complaint alleges breach of contract by WVAWC for failure to supply water, violation of West Virginia law regarding the sufficiency of WVAWC's facilities and negligence by WVAWC in the design, maintenance and operation of the water system. The *Jeffries* plaintiffs seek unspecified alleged damages on behalf of the class for lost profits, annoyance and inconvenience, and loss of use, as well as punitive damages for willful, reckless and wanton behavior in not addressing the risk of pipe failure and a large outage.

In February 2020, the *Jeffries* plaintiffs filed a motion seeking class certification on the issues of breach of contract and negligence, and to determine the applicability of punitive damages and a multiplier for those damages if imposed. In July 2020, the Circuit Court entered an order granting the *Jeffries* plaintiffs' motion for certification of a class regarding certain liability issues but denying certification of a class to determine a punitive damages multiplier. In August 2020, WVAWC filed a Petition for Writ of Prohibition in the Supreme Court of Appeals of West Virginia seeking to vacate or remand the Circuit Court's order certifying the issues class. In January 2021, the Supreme Court of Appeals remanded the case back to the Circuit Court for further consideration in light of a decision issued in another case relating to the class certification issues raised on appeal. On July 5, 2022, the Circuit Court entered an order again certifying a class to address at trial certain liability issues but not to consider damages. On August 26, 2022, WVAWC filed another Petition for Writ of Prohibition in the Supreme Court of Appeals of West Virginia challenging the West Virginia Circuit Court's July 5, 2022 order. The Writ Petition has been supported by an amicus brief filed by certain water and utility industry trade groups. On February 9, 2023, the Supreme Court of Appeals accepted the Writ Petition by issuing a Rule to Show Cause and scheduling oral argument for April 26, 2023.

The Company and WVAWC believe that WVAWC has meritorious defenses to the claims raised in this class action complaint and WVAWC will continue to vigorously defend itself against these allegations.

Chattanooga, Tennessee Class Action Litigation

On September 12, 2019, Tennessee-American Water Company, the Company's Tennessee subsidiary ("TAWC"), experienced a leak in a 36-inch water transmission main, which caused service fluctuations or interruptions to TAWC customers and the issuance of a boil water notice. TAWC repaired the main by early morning on September 14, 2019, and restored full water service by the afternoon of September 15, 2019, with the boil water notice lifted for all customers on September 16, 2019.

On September 17, 2019, a complaint captioned *Bruce, et al. v. American Water Works Company, Inc., et al.* was filed in the Circuit Court of Hamilton County, Tennessee against TAWC, the Company and Service Company (collectively, the "Tennessee-American Water Defendants"), on behalf of a proposed class of individuals or entities who lost water service or suffered monetary losses as a result of the Chattanooga incident (the "Tennessee Plaintiffs"). The complaint alleged breach of contract and negligence against the Tennessee-American Water Defendants, as well as an equitable remedy of piercing the corporate veil. In the complaint as originally filed, the Tennessee Plaintiffs were seeking an award of unspecified alleged damages for wage losses, business and economic losses, out-of-pocket expenses, loss of use and enjoyment of property and annoyance and inconvenience, as well as punitive damages, attorneys' fees and pre- and post-judgment interest. In September 2020, the court dismissed all of the Tennessee Plaintiffs' claims in their complaint, except for the breach of contract claims against TAWC, which remain pending. In October 2020, TAWC answered the complaint, and the parties have been engaging in discovery. On January 12, 2023, after hearing oral argument, the court issued an oral ruling denying the Tennessee Plaintiffs' motion for class certification. On February 9, 2023, the Tennessee Plaintiffs sought reconsideration of the ruling by the court, and any final ruling is appealable to the Tennessee Court of Appeals, as allowed under Tennessee law.

TAWC and the Company believe that TAWC has meritorious defenses to the claims raised in this class action complaint, and TAWC is vigorously defending itself against these allegations.

Other Matters

In April 2021, American Water Resources, LLC ("AWR"), which, prior to the December 9, 2021 sale of the Company's former HOS business was one of the indirect, wholly owned subsidiaries comprising that business, received a grand jury subpoena in connection with an investigation by the U.S. Attorney's Office for the Eastern District of New York (the "EDNY"). The subpoena seeks documents regarding AWR's operations and its contractor network in the New York City metropolitan area. On September 9, 2022, a former employee of AWR pled guilty in U.S. District Court to two felony counts in connection with the matters being investigated by the EDNY. The Company has been fully cooperating with the EDNY investigation and continues to do so, and continues to believe that the investigation is not focused on the Company.

In connection with the sale of the HOS operations (including all of the Company's equity interests in AWR), in December 2021, the Company and AWR entered into an agreement with the buyer of the HOS operations, which facilitates a common defense for, and the sharing of information concerning, the EDNY investigation and any legal or regulatory inquiries or proceedings related to or resulting from it or the subject matter in the subpoena (collectively, the "Covered Matters"). The Company, on behalf of AWR, is required to defend any Covered Matter, using commercially reasonable efforts to resolve it on a reasonably expedient basis. Further, the Company is required to consult with the buyer in specified circumstances and obtain its prior written consent (which consent may not be unreasonably withheld, conditioned or delayed) before entering into any resolution of any Covered Matter that imposes non-monetary provisions or undertakings or any other terms for which there will be no indemnification under this agreement. In addition, until March 9, 2025, the Company is required to indemnify the buyer for any monetary losses or out-of-pocket damages (as described in the agreement) incurred by the buyer or certain of the HOS subsidiaries to the extent directly arising in connection with, or directly resulting from, any Covered Matter.

While it is not possible at this time to predict the outcome of the investigation or determine the amount, if any, of fines, penalties or other liabilities that may be incurred in connection with it, the Company does not currently believe that the investigation will have a material adverse effect on the Company's results of operations, financial condition or liquidity.

General

Periodically, the Company is involved in other proceedings or litigation arising in the ordinary course of business. Other than those proceedings described in this Item 3—Legal Proceedings, the Company does not believe that the ultimate resolution of these matters will materially affect its financial position or results of operations. However, litigation and other proceedings are subject to many uncertainties, and the outcome of individual matters is not predictable with assurance. It is possible that some litigation and other proceedings could be decided unfavorably to the Company, and that any such unfavorable decisions could have a material adverse effect on its business, financial condition, results of operations and cash flows.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Since April 23, 2008, the Company's common stock has traded on the New York Stock Exchange ("NYSE") under the symbol "AWK." As of January 31, 2023, there were 181,858,619 shares of common stock outstanding held by approximately 2,234 record holders. Holders of the Company's common stock are entitled to receive dividends when they are declared by its Board of Directors. See Note 9—Shareholders' Equity in the Notes to Consolidated Financial Statements for additional information regarding the Company's dividends.

In February 2015, the Board of Directors authorized an anti-dilutive stock repurchase program to mitigate the dilutive effect of shares issued through the Company's dividend reinvestment, employee stock purchase and executive compensation activities. The program allows the Company to purchase up to 10 million shares of its outstanding common stock over an unrestricted period of time in the open market or through privately negotiated transactions. The program is conducted in accordance with Rule 10b-18 of the Exchange Act, and, to facilitate these repurchases, the Company enters into Rule 10b5-1 stock repurchase plans with a third-party broker, which allow the Company to repurchase shares of its common stock at times when it otherwise might be prevented from doing so under insider trading laws or because of self-imposed trading blackout periods. Subject to applicable regulations, the Company may elect to amend or cancel the program or the stock repurchase parameters at its discretion to manage dilution.

From April 1, 2015, the date repurchases under the anti-dilutive stock repurchase program commenced, through December 31, 2022, the Company repurchased an aggregate of 4,860,000 shares of its common stock under the program, leaving an aggregate of 5,140,000 shares available for repurchase under this program. There were no repurchases of common stock in 2022.

ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read together with the Consolidated Financial Statements and the Notes thereto included elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements that are based on management's current expectations, estimates and projections about the Company's business, operations and financial performance. The cautionary statements made in this Form 10-K should be read as applying to all related forward-looking statements whenever they appear in this Form 10-K. The Company's actual results may differ materially from those currently anticipated and expressed in such forward-looking statements as a result of a number of factors, including those that are discussed under "Forward-Looking Statements," Item 14—Risk Factors and elsewhere in this Form 10-K. The Company has a disclosure committee consisting of members of senior management and other key employees involved in the preparation of the Company's SEC reports. The disclosure committee is actively involved in the review and discussion of the Company's SEC filings. For a discussion and analysis of the Company's financial statements for fiscal 2021 compared to fiscal 2020, please refer to Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations in the Company's Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on February 16, 2022.

Overview

American Water is the largest and most geographically diverse, publicly-traded water and wastewater utility company in the United States, as measured by both operating revenues and population served. The Company employs approximately 6,500 professionals who provide drinking water, wastewater and other related services to over 14 million people in 24 states. The Company's primary business involves the ownership of utilities that provide water and wastewater services to residential, commercial, industrial, public authority, fire service and sale for resale customers, collectively presented as the "Regulated Businesses." The Company's utilities operate in approximately 1,600 communities in 14 states in the United States, with 3.4 million active customers with services provided by its water and wastewater networks. Services provided by the Company's utilities are subject to regulation by PUCs. The Company also operates other businesses not subject to economic regulation by state PUCs that provide water and wastewater services to the U.S. government on military installations, as well as municipalities, collectively presented throughout this Form 10-K within "Other." See Item 1—Business for additional information.

Selected Financial Data

This selected financial data below should be read in conjunction with the Company's Consolidated Financial Statements and related Notes in this Annual Report on Form 10-K as well as the remainder of this Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations.

		Fo	r the Year	s Ended December	31,		
(In millions, except per share data)	2022	2021		2020		2019	2018
Statement of Operations data:							
Operating revenues	\$ 3,792	\$ 3,930	\$	3,777	\$	3,610	\$ 3,440
Net income attributable to common shareholders	820	1,263		709		621	567
Net income attributable to common shareholders per basic common share	4.51	6.96		3.91		3.44	3.16
Net income attributable to common shareholders per diluted common share	4.51	6.95		3.91		3.43	3.15
Balance Sheet data:							
Total assets	\$ 27,787	\$ 26,075	\$	24,766	\$	22,682	\$ 21,223
Long-term debt and redeemable preferred stock at redemption value	10,929	10,344		9,333		8,644	7,576
Other data:							
Cash dividends declared per common share	\$ 2.62	\$ 2.41	\$	2.20	\$	2.00	\$ 1.82
Net cash provided by operating activities	1,108	1,441		1,426		1,383	1,386
Net cash used in investing activities	(2,127)	(1,536)		(2,061)		(1,945)	(2,036)
Net cash provided by (used in) financing activities	1,000	(345)		1,120		494	726
Capital expenditures included in net cash used in investing activities	(2,297)	(1,764)		(1,822)		(1,654)	(1,586)

Financial Results

For the years ended December 31, 2022, 2021 and 2020, diluted earnings per share (GAAP) were \$4.51, \$6.95 and \$3.91, respectively. The 2021 financial results included a pre-tax gain of \$748 million relating to the sale of HOS and a \$45 million pre-tax contribution to the American Water Charitable Foundation, a consolidated net impact of \$2.70 diluted earnings per share. After excluding the gain related to the sale of HOS and charitable contribution in 2021, diluted earnings per share increased \$0.26 in 2022 as compared to 2021. This increase was primarily driven by continued growth in the Regulated Businesses from infrastructure investment and acquisitions, as well as organic growth, offset somewhat by impacts from inflationary pressures on production costs and higher interest costs along with higher depreciation expenses from the growth of the business. Results for 2022 also reflect the favorable impact of weather, estimated at \$0.06 per share, primarily due to hot and dry weather in the third quarter of 2022 as compared to a \$0.02 per share favorable impact in 2021. Also, included in the results for 2022 are \$0.24 per share from interest income earned on the seller note and income earned on revenue share agreements, which compares to HOS operating results for 2021 of \$0.31 per share. Lastly, the operating results for the Company's New York subsidiary, which was sold on January 1, 2022, were \$0.12 per share in 2021. See Note 5—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements for additional information.

Growth Through Capital Investment in Infrastructure and Regulated Acquisitions

The Company continues to grow its businesses, with the majority of its growth to be achieved in the Regulated Businesses through (i) continued capital investment in the Company's infrastructure to provide safe, reliable and affordable water and wastewater services to its customers, and (ii) regulated acquisitions to expand the Company's services to new customers. In 2022, the Company invested \$2.6 billion, primarily in the Regulated Businesses, as discussed below:

Regulated Businesses Growth and Optimization

- \$2.3 billion capital investment in the Regulated Businesses, the substantial majority for infrastructure improvements and replacements; and
- \$315 million to fund acquisitions in the Regulated Businesses, which added approximately 70,000 customers during 2022, in addition to approximately 18,500 customers added through organic growth during 2022. This includes the Company's Pennsylvania subsidiary's acquisition of the wastewater system assets from the York City Sewer Authority and the City of York on May 27, 2022, for a cash purchase price of \$235 million, \$20 million of which was funded as a deposit to the seller in April 2021 in connection with the execution of the acquisition agreement.

On October 11, 2022, the Company's Pennsylvania subsidiary entered into an agreement to acquire the wastewater assets of the Butler Area Sewer Authority for a total purchase price of \$232 million in cash, subject to adjustment as provided for in the Asset Purchase Agreement. This system provides wastewater service for approximately 14,700 customer connections. The Company expects to close this acquisition by the end of 2023, pending regulatory approval.

On March 29, 2021, the Company's New Jersey subsidiary entered into an agreement to acquire the water and wastewater assets of Egg Harbor City for \$22 million. The water and wastewater systems currently serve approximately 1,500 customers each, or 3,000 combined, and are being sold through the New Jersey Water Infrastructure Protection Act process. The Company expects to close this acquisition in early 2023.

As of December 31, 2022, the Company has entered into agreements for 21 pending acquisitions in the Regulated Businesses, including the two agreements discussed above, to add approximately 32,400 additional customers.

Sale of Homeowner Services Group

On December 9, 2021, the Company sold all of the equity interests in subsidiaries that comprised the Company's HOS to a wholly owned subsidiary of funds advised by Apax Partners LLP, a global private equity advisory firm (the "Buyer"), for total consideration of approximately \$1.275 billion, resulting in pre-tax gain of \$748 million during the fourth quarter of 2021. The consideration was comprised of \$480 million in cash, a seller promissory note issued by the Buyer in the principal amount of \$720 million, and a contingent cash payment of \$75 million payable upon satisfaction of certain conditions on or before December 31, 2023. See Note 18—Fair Value of Financial Information for additional information relating to the seller promissory note and contingent cash payment. For the year ended December 31, 2022, the Company recorded post-close adjustments, primarily related to working capital, of pre-tax income of \$20 million, which is included in Gain on sale of businesses on the Consolidated Statements of Operations.

The seller note has a five-year term, is payable in cash, and bears interest at a rate of 7.00% per year during the term. The Company recognized \$50 million of interest income during the year ended December 31, 2022, from the seller note.

The Company and the Buyer also entered into revenue share agreements, pursuant to which the Company is to receive 10% of the revenue generated from customers who are billed for home warranty services through an applicable Company subsidiary (an "on-bill" arrangement), and 15% of the revenue generated from any future on-bill arrangements entered into after the closing. Unless earlier terminated, this agreement has a term of up to 15 years, which may be renewed for up to two five-year periods. The Company recognized \$9 million of income during the year ended December 31, 2022, from the revenue share agreements, which is included in Other, net on the Consolidated Statements of Operations. See Note 5—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements for additional information.

Sale of New York American Water Company, Inc.

On January 1, 2022, the Company completed the previously disclosed sale of its regulated utility operations in New York to Liberty Utilities (Eastern Water Holdings) Corp. ("Liberty"), an indirect, wholly owned subsidiary of Algonquin Power & Utilities Corp. Liberty purchased from the Company all of the capital stock of the Company's New York subsidiary for a purchase price of \$608 million in cash. See Note 5—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements for additional information.

Sale of Michigan American Water Company

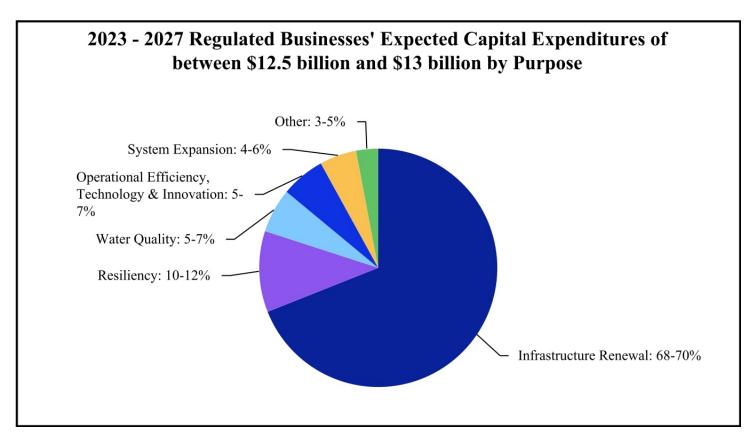
On February 4, 2022, the Company completed the sale of its operations in Michigan for \$6 million in cash.

Future Growth

The Company expects to invest between \$14 billion to \$15 billion over the next five years, and between \$30 billion to \$34 billion over the next 10 years, including \$2.9 billion in 2023. The Company's expected future investments include:

- capital investment for infrastructure improvements in the Regulated Businesses between \$12.5 billion to \$13 billion over the next five years, and between \$27 billion to \$30 billion over the next 10 years, including \$2.5 billion expected in 2023; and
- growth from acquisitions in the Regulated Businesses to expand the Company's water and wastewater customer base of between \$1.5 billion to \$2 billion over the next five years, and between \$3 billion to \$4 billion over the next 10 years, including \$400 million expected in 2023.

Presented in the following chart is the estimated allocation of the Company's expected capital investment for infrastructure improvements in its Regulated Businesses over the next five years, by purpose:



Other Matters

Military Services Group

On June 30, 2022, MSG was awarded a contract for the ownership, operation, maintenance and replacement of the wastewater utility system assets at Naval Station Mayport in Jacksonville, Florida. The contract was effective July 1, 2022, and its total revenue is approximately \$341 million over a 50-year period, subject to an annual economic price adjustment. The performance start date for operation is scheduled for March 1, 2023. MSG operates and maintains water and/or wastewater systems and related capital programs as part of the U.S. government's Utilities Privatization Program. This contract represents the 18th installation in MSG's footprint and the first contract with respect to a U.S. Navy installation.

Permanganate Supply Disruption

In January 2023, a fire occurred at a plant owned by the sole supplier of permanganate in the Western Hemisphere, which has severely limited the U.S. supply of potassium and sodium permanganate, two chemicals used by water utilities to treat water. The Company is seeking to utilize alternative methods of treatment and to manage its existing supplies of permanganate, but any inability to source sufficient quantities of these chemicals or utilize alternative chemicals may have a material adverse effect on the Company's ability to comply with applicable environmental and regulatory requirements.

Operational Excellence

The Company's adjusted regulated O&M efficiency ratio was 33.7% for the year ended December 31, 2022, compared to 34.1% for the year ended December 31, 2021. The ratio reflects an increase in operating revenues for the Regulated Businesses, after considering the adjustment for the amortization of the excess accumulated deferred income taxes ("EADIT") shown in the table below, as well as the continued focus on operating costs.

The Company's adjusted regulated O&M efficiency ratio is a non-GAAP measure and is defined by the Company as its operation and maintenance expenses from the Regulated Businesses, divided by the operating revenues were adjusted to eliminate purchased water expense. Operating revenues were further adjusted to exclude reductions for the amortization of the EADIT. Also excluded from operation and maintenance expenses is the allocable portion of non-O&M support services costs, mainly depreciation and general taxes, which is reflected in the Regulated Businesses segment as operation and maintenance expenses, but for consolidated financial reporting purposes, is categorized within other line items in the accompanying Consolidated Statements of Operations. The items discussed above were excluded from the O&M efficiency ratio calculation as they are not reflective of management's ability to increase the efficiency of the Regulated Businesses.

The Company evaluates its operating performance using this ratio, and believes it is useful to investors because it directly measures improvement in the operating performance and efficiency of the Regulated Businesses. This information is derived from the Company's consolidated financial information but is not presented in its financial statements prepared in accordance with GAAP. This information supplements and should be read in conjunction with the Company's GAAP disclosures, and should be considered as an addition to, and not a substitute for, any GAAP measure. The Company's adjusted regulated O&M efficiency ratio (i) is not an accounting measure that is based on GAAP; (ii) is not based on a standard, objective industry definition or method of calculation; (iii) may not be comparable to other companies' operating measures; and (iv) should not be used in place of the GAAP information provided elsewhere in this Annual Report on Form 10-K.

Presented in the table below is the calculation of the Company's adjusted regulated O&M efficiency ratio and a reconciliation that compares operation and maintenance expenses and operating revenues, each as determined in accordance with GAAP, to those amounts utilized in the calculation of its adjusted O&M efficiency ratio:

	For the Years Ended December 31,							
(Dollars in millions)		2022		2021		2020		
Total operation and maintenance expenses	\$	1,589	\$	1,777	\$	1,622		
Less:								
Operation and maintenance expenses—Other		244		452		364		
Total operation and maintenance expenses—Regulated Businesses		1,345		1,325		1,258		
Less:								
Regulated purchased water expenses		154		153		149		
Allocation of non-operation and maintenance expenses		31		34		41		
Adjusted operation and maintenance expenses—Regulated Businesses (i)	\$	1,160	\$	1,138	\$	1,068		
Total operating revenues	\$	3,792	\$	3,930	\$	3,777		
Less:								
Operating revenues—Other		287		546		522		
Total operating revenues—Regulated Businesses		3,505		3,384		3,255		
Less:								
Regulated purchased water revenues (a)		154		153		149		
Revenue reductions from the amortization of EADIT		(89)		(104)		(7)		
Adjusted operating revenues—Regulated Businesses (ii)	\$	3,440	\$	3,335	\$	3,113		
Adjusted O&M efficiency ratio—Regulated Businesses (i) / (ii)		33.7 %		34.1 %		34.3 %		

⁽a) The calculation assumes regulated purchased water revenues approximate regulated purchased water expenses.

Regulatory Matters

General Rate Cases

Presented in the table below are annualized incremental revenues, including reductions for the amortization of EADIT that are generally offset in income tax expense, assuming a constant water sales volume and customer count, resulting from general rate case authorizations that became effective during 2022:

(In millions)	Effective Date	Amount	
General rate cases by state:			
New Jersey	September 1, 2022	\$	46
Hawaii	July 1, 2022		2
West Virginia	February 25, 2022		13
California, Step Increase	January 1, 2022		9
Pennsylvania, Step Increase	January 1, 2022		20
Total general rate case authorizations		\$	90

Presented in the table below are annualized incremental revenues, including reductions for the amortization of EADIT that are generally offset in income tax expense, assuming a constant water sales volume and customer count, resulting from general rate case authorizations that became effective on or after January 1, 2023:

(In millions)	Effective Date	Amount	
General rate cases by state:	-		
Pennsylvania	January 28, 2023	\$	138
Illinois	January 1, 2023		67
California, Step Increase	January 1, 2023		13
Total general rate case authorizations		\$	218

On December 15, 2022, the Illinois Commerce Commission issued an order approving the adjustment of base rates requested in a rate case filed on February 10, 2022, by the Company's Illinois subsidiary. As updated in the Illinois subsidiary's June 29, 2022 rebuttal filing, the request sought \$83 million in additional annualized revenues excluding previously recovered infrastructure surcharges. The general rate case order approved a \$67 million annualized increase in water and wastewater system revenues excluding previously recovered infrastructure surcharges, effective January 1, 2023, based on an authorized return on equity of 9.8%, authorized rate base of \$1.64 billion, a common equity ratio of 49.0% and a debt ratio of 51.0%. The annualized revenue increase is being driven primarily by significant water and wastewater system capital investments since the Illinois subsidiary's 2017 rate case order that have been completed or are planned through December 31, 2023, expected higher pension and other postretirement benefit costs, and increases in production costs, including chemicals, fuel and power costs.

On December 8, 2022, the Pennsylvania Public Utility Commission issued an order approving the joint settlement of the rate case filed on April 29, 2022, by the Company's Pennsylvania subsidiary. The general rate case order approved a \$138 million annualized increase in water and wastewater revenues and authorizes implementation of the new water and wastewater rates effective January 28, 2023. The rate case proceeding was resolved through a "black box" settlement agreement and did not specify an approved return on equity ("ROE"). The annualized revenue increase is driven primarily by significant incremental capital investments since the Pennsylvania subsidiary's 2021 rate case order that will be completed through December 31, 2023, increases in pension and other postretirement benefits expense and increases in production costs, including chemicals, fuel and power costs. The general rate case order also includes recovery of the Company's Pennsylvania subsidiary's COVID-19 deferral balance.

On August 17, 2022, the Company's New Jersey subsidiary was authorized additional annual revenues of \$46 million in its general rate case, effective September 1, 2022, based on an authorized return on equity of 9.6%, authorized rate base of \$4.15 billion, a common equity ratio of 54.6% and a long-term debt ratio of 45.4%. The request incorporated updated estimates of production costs, including chemicals, fuel and power costs. Beginning January 1, 2023, the Company's New Jersey subsidiary will defer as a regulatory asset or liability, as appropriate, the difference between its pension expense and other postretirement benefits expense and those amounts included in base rates. The deferral period for this regulatory asset or liability will be two years or, if earlier, will end at the conclusion of the Company's New Jersey subsidiary's next general rate case. The Company's New Jersey subsidiary also withdrew its request, without prejudice, to recover its existing authorized COVID-19-related regulatory asset in the general rate case and will seek recovery in a separate proceeding within the process established in the New Jersey Board of Public Utilities' (the "NJBPU") generic COVID-19-related proceeding.

On February 24, 2022, WVAWC was authorized additional annual revenues of \$13 million in its general rate case, effective February 25, 2022, based on an authorized return on equity of 9.8%, authorized rate base of \$734 million and a common equity ratio of 47.9%. Staff of the Public Service Commission of West Virginia moved for reconsideration of the final order on several grounds. WVAWC filed its response to the Staff's Petition for Reconsideration on March 28, 2022, in support of the authorized revenue requirement. On October 21, 2022, the Public Service Commission of West Virginia denied the motion for reconsideration.

Pending General Rate Case Filings

On July 1, 2022, the Company's California subsidiary filed a general rate case requesting an increase in 2024 revenue of \$56 million and a total increase in revenue over the 2024 to 2026 period of \$95 million, with all increases compared against 2022 revenues. The Company updated its filing in January 2023 to capture the authorized step increase effective January 1, 2023. The filing was also updated to incorporate a decoupling proposal and a revision to the Company's sales and associated variable expense forecast. The revised requested additional annualized revenues for the test year 2024 is now \$37 million, compared against 2023 revenues. This excludes the proposed step rate and attrition rate increase for 2025 and 2026 of \$20 million and \$19 million, respectively. The total revenue requirement request for the three-year rate case cycle, incorporating updates to present rate revenues and forecasted demand, is \$76 million.

On July 1, 2022, the Company's Missouri subsidiary filed a general rate case requesting \$105 million in additional annualized revenues.

On November 15, 2021, the Company's Virginia subsidiary filed a general rate case requesting \$14 million in additional annualized revenues. Interim rates were effective on May 1, 2022, and the difference between interim and final approved rates is subject to refund. On September 26, 2022, a settlement agreement, supported by all parties except one, was filed with the Virginia State Corporation Commission for a \$11 million annual revenue increase. Public hearings were held on September 27 and 28, 2022. A final decision on this matter is expected in the first quarter of 2023.

The Company's California subsidiary submitted its application on May 3, 2021, to set its cost of capital for 2022 through 2024. According to the CPUC's procedural schedule, a decision setting the authorized cost of capital is expected to be issued in the first quarter of 2023.

Infrastructure Surcharges

A number of states have authorized the use of regulatory mechanisms that permit rates to be adjusted outside of a general rate case for certain costs and investments, such as infrastructure surcharge mechanisms that permit recovery of capital investments to replace aging infrastructure. Presented in the table below are annualized incremental revenues, assuming a constant water sales volume and customer count, resulting from infrastructure surcharge authorizations that became effective during 2022:

(In millions)	Effective Date	Amount	
Infrastructure surcharges by state:			
New Jersey	(a)	\$	11
Pennsylvania	(b)		19
Missouri	(c)		30
Tennessee	August 8, 2022		3
Kentucky	July 1, 2022		3
Indiana	March 21, 2022		8
West Virginia	March 1, 2022		3
Illinois	January 1, 2022		6
Total infrastructure surcharge authorizations		\$	83

- (a) In 2022, \$1 million was effective December 30 and \$10 million was effective June 27.
- (b) In 2022, \$8 million was effective on October 1, \$9 million was effective July 1 and \$2 million was effective April 1.
- (c) In 2022, \$18 million was effective August 11 and \$12 million was effective February 1.

Presented in the table below are annualized incremental revenues, assuming a constant water sales volume and customer count, resulting from infrastructure surcharge authorizations that became effective on or after January 1, 2023:

(In millions)	Effective Date	Amount	
Infrastructure surcharge filings by state:			_
Missouri	January 16, 2023	\$	15
West Virginia	January 1, 2023		7
Pennsylvania	January 1, 2023		3
Total infrastructure surcharge filings		\$	25

Pending Infrastructure Surcharge Filings

On January 20, 2023, the Company's Indiana subsidiary filed an infrastructure surcharge proceeding requesting \$21 million in additional annualized revenue

On November 18, 2022, the Company's Indiana subsidiary filed an infrastructure surcharge proceeding requesting \$7 million in additional annualized revenues.

Other Regulatory Matters

In September 2020, the CPUC released a decision under its Low-Income Rate Payer Assistance program rulemaking that required the Company's California subsidiary to file a proposal to alter its water revenue adjustment mechanism in its next general rate case filing in 2022, which would become effective in January 2024. On October 5, 2020, the Company's California subsidiary filed an application for rehearing of the decision and following the CPUC's denial of its rehearing application in September 2021, the Company's California subsidiary filed a petition for writ of review with the California Supreme Court on October 27, 2021. On May 18, 2022, the California Supreme Court issued a writ of review for the Company's California subsidiary's petition and the petitions filed by other entities challenging the decision. Independent of the judicial challenge, California passed Senate Bill 1469, which allows the CPUC to consider and authorize the implementation of a mechanism that separates the water corporation's revenue and its water sales. Legislation was signed by the Governor on September 30, 2022, and became effective on January 1, 2023. In response to the legislation, on January 27, 2023, the Company's California subsidiary filed an updated application requesting the CPUC to consider a Water Resources Sustainability Plan decoupling mechanism in its pending 2022 general rate case, which would be effective 2024 through 2026.

On March 2, 2021, an administrative law judge ("ALJ") in the Office of Administrative Law of New Jersey filed an initial decision with the NJBPU that recommended denial of a petition filed by the Company's New Jersey subsidiary, which sought approval of acquisition adjustments in rate base of \$29 million associated with the acquisitions of Shorelands Water Company, Inc. in 2017 and the Borough of Haddonfield's water and wastewater systems in 2015. On July 29, 2021, the NJBPU issued an order adopting the ALJ's initial decision without modification. The Company's New Jersey subsidiary filed a Notice of Appeal with the New Jersey Appellate Division on September 10, 2021. The Company's New Jersey subsidiary filed its brief in support of the appeal on March 4, 2022. Response and Reply briefs were filed on June 22, 2022, and August 4, 2022, respectively. There is no financial impact to the Company as a result of the NJBPU's order, since the acquisition adjustments are currently recorded as goodwill on the Consolidated Balance Sheets.

Consolidated Results of Operations

Presented in the table below are the Company's consolidated results of operations:

	For the Years Ended December 31,				
	 2022	2021		2020	
(In millions)	_				
Operating revenues	\$ 3,792	\$ 3,930	\$	3,777	
Operating expenses:					
Operation and maintenance	1,589	1,777		1,622	
Depreciation and amortization	649	636		604	
General taxes	281	321		303	
Total operating expenses, net	 2,519	2,734	<u> </u>	2,529	
Operating income	1,273	1,196		1,248	
Other income (expense):					
Interest expense	(433)	(403)	(397)	
Interest income	52	4		2	
Non-operating benefit costs, net	77	78		49	
Gain on sale of businesses	19	747			
Other, net	20	18		22	
Total other income (expense)	(265)	444		(324)	
Income before income taxes	 1,008	1,640		924	
Provision for income taxes	188	377	,	215	
Net income attributable to common shareholders	\$ 820	\$ 1,263	\$	709	

Segment Results of Operations

The Company's operating segments are comprised of its businesses which generate revenue, incur expense and have separate financial information which is regularly used by management to make operating decisions, assess performance and allocate resources. The Company operates its business primarily through one reportable segment, the Regulated Businesses segment. Other primarily includes MSG, which does not meet the criteria of a reportable segment in accordance with GAAP. Other also includes corporate costs that are not allocated to the Regulated Businesses segment, interest income related to the seller promissory note and income from the revenue share agreement from the sale of HOS, eliminations of inter-segment transactions and fair value adjustments related to acquisitions that have not been allocated to the Regulated Businesses segment. This presentation is consistent with how management assesses the results of these businesses. For a discussion and analysis of the Company's financial statements for fiscal 2021 compared to fiscal 2020, please refer to Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations in the Company's Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on February 16, 2022.

As a result of the sale of HOS, the categories which were previously shown as "Market-Based Businesses" and "Other" have been combined and shown as Other. Segment results for the year ended December 31, 2021, have been adjusted retrospectively to reflect this change.

Regulated Businesses Segment

Presented in the table below is financial information for the Regulated Businesses:

	For the Years Ended December 31,					
		2022		2021		2020
(In millions)						
Operating revenues	\$	3,505	\$	3,384	\$	3,255
Operation and maintenance		1,345		1,325		1,258
Depreciation and amortization		633		601		562
General taxes		264		301		285
Other operating expenses				1		(3)
Other income (expense)		(220)		(195)		(221)
Income before income taxes		1,042		962		932
Provision for income taxes		188		172		217
Net income attributable to common shareholders	\$	854	\$	789	\$	715

Operating Revenues

Presented in the tables below is information regarding the main components of the Regulated Businesses' operating revenues:

Commercial 710 676 Fire service 147 151 Industrial 153 141 Public and other 267 239 Total water services 3,218 3,142 3, Wastewater services: 8 174 151 <th></th> <th colspan="5">For the Years Ended December 31,</th>		For the Years Ended December 31,				
Water services: \$ 1,941 \$ 1,935 \$ 1, Commercial 710 676 Fire service 147 151 Industrial 153 141 Public and other 267 239 Total water services 3,218 3,142 3, Wastewater services: 174 151 Commercial 45 37 Industrial 4 4 Public and other 19 16 Total wastewater services 242 208		2022	2021	2020		
Residential \$ 1,941 \$ 1,935 \$ 1, Commercial 710 676 676 Fire service 147 151 Industrial 153 141 151 Public and other 267 239 239 239 Total water services 3,218 3,142 3, Wastewater services: 8 174 151						
Commercial 710 676 Fire service 147 151 Industrial 153 141 Public and other 267 239 Total water services 3,218 3,142 3, Wastewater services: 8 174 151 <th>Water services:</th> <th></th> <th></th> <th></th>	Water services:					
Fire service 147 151 Industrial 153 141 Public and other 267 239 Total water services 3,218 3,142 3, Wastewater services: 174 151	Residential	\$ 1,941	\$ 1,935	\$ 1,895		
Industrial 153 141 Public and other 267 239 Total water services 3,218 3,142 3,88 Wastewater services: 8 8 174 151	Commercial	710	676	627		
Public and other 267 239 Total water services 3,218 3,142 3, Wastewater services: Residential 174 151 Commercial 4 45 37 Industrial 4 4 Public and other 19 16 Total wastewater services 242 208	Fire service	147	151	147		
Total water services 3,218 3,142 3, Wastewater services: 174 151 Residential 45 37 Industrial 4 4 Public and other 19 16 Total wastewater services 242 208	Industrial	153	141	133		
Wastewater services: 174 151 Residential 45 37 Commercial 4 4 Industrial 4 4 Public and other 19 16 Total wastewater services 242 208	Public and other	267	239	226		
Residential 174 151 Commercial 45 37 Industrial 4 4 Public and other 19 16 Total wastewater services 242 208	Total water services	3,218	3,142	3,028		
Commercial 45 37 Industrial 4 4 Public and other 19 16 Total wastewater services 242 208	Wastewater services:					
Industrial44Public and other1916Total wastewater services242208	Residential	174	151	134		
Public and other Total wastewater services 19 16 242 208	Commercial	45	37	34		
Total wastewater services 242 208	Industrial	4	4	3		
	Public and other	19	16	14		
45	Total wastewater services	242	208	185		
Other (a) 45 34	Other (a)	45	34	42		
Total operating revenues \$ 3,505 \\$ 3,384 \\$ 3,	Total operating revenues	\$ 3,505	\$ 3,384	\$ 3,255		

⁽a) Includes other operating revenues consisting primarily of miscellaneous utility charges, fees and rents.

	For the Y	31,	
	2022	2021	2020
(Gallons in millions)			_
Billed water services volumes:			
Residential	162,105	173,644	178,753
Commercial	77,627	77,476	75,875
Industrial	37,265	35,738	34,875
Fire service, public and other	51,966	51,957	49,031
Total billed water services volumes	328,963	338,815	338,534

Included in operating revenues for 2021, was \$127 million related to the Company's New York operations. Excluding the Company's New York operations, for 2022, operating revenues increased \$248 million, primarily due to: (i) a \$180 million increase from authorized rate increases, including infrastructure surcharges, principally to fund infrastructure investment in various states; (ii) a \$36 million increase from water and wastewater acquisitions, as well as organic growth in existing systems; (iii) a \$17 million net increase as a result of reduced amortization of EADIT, primarily in the Company's New Jersey subsidiary; and (iv) a \$13 million estimated net increase primarily due to warmer and drier than normal weather in the third quarter of 2022 in the Company's New Jersey and Missouri service territories, which was partially offset by warmer and drier than normal weather in the second quarter of 2021 in the Northeast.

Operation and Maintenance

Presented in the table below is information regarding the main components of the Regulated Businesses' operating and maintenance expense:

	2020
	2020
22 \$	495
53	335
15	242
03	84
66	58
16	44_
25 \$	1,258
35 24 9 6	522 \$ 353 245 93 66 46 325 \$

Employee-Related Costs

	For the rears Ended December 31,						
	2022		2021		2020		
\$	395	\$	402	\$	382		
	59		66		65		
	21		25		20		
	30		29		28		
\$	505	\$	522	\$	495		

Included in employee-related costs for 2021, was \$16 million related to the Company's New York operations. After excluding the Company's New York operations, for 2022, employee-related costs remained consistent compared to 2021. In 2022, the Regulated Businesses experienced an increase in salaries and wages due to merit increases and higher headcount to support growth, which was offset by higher capitalized labor and overhead rates, as well as lower pension service costs.

Production Costs

		For the Years Ended December 31,									
	2	022		2021		2020					
(In millions)						_					
Purchased water	\$	154	\$	153	\$	149					
Fuel and power		104		97		88					
Chemicals		78		59		57					
Waste disposal		51		44		41					
Total	\$	387	\$	353	\$	335					

Included in production costs for 2021, was \$8 million related to the Company's New York operations. Excluding the Company's New York operations, for 2022, production costs increased \$42 million, primarily due to inflationary pressures which resulted in increased fuel, power and chemical costs.

Customer Billing and Accounting

In 2022, as compared to 2021, customer billing and accounting decreased \$7 million primarily due to the sale of the Company's New York operations and lower uncollectible customer accounts expense.

Other

In 2022, as compared to 2021, other increased \$10 million primarily due to increase to the insurance other than group reserve which had an unfavorable claims experience compared to prior year.

Depreciation and Amortization

In 2022, as compared to 2021, depreciation and amortization increased \$32 million primarily due to additional utility plant placed in service from capital infrastructure investments and acquisitions.

General Taxes

In 2022, as compared to 2021, general taxes decreased \$37 million, primarily related to the sale of the Company's New York operations.

Other Income (Expense)

In 2022, as compared to 2021, other expenses increased \$25 million primarily due to higher interest expense as a result of an \$800 million long-term debt issuance in May 2022 and higher interest rates on short-term debt due to macroeconomic market conditions.

Provision for Income Taxes

In 2022, as compared to 2021, the Regulated Businesses' provision for income taxes increased \$16 million. The Regulated Businesses' effective income tax rate was 18.0% and 17.9% for the years ended December 31, 2022 and 2021, respectively. The increase was primarily due to the decrease in the amortization of EADIT due to the completion of stub period amortization, pursuant to regulatory orders. The amortization of EADIT is generally offset with reductions in revenue.

Other

Presented in the table below is information for Other:

	For the Years Ended December 31,								
	2022		2021			2020			
(In millions)									
Operating revenues	\$	287	\$	546	\$	522			
Operation and maintenance		244		452		364			
Depreciation and amortization		16		35		42			
Gain on sale of businesses		19		748		3			
Income before income taxes		(34)		678		(8)			
Provision for income taxes		_		205		(2)			
Net (loss) income attributable to common shareholders	\$	(34)	\$	474	\$	(6)			

Operating Revenues

In 2022, operating revenues decreased \$259 million primarily due to the sale of HOS, which had operating revenues of \$293 million in 2021. Excluding the Company's HOS operations, for 2022, operating revenues increased \$34 million, largely driven by an increase in capital and O&M projects in MSG, primarily at Joint Base Lewis-McChord and the United States Military Academy at West Point, New York.

Operation and Maintenance

Presented in the table below is information regarding the main components of Other's operating and maintenance expense:

For the Years Ended December 31,						
	2022		2021		2020	
\$	120	\$	191	\$	118	
	35		123		114	
	73		109		111	
	10		7		6	
	6		22		15	
\$	244	\$	452	\$	364	
	\$ \$	\$ 120 35 73 10 6	\$ 120 \$ 35 73 10 6	2022 2021 \$ 120 \$ 191 35 123 73 109 10 7 6 22	2022 2021 \$ 120 \$ 191 \$ 35 123 109 10 7 7 6 22 22	

Operating Supplies and Services

Included in operating supplies and services for 2021, was \$39 million related to the Company's HOS operations and a \$45 million pre-tax contribution to the AWCF. Excluding the Company's HOS operations and AWCF contribution, for 2022, operating supplies and services increased \$13 million, primarily driven by costs associated with increased capital and O&M projects in MSG, as discussed above.

Maintenance Materials and Supplies

Included in maintenance materials and supplies for 2021, was \$96 million related to the Company's HOS operations. Excluding the Company's HOS operations, for 2022, operating supplies and services increased \$8 million, primarily due to an increase in CSG costs related to contract with the City of Camden, New Jersey.

Employee-Related Costs

In 2022, as compared to 2021, employee-related costs decreased \$36 million primarily due to the sale of HOS.

Depreciation and Amortization

In 2022, as compared to 2021, depreciation and amortization decreased \$19 million primarily due to the sale of HOS.

Gain on Sale of Businesses

During the fourth quarter of 2021, the Company recognized a pre-tax gain of \$748 million relating to the sale of HOS. In 2022, the Company recorded post-closing adjustments, primarily related to working capital, of pre-tax income of \$20 million, which increased the total gain related to the sale of HOS. See Note 5—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements for additional information.

Provision for Income Taxes

In 2022, as compared to 2021, provision for income taxes decreased \$205 million primarily due to the sale of HOS. See Note 5—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements for additional information.

Tax Matters

On August 16, 2022, President Biden signed into law the Inflation Reduction Act of 2022 (the "IRA"). The IRA contains a Corporate Alternative Minimum Tax ("CAMT") provision, effective January 1, 2023. To determine if a company is considered an applicable corporation subject to CAMT, the company's average adjusted financial statement income ("AFSI") for the three consecutive years preceding the tax year must exceed \$1 billion. An applicable corporation must make several adjustments to AFSI when determining CAMT under the new law. Initial guidance regarding the application of the CAMT was issued on December 27, 2022, and additional guidance is forthcoming. The Company is continuing to assess the impact of the initial guidance and will continue to monitor as additional guidance is released.

On July 8, 2022, Pennsylvania Governor Tom Wolf signed into law Act 53 of 2022, which reduces the Pennsylvania State Income Tax Rate in yearly increments starting January 1, 2023, with an initial rate of 8.99% and ending effective January 1, 2031, with a rate of 4.99%. Under Accounting Standards Codification Topic 740, Income Taxes ("ASC 740"), the tax effects of changes in tax laws must be recognized in the period in which the law is enacted. ASC 740 also requires deferred tax assets and liabilities to be measured at the enacted tax rate expected to apply when temporary differences are to be realized or settled. As such, the Company's accumulated deferred income tax ("ADIT") balances for its Pennsylvania subsidiary were remeasured during the quarter ended September 30, 2022, to estimate the impacts of the recently enacted tax rate. The remeasurement reduced the ADIT liability by \$159 million as of December 31, 2022 and created a corresponding regulatory liability since the EADIT is expected to be returned to customers in a future rate case. However, since the rate is declining in yearly increments, the total EADIT will be subject to change.

On September 27, 2022, Iowa's Department of Revenue announced a reduction in the state's top corporate rate from 9.8% to 8.4% effective January 1, 2023. As such, the Company's ADIT balances for its Iowa subsidiary were remeasured during the quarter ended September 30, 2022, to estimate the impacts of the recently enacted tax rate. The remeasurement reduced the ADIT liability by \$2 million as of December 31, 2022 and created a corresponding regulatory liability since the EADIT is expected to be returned to customers in a future rate case.

Federal Net Operating Loss

The Company had no federal NOL carryover balance as of December 31, 2021.

Legislative Updates

During 2022, the Company's regulatory jurisdictions enacted the following legislation that has been approved and is effective as of February 15, 2023:

- Indiana passed Senate Enrolled Act 272, which requires public reporting of a non-jurisdictional utility's asset management programs. Non-jurisdictional utilities are exempt from the jurisdiction of the Indiana Utility Regulatory Commission (the "IURC"). The legislation also creates a water and wastewater research and extension program at a state university to serve as a repository for data collected from utilities. Additionally, the legislation establishes oversight and a receivership program in the IURC for non-jurisdictional utilities with violations that create environmental or human health and safety issues. Legislation was signed by the Governor on March 7, 2022, and became effective on July 1, 2022.
- Indiana passed water and wastewater utility asset financing legislation, Senate Enrolled Act 273, which authorizes the recovery of property tax in Distribution System Improvement Charge filings. The legislation also permits the IURC to allow recovery through tracking mechanisms for changes in property tax and for costs attributable to referenda or action by elected or appointed individuals. Legislation was signed by the Governor on March 10, 2022, and became effective on July 1, 2022.

- Virginia passed Senate Bill 500 and House Bill 182, which requires the Virginia State Corporation Commission, in any future ratemaking proceeding for an investor-owned water/wastewater utility, to evaluate the utility on a stand-alone basis and utilize the utility's actual end-of-test period capital structure and cost of capital without regard to the cost of capital structure, or investments of any other entities with which the utility may be affiliated. Legislation was signed by the Governor on April 11, 2022, and became effective on July 1, 2022.
- Illinois passed House Bill 900/Public Act 102-0698, which contains appropriations to the Department of Commerce and Economic Opportunity of \$3 million for the purposes of the Water and Sewer Finance Assistance Act (H.B. 414/Public Act 102-0262) and \$55 million for the purposes of the federal Low-Income Household Water Assistance Program (LIHWAP). Legislation was signed by the Governor on April 19, 2022, with these provisions of the bill taking effect on July 1, 2022.
- Tennessee passed Senate Bill 2282 and House Bill 2346, which requires all utilities to implement a cyber security plan and update it every two years to provide for the protection of the utility's facilities from unauthorized use, alteration, ransom, or destruction of electronic data. The relevant regulatory body will verify if a utility has complied or impose reasonable sanctions if out of compliance. Utility compliance will be required by July 1, 2023. Legislation was signed by the Governor on June 1, 2022, and became effective immediately.
- The Missouri General Assembly passed state and local property tax tracker legislation, Senate Bill 745, which requires a utility to defer to a regulatory asset or liability account any difference in what was actually paid in state or local property taxes and what was used to set the revenue requirement in the utility's most recently completed general rate case. Legislation was signed by the Governor on June 29, 2022, and became effective on August 28, 2022.
- California passed Senate Bill 1469, which allows the CPUC to consider and authorize the implementation of a mechanism that separates the water corporation's revenue and its water sales. Legislation was signed by the Governor on September 30, 2022 and became effective on January 1, 2023.

Liquidity and Capital Resources

The Company uses its capital resources, including cash, primarily to (i) fund operating and capital requirements, (ii) pay interest and meet debt maturities, (iii) pay dividends, (iv) fund acquisitions, (v) fund pension and postretirement benefit obligations, and (vi) to pay federal income taxes. The Company invests a significant amount of cash on regulated capital projects where it expects to earn a long-term return on investment. Additionally, the Company operates in rate regulated environments in which the amount of new investment recovery may be limited, and where such recovery generally takes place over an extended period of time, and certain capital recovery is also subject to regulatory lag. See Item 1—Business—Regulated Businesses—Regulation and Rate Making for additional information. The Company expects to fund future maturities of long-term debt through a combination of external debt and, to the extent available, cash flows from operations. Since the Company expects its capital investments over the next few years to be greater than its cash flows from operating activities, the Company currently plans to fund the excess of its capital investments over its cash flows from operating activities for the next five years through a combination of long-term debt and equity in addition to the remaining proceeds from the sale of HOS. The remaining proceeds from the sale of HOS include receipt of a seller promissory note, plus interest, and a contingent cash payment payable upon satisfaction of certain conditions on or before December 31, 2023. If necessary, the Company may delay certain capital investments or other funding requirements or pursue financing from other sources to preserve liquidity. In this event, the Company believes it can rely upon cash flows from operations to meet its obligations and fund its minimum required capital investments for an extended period of time.

The Company regularly evaluates and monitors its cash requirements for capital investments, acquisitions, operations, commitments, debt maturities, interest and dividends. The Company's business is capital intensive, with a majority of this capital funded by cash flows from operations. The Company also obtains funds from external sources, primarily in the debt markets and through short-term commercial paper borrowings, and may also access the equity capital markets as needed or desired to support capital funding requirements. In order to meet short-term liquidity needs, American Water Capital Corp. ("AWCC"), the wholly owned finance subsidiary of parent company, issues commercial paper that is supported by its revolving credit facility. The Company's access to external financing on reasonable terms may depend on, as appropriate, any or all of the following: current business conditions, including that of the utility and water utility industry in general; conditions in the debt or equity capital markets; the Company's credit ratings; and conditions in the national and international economic and geopolitical arenas. Disruptions in the credit markets may discourage lenders from extending the terms of such commitments or agreeing to new commitments. Market disruptions may also limit the Company's ability to issue debt and equity securities in the capital markets.

If these unfavorable business, market, financial and other conditions deteriorate to the extent that the Company is no longer able to access the commercial paper and/or capital markets on reasonable terms, AWCC has access to an unsecured revolving credit facility. AWCC's revolving credit facility is used principally to support its commercial paper program, to provide additional liquidity support, and to provide a sublimit for the issuance of up to \$150 million in letters of credit. On October 26, 2022, AWCC and certain lenders amended and restated the credit agreement with respect to the revolving credit facility to, among other things, increase the maximum commitments under the facility from March 2025 to October 2027. Subject to satisfying certain conditions, the credit agreement also permits AWCC to increase the maximum commitment under the facility by up to an aggregate of \$500 million and to request extensions of its expiration date for up to two one-year periods. Also, effective October 26, 2022, the maximum aggregate principal amount of short-term borrowings authorized under AWCC's commercial paper program was increased from \$2.10 billion to \$2.60 billion. As of December 31, 2022, AWCC had no outstanding borrowings and \$78 million of outstanding letters of credit under its revolving credit facility, with \$1.50 billion available to fulfill its short-term liquidity needs and to issue letters of credit.

The Company believes that its ability to access the debt and equity capital markets, the revolving credit facility and cash flows from operations will generate sufficient cash to fund the Company's short-term requirements. The Company believes it has sufficient liquidity and the ability to manage its expenditures, should there be a disruption of the capital and credit markets. However, there can be no assurance that the lenders will be able to meet existing commitments to AWCC under the revolving credit facility, or that AWCC will be able to access the commercial paper or loan markets in the future on acceptable terms or at all.

Cash Flows from Operating Activities

Cash flows from operating activities primarily result from the sale of water and wastewater services and, due to the seasonality of demand, are generally greater during the warmer months. The Company's future cash flows from operating activities will be affected by, among other things: customers' ability to pay for service in a timely manner, economic utility regulation, inflation, compliance with environmental, health and safety standards, production costs, maintenance costs, customer growth, declining customer usage of water, employee-related costs, including pension funding, weather and seasonality, taxes, and overall economic conditions.

Operating cash flows can be negatively affected by changes in the Company's rate regulated environments, changes in the economy, interest rates, the timing of tax payments, and the Company's customers' ability to pay for service in a timely manner, among other items. The Company can provide no assurance that its customers' historical payment pattern will continue in the future. The Company's current liabilities may exceed current assets mainly from debt maturities due within one year and the use of short-term debt as a funding source, primarily to meet scheduled maturities of long-term debt, fund acquisitions and construction projects, as well as cash needs, which can fluctuate significantly due to the seasonality of the business and other factors. The Company addresses cash timing differences primarily through its short-term liquidity funding mechanisms.

Presented in the table below is a summary of the major items affecting the Company's cash flows from operating activities:

	For the Years Ended December 31,								
(In millions)	2022			2021		2020			
Net income	\$	820	\$	1,263	\$	709			
Add (less):									
Depreciation and amortization		649		636		604			
Deferred income taxes and amortization of investment tax credits (c)		80		230		207			
Other non-cash activities (a)		(16)		(27)		_			
Changes in working capital (b)		(355)		126		(55)			
Pension and non-pension postretirement benefit contributions		(51)		(40)		(39)			
(Gain) or loss on sale of businesses		(19)		(747)		_			
Net cash provided by operating activities	\$	1,108	\$	1,441	\$	1,426			

- (a) Includes provision for losses on accounts receivable, pension and non-pension postretirement benefits and other non-cash, net. Details of each component can be found on the Consolidated Statements of Cash Flows.
- (b) Changes in working capital include changes to receivables and unbilled revenues, income tax receivable, accounts payable and accrued liabilities, accrued taxes and other current assets and liabilities, net.
- (c) The decrease in the 2022 deferred tax activity is primarily due to the settlement of the deferred tax liability related to New York American Water, sold in January 2022.

In 2022, cash flows provided by operating activities decreased \$333 million. The changes were driven by \$338 million of estimated tax payments primarily for taxable gains on the sales of the Company's HOS business and its New York regulated operations, as well as the contribution of \$45 million to the American Water Charitable Foundation. Partially offsetting these changes was a decrease due to the gain recognized from the sale of HOS in 2021.

The Company expects to make pension contributions to the plan trusts of \$39 million in 2023. Actual amounts contributed could change materially from this estimate as a result of changes in assumptions and actual investment returns, among other factors.

Cash Flows from Investing Activities

Presented in the table below is a summary of the major items affecting the Company's cash flows from investing activities:

	For the Years Ended December 31,								
(In millions)	2022			2021		2020			
Capital expenditures	\$	(2,297)	\$	(1,764)	\$	(1,822)			
Acquisitions, net of cash acquired		(315)		(135)		(135)			
Proceeds from sale of assets, net of cash on hand		608		472		2			
Removal costs from property, plant and equipment retirements, net		(123)		(109)		(106)			
Net cash used in investing activities	\$	(2,127)	\$	(1,536)	\$	(2,061)			

In 2022, cash flows used in investing activities increased \$591 million primarily due to increased payments for capital expenditures and acquisitions partially offset by proceeds of \$608 million received from the sale of the Company's New York operations. The Company continues to invest across all infrastructure categories, mainly replacement and renewal of transmission and distribution and services, meter and fire hydrants infrastructure in the Company's Regulated Businesses, as discussed below.

The Company's infrastructure investment plan consists of both infrastructure renewal programs, where the Company replaces mains, services, meters, hydrants and valves, as needed, and major capital investment projects, where the Company constructs new water and wastewater treatment and delivery facilities to meet new customer growth and water quality regulations. The Company's projected capital expenditures and other investments are subject to periodic review and revision to reflect changes in economic conditions and other factors.

Presented in the table below is a summary of the Company's capital expenditures by category:

	For the Years Ended December 31,								
(In millions)	<u> </u>	2022		2021		2020			
Transmission and distribution	\$	901	\$	749	\$	704			
Treatment and pumping		190		197		306			
Services, meter and fire hydrants		546		366		333			
General structure and equipment		380		251		299			
Sources of supply		95		64		54			
Wastewater		185		137		126			
Total capital expenditures	\$	2,297	\$	1,764	\$	1,822			

In 2022, the Company's capital expenditures increased \$533 million due to an increase across most infrastructure categories.

The Company also grows its business primarily through acquisitions of water and wastewater systems. These acquisitions are generally located in geographic proximity to the Company's existing Regulated Businesses and support continued geographical diversification and growth of its operations. Generally, acquisitions are funded initially with short-term debt, and later refinanced with long-term financing. During 2022, the Company paid \$315 million for the acquisition of 26 water and wastewater systems, representing in the aggregate approximately 70,000 customers.

As previously noted, over the next five years the Company expects to invest between \$14 billion to \$15 billion, with \$12.5 billion to \$13 billion for infrastructure improvements in the Regulated Businesses, and the Company expects to invest between \$30 billion to \$34 billion over the next 10 years. In 2023, the Company expects to invest \$2.9 billion, consisting of \$2.5 billion for infrastructure improvements and \$400 million for acquisitions in the Regulated Businesses.

Cash Flows from Financing Activities

Presented in the table below is a summary of the major items affecting the Company's cash flows from financing activities:

	For the Years Ended December 31,							
	2022			2021	2020			
(In millions)		_						
Proceeds from long-term debt	\$	822	\$	1,118	\$	1,334		
Repayments of long-term debt		(15)		(372)		(342)		
(Repayments of) proceeds from term loan		_		(500)		500		
Net short-term borrowings (repayments) with maturities less than three months		591		(198)		(5)		
Dividends paid		(467)		(428)		(389)		
Other financing activities, net (a)		69		35		22		
Net cash provided by (used in) financing activities	\$	1,000	\$	(345)	\$	1,120		

⁽a) Includes proceeds from issuances of common stock under various employee stock plans and the Company's dividend reinvestment plan, net of taxes paid, advances and contributions in aid of construction, net of refunds, and debt issuance costs and make-whole premiums on early debt redemption.

In 2022, cash flows provided by financing activities increased \$1,345 million, primarily due to an increase in commercial paper borrowings, the repayment in full at maturity of the \$500 million term loan in 2021 and repayments of long-term debt due to the prepayment of \$327 million in aggregate principal amount of AWCC's outstanding senior notes in 2021, with no comparable repayments in 2022. These changes were partially offset by lower proceeds from long-term debt.

The Company's financing activities are primarily focused on funding regulated infrastructure expenditures, regulated acquisitions and payment of dividends. These activities included the issuance of long-term and short-term debt, primarily through AWCC. Based on the needs of the Regulated Businesses and the Company, AWCC may borrow funds or issue its debt in the capital markets and then, through intercompany loans, provide those borrowings to the Regulated Businesses and parent company. The Regulated Businesses and parent company are obligated to pay their portion of the respective principal and interest to AWCC, in the amount necessary to enable AWCC to meet its debt service obligations. Parent company's borrowings are not a source of capital for the Regulated Businesses, therefore, parent company is not able to recover the interest charges on its debt through regulated water and wastewater rates. As of December 31, 2022, AWCC has made long-term fixed rate loans and commercial paper loans to the Regulated Businesses amounting to \$7.6 billion. Additionally, as of December 31, 2022, AWCC has made long-term fixed rate loans and commercial paper loans to parent company amounting to \$3.6 billion.

On May 5, 2022, AWCC issued \$800 million aggregate principal amount of its 4.45% senior notes due 2032. At closing, AWCC received, after deduction of underwriting discounts and before deduction of offering expenses, net proceeds of approximately \$792 million. AWCC used the net proceeds of the offering: (i) to lend funds to parent company and its regulated subsidiaries; (ii) to repay AWCC's commercial paper obligations; and (iii) for general corporate purposes.

One of the principal market risks to which the Company is exposed is changes in interest rates. In order to manage the exposure, the Company follows risk management policies and procedures, including the use of derivative contracts such as treasury lock agreements. The Company also reduces exposure to interest rates by managing commercial paper and debt maturities. The Company does not enter into derivative contracts (through AWCC) for speculative purposes and does not use leveraged instruments. The derivative contracts entered into are for periods consistent with the related underlying exposures. The Company is exposed to the risk that counterparties to derivative contracts will fail to meet their contractual obligations. The Company minimizes the counterparty credit risk on these transactions by dealing only with leading, creditworthy financial institutions, having long-term credit ratings of "A" or better.

In April 2022, the Company entered into several 10-year treasury lock agreements, with notional amounts totaling \$400 million, and an average fixed interest rate of 2.89%. The Company designated these treasury lock agreements as cash flow hedges, with their fair value recorded in accumulated other comprehensive gain or loss. In May 2022, the Company terminated the treasury lock agreements, realizing a net gain of approximately \$4 million, to be amortized through interest, net over a 10-year period, in accordance with the tenor of the debt issuance on May 5, 2022.

In November and December 2022, the Company entered into four 10-year treasury lock agreements, with notional amounts totaling \$100 million, to reduce interest rate exposure on debt expected to be issued in 2023. These treasury lock agreements terminate in January 2024, and have an average fixed rate of 3.56%. In January 2023, the Company entered into three additional 10-year treasury lock agreements, with notional amounts totaling \$100 million, to reduce interest rate exposure on debt expected to be issued in 2023. These treasury lock agreements terminate in January 2024, and have an average fixed rate of 3.35%. The Company designated these treasury lock agreements as cash flow hedges, with their fair value recorded in accumulated other comprehensive gain or loss. Upon termination, the cumulative gain or loss recorded in accumulated other comprehensive gain or loss will be amortized through interest, net over the term of the new debt.

No ineffectiveness was recognized on hedging instruments for the years ended December 31, 2022, 2021 or 2020.

In February 2021, parent company and AWCC filed with the SEC a universal shelf registration statement that enables the Company to meet its capital needs through the offer and sale to the public from time to time of an unlimited amount of various types of securities, including American Water common stock, preferred stock, and other equity and hybrid securities, and AWCC debt securities, all subject to market conditions and demand, general economic conditions, and as applicable, rating status. The shelf registration statement will expire in February 2024. During 2022, 2021 and 2020, \$800 million, \$1.10 billion, and \$1.00 billion, respectively, of debt securities were issued under this and predecessor registration statements.

Presented in the table below are the issuances of long-term debt in 2022:

Company	Туре	Rate	Weighted Average Rate	Maturity	nount nillions)
AWCC (a)	Senior notes—fixed rate	4.45%	4.45%	2032	\$ 800
Other American Water subsidiaries	Private activity bonds and government funded debt—fixed rate	0.00%-1.75%	1.03%	2027-2042	 22
Total issuances					\$ 822

(a) This indebtedness is considered "debt" for purposes of a support agreement between parent company and AWCC, which serves as a functional equivalent of a full and unconditional guarantee by parent company of AWCC's payment obligations under such indebtedness. See "—Issuer and Guarantor of Senior Notes" below.

Presented in the table below are the retirements and redemptions of long-term debt in 2022 through sinking fund provisions, optional redemption or payment at maturity:

Company	Company Type				mount millions)
AWCC	Private activity bonds and government funded debt—fixed rate	1.79%-2.31%	2.24%	2024-2031	\$ 1
Other American Water subsidiaries	Private activity bonds and government funded debt—fixed rate	0.00%-5.50%	1.50%	2022-2051	13
Other American Water subsidiaries	Mandatorily redeemable preferred stock	8.49%	8.49%	2022	 1
Total retirements and redemptions					\$ 15

From time to time and as market conditions warrant, the Company may engage in long-term debt retirements through make-whole redemptions, tender offers, open market repurchases or other viable alternatives.

Issuer and Guarantor of Senior Notes

The outstanding senior notes issued by AWCC have been issued under two indentures, each by and between AWCC and Computershare Trust Company, N.A., as successor to Wells Fargo Bank, National Association, as trustee, providing for the rights and obligations of the parties thereto and the holders of the notes issued thereunder. The senior notes also have been issued with the benefit of a support agreement, as amended, between parent company and AWCC, which serves as the functional equivalent of a full and unconditional guarantee by parent company of AWCC's payment obligations under the senior notes. No other subsidiary of parent company provides guarantees for any of the outstanding senior notes. If AWCC is unable to make timely payment of any interest, principal or premium, if any, on such senior notes, parent company will provide to AWCC, at its request or the request of any holder of such senior notes, funds to make such payment in full. If AWCC fails or refuses to take timely action to enforce certain rights under the support agreement or if AWCC defaults in the timely payment of any amounts owed to any holder of such senior notes, when due, the support agreement provides that the holder may proceed directly against parent company to enforce such rights or to obtain payment of the defaulted amounts owed to that holder.

As a wholly owned finance subsidiary of parent company, AWCC has no significant assets other than obligations of parent company and certain of its subsidiaries in its Regulated Businesses segment to repay certain intercompany loans made to them by AWCC. AWCC's ability to make payments of amounts owed to holders of the senior notes will be dependent upon AWCC's receipt of sufficient payments of amounts owed pursuant to the terms of such intercompany loans and from its ability to issue indebtedness or otherwise obtain loans in the future, the proceeds of which would be used to fund the repayment of the senior notes.

Because parent company is a holding company and substantially all of its operations are conducted through its subsidiaries other than AWCC, parent company's ability to fulfill its obligations under the support agreement will be dependent upon its receipt of sufficient cash dividends or distributions from its operating subsidiaries. See Note 9—Shareholders' Equity—Dividends and Distributions, in the Notes to the Consolidated Financial Statements for a summary of the limitations on parent company and its subsidiaries to pay dividends or make distributions. Furthermore, parent company's operating subsidiaries are separate and distinct legal entities and, other than AWCC, have no obligation to make any payments on the senior notes or to make available or provide any funds for such payment, other than through their repayment obligations under intercompany loans, if any, with AWCC. Based on the foregoing, parent company's obligations under the support agreement will be effectively subordinated to all indebtedness and other liabilities, including trade payables, lease commitments and moneys borrowed or other indebtedness incurred or issued by parent company's subsidiaries other than AWCC.

Credit Facilities and Short-Term Debt

Interest rates on advances under the Company's revolving credit facility are based on a credit spread to the Secured Overnight Financing Rate ("SOFR") rate (or applicable market replacement rate) or base rate, each determined in accordance with Moody Investors Service's and S&P Global Ratings' then applicable credit rating on AWCC's senior unsecured, non-credit enhanced debt. The facility is used principally to support AWCC's commercial paper program and to provide up to \$150 million in letters of credit. Indebtedness under the facility and AWCC's commercial paper are considered "debt" for purposes of a support agreement between parent company and AWCC, which serves as a functional equivalent of a full and unconditional guarantee by parent company of AWCC's payment obligations thereunder.

Presented in the tables below are the aggregate credit facility commitments, commercial paper limit and letter of credit availability under the revolving credit facility, as well as the available capacity for each, as of December 31:

	2022							
	Commercial	Paper Limit	Letters of Credit			Total (a)		
(In millions)								
Total availability	\$	2,600	\$	150	\$	2,750		
Outstanding debt		(1,177)		(78)		(1,255)		
Remaining availability as of December 31, 2022	\$	1,423	\$	72	\$	1,495		

Total remaining availability of \$1.50 billion as of December 31, 2022, may be accessed through revolver draws.

		2021						
	Commerci	Commercial Paper Limit		Letters of Credit		Total (a)		
	\$	2,100	\$	150	\$	2,250		
		(584)		(76)		(660)		
nber 31, 2021	\$	1,516	\$	74	\$	1,590		

(a) Total remaining availability of \$1.59 billion as of December 31, 2021, may be accessed through revolver draws.

Presented in the table below is the Company's total available liquidity as of December 31, 2022 and 2021:

	Equivalents			Credit Facility	Total Available Liquidity		
(In millions)							
Available liquidity as of December 31, 2022	\$	85	\$	1,495	\$	1,580	
Available liquidity as of December 31, 2021		116		1,590		1,706	

The weighted average interest rate on AWCC's outstanding short-term borrowings was approximately 4.41% and 0.20%, for the years ended December 31, 2022 and 2021, respectively.

Capital Structure

Presented in the table below is the percentage of the Company's capitalization represented by the components of its capital structure as of December 31:

	2022	2021	2020
Total common shareholders' equity	38.3 %	39.9 %	37.1 %
Long-term debt and redeemable preferred stock at redemption value	54.4 %	56.6 %	53.6 %
Short-term debt and current portion of long-term debt	7.3 %	3.5 %	9.3 %
Total	100 %	100 %	100 %

The changes in the capital structure mix between periods were mainly attributable to the impacts of the HOS sale on December 9, 2021, and the repayment of short-term borrowings with proceeds from the sale, and the Company's long-term debt offering that was completed on May 5, 2022.

Debt Covenants

The Company's debt agreements contain financial and non-financial covenants. To the extent that the Company is not in compliance with these covenants, an event of default may occur under one or more debt agreements and the Company, or its subsidiaries, may be restricted in its ability to pay dividends, issue new debt or access the revolving credit facility. The long-term debt indentures contain a number of covenants that, among other things, prohibit or restrict the Company from issuing debt secured by the Company's assets, subject to certain exceptions. Failure to comply with any of these covenants could accelerate repayment obligations.

Covenants in certain long-term notes and the revolving credit facility require the Company to maintain a ratio of consolidated debt to consolidated capitalization (as defined in the relevant documents) of not more than 0.70 to 1.00. On December 31, 2022, the Company's ratio was 0.62 to 1.00 and therefore the Company was in compliance with the covenants.

Security Ratings

Presented in the table below are long-term and short-term credit ratings and rating outlooks as of February 15, 2023, as issued by Moody's Investors Service on December 19, 2022, and S&P Global Ratings on February 6, 2023:

	Securities	Moody's Investors Service	S&P Global Ratings
Rating outlook		Stable	Stable
Senior unsecured debt		Baa1	A
Commercial paper		P-2	A-1

A security rating is not a recommendation to buy, sell or hold securities and may be subject to revision or withdrawal at any time by the assigning rating agency, and each rating should be evaluated independently of any other rating. Security ratings are highly dependent upon the ability to generate cash flows in an amount sufficient to service debt and meet investment plans. The Company can provide no assurances that its ability to generate cash flows is sufficient to maintain its existing ratings. None of the Company's borrowings are subject to default or prepayment as a result of the downgrading of these security ratings, although such a downgrading could increase fees and interest charges under its credit facility.

As part of its normal course of business, the Company routinely enters into contracts for the purchase and sale of water, power and other fuel, chemicals and other services. These contracts either contain express provisions or otherwise permit the Company and its counterparties to demand adequate assurance of future performance when there are reasonable grounds for doing so. In accordance with the contracts and applicable contract law, if the Company is downgraded by a credit rating agency, especially if such downgrade is to a level below investment grade, it is possible that a counterparty would attempt to rely on such a downgrade as a basis for making a demand for adequate assurance of future performance, which could include a demand that the Company must provide collateral to secure its obligations. The Company does not expect to post any collateral which will have a material adverse impact on the Company's results of operations, financial position or cash flows.

Access to the capital markets, including the commercial paper market, and respective financing costs in those markets, may be directly affected by the Company's securities ratings. The Company primarily accesses the debt capital markets, including the commercial paper market, through AWCC. However, the Company has also issued debt through its regulated subsidiaries, primarily in the form of mortgage bonds and tax exempt securities or borrowings under state revolving funds, to lower the overall cost of debt.

Dividends and Regulatory Restrictions

For discussion of the Company's dividends, dividend restrictions and dividend policy, see Note 9—Shareholders' Equity in the Notes to Consolidated Financial Statements for additional information.

Insurance Coverage

The Company carries various property, casualty, cyber and financial insurance policies with limits, deductibles and exclusions that it believes are consistent with industry standards. However, insurance coverage may not be adequate or available to cover unanticipated losses or claims. Additionally, annual policy renewals can be impacted by claims experience which in turn can impact coverage terms and conditions on a going-forward basis. The Company is self-insured to the extent that losses are within the policy deductible or exceed the amount of insurance maintained. Such losses could have a material adverse effect on the Company's short-term and long-term financial condition and its results of operations and cash flows.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with GAAP requires that management apply accounting policies and make estimates, assumptions and judgments that could affect the Company's financial condition, results of operations and cash flows. Actual results could differ from these estimates, assumptions and judgments. Management believes that the areas described below require significant judgment in the application of accounting policy or in making estimates and assumptions in matters that are inherently uncertain and that may change in subsequent periods. Accordingly, changes in the estimates, assumptions and judgments applied to these accounting policies could have a significant impact on the Company's financial condition, results of operations and cash flows, as reflected in the Company's Consolidated Financial Statements. Management has reviewed the critical accounting policies described below with the Company's Audit, Finance and Risk Committee, including the estimates, assumptions and judgments used in their application. Additional discussion regarding these critical accounting policies and their application can be found in Note 2—Significant Accounting Policies in the Notes to Consolidated Financial Statements.

Regulation and Regulatory Accounting

The Company's regulated utilities are subject to regulation by PUCs and, as such, the Company follows the authoritative accounting principles required for rate regulated utilities, which requires the Company to reflect the effects of rate regulation in its Consolidated Financial Statements. Use of this authoritative guidance is applicable to utility operations that meet the following criteria: (i) third-party regulation of rates; (ii) cost-based rates; and (iii) a reasonable assumption that rates will be set to recover the estimated costs of providing service, plus a return on net investment, or rate base. As of December 31, 2022, the Company concluded that the operations of its utilities met the criteria.

Application of this authoritative guidance has a further effect on the Company's financial statements as it pertains to allowable costs used in the ratemaking process. The Company makes significant assumptions and estimates to quantify amounts recorded as regulatory assets and liabilities. Such judgments include, but are not limited to, assets and liabilities related to regulated acquisitions, pension and postretirement benefits, depreciation rates and taxes. Due to timing and other differences in the collection of revenues, these authoritative accounting principles allow a cost that would otherwise be charged as an expense by a non-regulated entity, to be deferred as a regulatory asset if it is probable that such cost is recoverable through future rates. Conversely, the principles require the creation of a regulatory liability for amounts collected in rates to recover costs expected to be incurred in the future, or amounts collected in excess of costs incurred and are refundable to customers.

For each regulatory jurisdiction where the Company conducts business, the Company assesses, at the end of each reporting period, whether the regulatory assets continue to meet the criteria for probable future recovery and regulatory liabilities continue to meet the criteria for probable future settlement. This assessment includes consideration of factors such as changes in regulatory environments, recent rate orders (including recent rate orders on recovery of a specific or similar incurred cost to other regulated entities in the same jurisdiction) and the status of any pending or potential legislation. If subsequent events indicate that the regulatory assets or liabilities no longer meet the criteria for probable future recovery or probable future settlement, the Company's Consolidated Statements of Operations and financial position could be materially affected. In addition, if the Company concludes in a future period that a separable portion of the business no longer meets the criteria, the Company is required to eliminate the financial statement effects of regulation for that part of the business, which would include the elimination of any or all regulatory assets and liabilities that had been recorded in the Consolidated Financial Statements. Failure to meet the criteria of this authoritative guidance could materially impact the Company's Consolidated Financial Statements.

As of December 31, 2022 and 2021, the Company's regulatory asset balance was \$1.0 billion and \$1.1 billion, respectively, and its regulatory liability balance was \$1.6 billion and \$1.6 billion, respectively. See Note 3—Regulatory Matters in the Notes to Consolidated Financial Statements for further information regarding the Company's significant regulatory assets and liabilities.

Accounting for Income Taxes

Significant management judgment is required in determining the provision for income taxes, primarily due to the uncertainty related to tax positions taken, as well as deferred tax assets and liabilities, valuation allowances and the utilization of NOL carryforwards.

In accordance with applicable authoritative guidance, the Company accounts for uncertain income tax positions using a benefit recognition model with a two-step approach, including a more-likely-than-not recognition threshold and a measurement approach based on the largest amount of tax benefit that is greater than 50% likely of being realized upon ultimate settlement. If it is not more-likely-than-not that the benefit of the tax position will be sustained on its technical merits, no benefit is recorded. Uncertain tax positions that relate only to timing of when an item is included on a tax return are considered to have met the recognition threshold. Management evaluates each position based solely on the technical merits and facts and circumstances of the position, assuming the position will be examined by a taxing authority having full knowledge of all relevant information. Significant judgment is required to determine whether the recognition threshold has been met and, if so, the appropriate amount of unrecognized tax benefit to be recorded in the Consolidated Financial Statements.

The Company evaluates the probability of realizing deferred tax assets quarterly by reviewing a forecast of future taxable income and its intent and ability to implement tax planning strategies, if necessary, to realize deferred tax assets. The Company also assesses its ability to utilize tax attributes, including those in the form of carryforwards, for which the benefits have already been reflected in the financial statements. The Company records valuation allowances for deferred tax assets when it concludes that it is more-likely-than-not such benefit will not be realized in future periods.

Under GAAP, specifically ASC 740, *Income Taxes*, the tax effects of changes in tax laws must be recognized in the period in which the law is enacted. ASC 740 also requires deferred tax assets and liabilities to be measured at the enacted tax rate expected to apply when temporary differences are to be realized or settled. For the Company's regulated entities, the change in deferred taxes are recorded as either an offset to a regulatory asset or a regulatory liability and may be subject to refund to customers. For the Company's unregulated operations, the change in deferred taxes are recorded as a non-cash re-measurement adjustment to earnings.

Actual income taxes could vary from estimated amounts due to the future impacts of various items, including changes in income tax laws, the Company's forecasted financial condition and results of operations, failure to successfully implement tax planning strategies and recovery of taxes through the regulatory process for the Regulated Businesses, as well as results of audits and examinations of filed tax returns by taxing authorities. The resulting tax balances as of December 31, 2022 and 2021 are appropriately accounted for in accordance with the applicable authoritative guidance; however, the ultimate outcome of tax matters could result in favorable or unfavorable adjustments to the Consolidated Financial Statements and such adjustments could be material. See Note 14—Income Taxes in the Notes to Consolidated Financial Statements for additional information regarding income taxes.

Accounting for Pension and Postretirement Benefits

The Company maintains noncontributory defined benefit pension plans covering eligible employees of its regulated utility and shared service operations. The Company also maintains other postretirement benefit plans providing medical and life insurance to eligible retirees. See Note 2—Significant Accounting Policies and Note 15—Employee Benefits in the Notes to Consolidated Financial Statements for additional information regarding the description of and accounting for the defined benefit pension plans and postretirement benefit plans.

The Company's pension and postretirement benefit costs are developed from actuarial valuations. Inherent in these valuations are key assumptions provided by the Company to its actuaries, including the discount rate and expected long-term rate of return on plan assets. Material changes in the Company's pension and postretirement benefit costs may occur in the future due to changes in these assumptions as well as fluctuations in plan assets. The assumptions are selected to represent the average expected experience over time and may differ in any one year from actual experience due to changes in capital markets and the overall economy. These differences will impact the amount of pension and other postretirement benefit expense that the Company recognizes. The primary assumptions are:

- Discount Rate—The discount rate is used in calculating the present value of benefits, which are based on projections of benefit payments to be made in the future. The objective in selecting the discount rate is to measure the single amount that, if invested at the measurement date in a portfolio of high-quality debt instruments, would provide the necessary future cash flows to pay the accumulated benefits when due.
- Expected Return on Plan Assets ("EROA")—Management projects the future return on plan assets considering prior performance, but primarily based upon the plans' mix of assets and expectations for the long-term returns on those asset classes. These projected returns reduce the net benefit costs the Company records currently.
- Rate of Compensation Increase—Management projects employees' pay increases, which are used to project employees' pension benefits at retirement.
- Health Care Cost Trend Rate—Management projects the expected increases in the cost of health care.
- Mortality— Management adopted the Society of Actuaries Pri-2012 mortality base table, the most recent table developed from private pension plan experience, which provides rates of mortality in 2012 and adopted the new MP-2021 mortality improvement scale to gradually adjust future mortality rates downward due to increased longevity in each year after 2012.

The discount rate assumption, which is determined for the pension and postretirement benefit plans independently, is subject to change each year, consistent with changes in applicable high-quality, long-term corporate bond indices. The Company uses an approach that approximates the process of settlement of obligations tailored to the plans' expected cash flows by matching the plans' cash flows to the coupons and expected maturity values of individually selected bonds. For each plan, the discount rate was developed as the level equivalent rate that would yield the same present value as using spot rates aligned with the projected benefit payments. The weighted-average discount rate assumption for determining pension benefit obligations was 5.58%, 2.94% and 2.74% at December 31, 2022, 2021 and 2020, respectively. The weighted-average discount rate assumption for determining other postretirement benefit obligations was 5.60%, 2.90% and 2.56% at December 31, 2022, 2021 and 2020, respectively.

In selecting an EROA, the Company considered tax implications, past performance and economic forecasts for the types of investments held by the plans. The weighted-average EROA assumption used in calculating pension cost was 6.50% for 2022, 6.50% for 2021, and 6.50% for 2020. The weighted-average EROA assumption used in calculating other postretirement benefit costs was 3.60% for 2022, 3.67% for 2021 and 3.68% for 2020.

Presented in the table below are the allocations of the pension plan assets by asset category:

	<u> </u>	Percentage of Plan Assets as of December 31,				
Asset Category	2023 Target Allocation	2022	2021			
Equity securities	37 %	57 %	53 %			
Fixed income	63 %	43 %	47 %			
Total	100 %	100 %	100 %			

Presented in the table below are the allocations of the other postretirement benefit plan assets by asset category:

	<u> </u>	Percentage of Plan Assets as of December 31,				
Asset Category	2023 Target Allocation (a)	2022	2021			
Equity securities	27 %	30 %	22 %			
Fixed income	73 %	70 %	78 %			
Total	100 %	100 %	100 %			

(a) Refer to Note 15—Employee Benefits in the Notes to Consolidated Financial Statements for additional details on the allocations of assets and the trusts which fund the other postretirement benefit plans

The investments of the pension and postretirement welfare plan trusts include debt and equity securities held either directly or through mutual funds, commingled funds and limited partnerships. The trustee for the Company's defined benefit pension and postretirement welfare plans uses an independent valuation firm to calculate the fair value of plan assets.

In selecting a rate of compensation increase, the Company considers past experience in light of movements in inflation rates. The Company's rate of compensation increase was 3.51% for 2022, 3.51% for 2021 and 3.51% for 2020.

In selecting health care cost trend rates, the Company considers past performance and forecasts of increases in health care costs. As of January 1, 2022, the Company's health care cost trend rate assumption used to calculate the periodic benefit cost was 6.00% in 2022 gradually declining to 5.00% in 2026 and thereafter. As of December 31, 2022, the Company projects that medical inflation will be 7.00% in 2023 gradually declining to 5.00% in 2031 and thereafter.

The Company will use a weighted-average discount rate and EROA of 5.58% and 6.75%, respectively, for estimating its 2023 pension costs. Additionally, the Company will use a weighted-average discount rate and EROA of 5.60% and 5.00%, respectively, for estimating its 2023 other postretirement benefit costs. A decrease in the discount rate or the EROA would increase the Company's pension expense. The Company's 2022 pension and postretirement total net benefit credit was \$47 million and the 2021 pension and postretirement total net benefit credit was \$41 million. The Company expects to make pension contributions to the plan trusts of \$39 million in 2023; however, the actual amounts contributed could change materially from this estimate. The assumptions are reviewed annually and at any interim re-measurement of the plan obligations. The impact of assumption changes is reflected in the recorded pension and postretirement benefit amounts as they occur, or over a period of time if allowed under applicable accounting standards.

Benefit Plan Amendments

In December 2022, the Company amended the American Water Pension Plan ("AWPP"), a tax-qualified defined benefit pension plan, to restructure it as of December 31, 2022. The restructuring involved the spin-off of certain inactive participants from the existing AWPP into a separate tax-qualified defined benefit pension plan, the American Water Pension Plan for Certain Inactive Participants ("AWPP Inactive"). Benefits offered to the plan participants remain unchanged. Actuarial gains and losses associated with AWPP Inactive will be amortized over the average remaining life expectancy of the inactive participants, which increases the amortization period from approximately 7 years to 18 years. The longer amortization period is expected to lower the Company's pre-tax pension expense by approximately \$5 million in 2023. The actuarial gains and losses associated with the AWPP will continue to be amortized over the average remaining service period for active participants. The Company remeasured the pension plan obligation and assets for each plan as of December 31, 2022.

Upon evaluating prior plan changes, Company funding and market performance, in December 2022, the Company completed plan amendments to spin-off and merge a portion of the American Water Retiree Welfare Plan, with and into the Company's medical plan for active employees ("Active Medical Plan"), in order to repurpose the over-funded portion of the Bargained Retiree Voluntary Employees' Beneficiary Association ("Bargained VEBA") trust. Benefits offered to the plan participants remain unchanged. As a result of these changes, effective December 31, 2022, the Company transferred investment assets from the Bargained VEBA into the existing trust maintained for the benefit of Active Medical Plan participants ("Active VEBA"). The transfer of these Bargained VEBA investment assets into the Active VEBA permits access to approximately \$194 million of assets for purposes of paying active union employee medical benefits. The Company recorded the transfer of assets as a negative contribution and therefore did not record a gain or loss, as permitted by accounting guidance. See Note 18—Fair Value of Financial Information in the Notes to Consolidated Financial Statements, for additional information on accounting for the assets as investments in debt and equity securities as of December 31, 2022.

Revenue Recognition

Revenue from the Company's Regulated Businesses is generated primarily from water and wastewater services delivered to customers. These contracts contain a single performance obligation, the delivery of water or wastewater services, as the promise to transfer the individual good or service is not separately identifiable from other promises within the contracts and, therefore, is not distinct. Revenues are recognized over time, as services are provided. There are generally no significant financing components or variable consideration. Revenues include amounts billed to customers on a cycle basis, and unbilled amounts calculated based on estimated usage from the date of the meter reading associated with the latest customer bill, to the end of the accounting period. The amounts that the Company has a right to invoice are determined by each customer's actual usage, an indicator that the invoice amount corresponds directly to the value transferred to the customer.

Increases or decreases in the volumes delivered to customers and rate mix due to changes in usage patterns in customer classes in the period could be significant to the calculation of unbilled revenue. In addition, changes in the timing of meter reading schedules and the number and type of customers scheduled for each meter reading date would also have an effect on the unbilled revenue calculation. Unbilled revenue for the Company's regulated utilities as of December 31, 2022 and 2021 was \$178 million and \$162 million, respectively.

The Company also recognizes revenue when it is probable that future recovery of previously incurred costs or future refunds that are to be credited to customers will occur through the ratemaking process.

Revenue from the Company's former HOS business, which was sold in December 2021, was generated through various protection programs in which the Company provided fixed fee services to domestic homeowners and smaller commercial customers for interior and exterior water and sewer lines, interior electric and gas lines, heating and cooling systems, water heaters, power surge protection and other related services. Most of the contracts had a one-year term and each service was a separate performance obligation, satisfied over time, as the customers simultaneously received and consumed the benefits provided from the service. Customers were obligated to pay for the protection programs ratably over 12 months or via a one-time, annual fee, with revenues recognized ratably over time for those services. Advances from customers were deferred until the performance obligation was satisfied.

The Company also has long-term, fixed fee contracts to operate and maintain water and wastewater systems for the U.S. government on various military installations and facilities owned by municipal customers. Billing and revenue recognition for the fixed fee revenues occurs ratably over the term of the contract, as customers simultaneously receive and consume the benefits provided by the Company. Additionally, these contracts allow the Company to make capital improvements to underlying infrastructure, which are initiated through separate modifications or amendments to the original contract, whereby stand-alone, fixed pricing is separately stated for each improvement. The Company has determined that these capital improvements are separate performance obligations, with revenue recognized over time based on performance completed at the end of each reporting period. Losses on contracts are recognized during the period in which the losses first become probable and estimable. Revenues recognized during the period in excess of billings on construction contracts are recorded as unbilled revenues, with billings in excess of revenues recorded as other current liabilities until the recognition criteria are met. Changes in contract performance and related estimated contract profitability may result in revisions to costs and revenues and are recognized in the period in which revisions are determined. Unbilled revenue within Other as of December 31, 2022 and 2021 was \$97 million and \$86 million, respectively.

Accounting for Contingencies

The Company records loss contingencies when management determines that the outcome of future events is probable of occurring and when the amount of the loss or a range of losses can be reasonably estimated. The determination of a loss contingency is based on management's judgment and estimates about the likely outcome of the matter, which may include an analysis of different scenarios. Liabilities are recorded or adjusted when events or circumstances cause these judgments or estimates to change. In assessing whether a loss is reasonably possible, management considers many factors, which include, but are not limited to: the nature of the litigation, claim or assessment, review of applicable law, opinions or views of legal counsel and other advisors, and the experience gained from similar cases or situations. The Company provides disclosures for material contingencies when management deems there is a reasonable possibility that a loss or an additional loss may be incurred. The Company provides estimates of reasonably possible losses when such estimates may be reasonably determined, either as a single amount or within a reasonable range.

Actual amounts realized upon settlement or other resolution of loss contingencies may be different than amounts recorded and disclosed and could have a significant impact on the liabilities, revenue and expenses recorded on the Consolidated Financial Statements. See Note 16—Commitments and Contingencies in the Notes to Consolidated Financial Statements for additional information regarding contingencies.

Recent Accounting Standards

See Note 2—Significant Accounting Policies in the Notes to Consolidated Financial Statements for a description of recent accounting standards.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company is exposed to market risk associated with changes in commodity prices, equity prices and interest rates. The Company is exposed to risks from changes in interest rates as a result of its issuance of variable and fixed rate debt and commercial paper. The Company manages its interest rate exposure by limiting its variable rate exposure and by monitoring the effects of market changes in interest rates. The Company also has the ability to enter into financial derivative instruments, which could include instruments such as, but not limited to, interest rate swaps, forward starting swaps and U.S. Treasury lock agreements to manage and mitigate interest rate risk exposure. As of December 31, 2022, a hypothetical increase of interest rates by 1% associated with the Company's short-term borrowings would result in a \$6 million increase in short-term interest expense.

The Company's risks associated with price increases for chemicals, electricity and other commodities are reduced through contractual arrangements and the expected ability to recover price increases through rates, in the next general rate case proceeding or other regulatory mechanism, as authorized by each regulatory jurisdiction. Non-performance by these commodity suppliers could have a material adverse impact on the Company's results of operations, financial position and cash flows.

The market price of the Company's common stock may experience fluctuations, which may be unrelated to its operating performance. In particular, the Company's stock price may be affected by general market movements as well as developments specifically related to the water and wastewater industry. These could include, among other things, interest rate movements, quarterly variations or changes in financial estimates by securities analysts and governmental or regulatory actions. This volatility may make it difficult for the Company to access the capital markets in the future through additional offerings of its common stock or other equity securities, regardless of its financial performance, and such difficulty may preclude the Company from being able to take advantage of certain business opportunities or meet business obligations.

The Company is exposed to credit risk through its water, wastewater and related services. The Company's Regulated Businesses serve residential, commercial, industrial and other customers, while the businesses within Other engage in business activities with government entities and other customers. The Company's primary credit risk is exposure to customer default on contractual obligations and the associated loss that may be incurred due to the non-payment of customer accounts receivable balances. The Company's credit risk is managed through established credit and collection policies which are in compliance with applicable regulatory requirements and involve monitoring of customer exposure and the use of credit risk mitigation measures such as letters of credit or prepayment arrangements. The Company's credit portfolio is diversified with no significant customer or industry concentrations. In addition, the Regulated Businesses are generally able to recover all prudently incurred costs including uncollectible customer accounts receivable expenses and collection costs through rates.

The Company's retirement trust assets are exposed to the market prices of debt and equity securities. Changes to the retirement trust asset values can impact the Company's pension and other benefits expense, funded status and future minimum funding requirements. Changes in interest rates can impact retirement liabilities. The Company aims to reduce risk through asset diversification and by investing in long duration fixed-income securities that have a duration similar to that of its pension liabilities, seeking to hedge some of the interest rate sensitivity of its liabilities. That way, if interest rates fall and liabilities increase, the Company expects that the fixed-income assets in its retirement trust will also increase in value. The Company also expects its risk to be reduced through its ability to recover pension and other benefit costs through rates.

The Company is also exposed to a potential national economic recession or deterioration in local economic conditions in the markets in which it operates. The credit quality of the Company's customer accounts receivable is dependent on the economy and the ability of its customers to manage through unfavorable economic cycles and other market changes. In addition, there can be no assurances that regulators will grant sufficient rate authorizations. Therefore, the Company's ability to fully recover operating expense, recover its investment and provide an appropriate return on invested capital made in the Regulated Businesses may be adversely impacted.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of American Water Works Company, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of American Water Works Company, Inc. and its subsidiaries (the "Company") as of December 31, 2022 and 2021, and the related consolidated statements of operations, comprehensive income, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2022, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022 in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Accounting for the Effects of Rate Regulation

As described in Notes 2 and 3 to the consolidated financial statements, the Company's consolidated regulatory assets and liabilities balances were \$1,030 million and \$1,595 million, respectively, as of December 31, 2022. The Company's regulated utilities are subject to regulation by multiple state utility commissions and the Company follows authoritative accounting principles required for rate regulated utilities, which requires the effects of rate regulation to be reflected in the Company's consolidated financial statements. As disclosed by management, for each regulatory jurisdiction where the Company conducts business, the Company assesses, at the end of each reporting period, whether the regulatory assets continue to meet the criteria for probable future settlement. This assessment includes consideration of factors such as changes in regulatory environments, recent rate orders (including recent rate orders on recovery of a specific or similar incurred cost to other regulated entities in the same jurisdiction) and the status of any pending or potential legislation.

The principal considerations for our determination that performing procedures relating to accounting for the effects of rate regulation is a critical audit matter are the significant judgment by management in accounting for regulatory assets and liabilities relative to whether regulatory assets continue to meet the criteria for probable future recovery and regulatory liabilities continue to meet the criteria for probable future settlement as a result of changes in regulatory environments, recent rate orders, and the status of any pending or potential legislation. This in turn led to a high degree of auditor judgment, subjectivity, and effort in performing audit procedures and evaluating audit evidence obtained relating to management's judgments.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the Company's regulatory accounting process, including controls over management's assessment and consideration of factors related to the probability of future recovery or settlement. These procedures also included, among others, evaluating the reasonableness of management's judgments regarding the probability of recovery and settlement based on the Company's correspondence with regulators, status of regulatory proceedings, past practices, and other relevant information; evaluating the related accounting and disclosure implications; and evaluating regulatory assets and liabilities balances based on provisions and formulas outlined in rate orders and other correspondence with the Company's regulators.

/s/ PricewaterhouseCoopers LLP Philadelphia, Pennsylvania February 15, 2023

We have served as the Company's auditor since 1948.

American Water Works Company, Inc. and Subsidiary Companies Consolidated Balance Sheets

(In millions, except share and per share data)

	Decer	nber 31, 2022	Decen	nber 31, 2021
ASSETS		_		
Property, plant and equipment	\$	29,736	\$	27,413
Accumulated depreciation		(6,513)		(6,329)
Property, plant and equipment, net		23,223		21,084
Current assets:				
Cash and cash equivalents		85		116
Restricted funds		32		20
Accounts receivable, net of allowance for uncollectible accounts of \$60 and \$75, respectively		334		271
Income tax receivable		114		4
Unbilled revenues		275		248
Materials and supplies		98		57
Assets held for sale				683
Other		312		155
Total current assets		1,250		1,554
Regulatory and other long-term assets:		<u> </u>		
Regulatory assets		990		1,051
Seller promissory note from the sale of the Homeowner Services Group		720		720
Operating lease right-of-use assets		82		92
Goodwill		1,143		1,139
Postretirement benefit assets		_		193
Other		379		242
Total regulatory and other long-term assets		3,314		3,437
Total assets	\$	27,787	\$	26,075

American Water Works Company, Inc. and Subsidiary Companies Consolidated Balance Sheets

(In millions, except share and per share data)

	December	31, 2022	Dec	cember 31, 2021
CAPITALIZATION AND LIABILITIES				
Capitalization:				
Common stock (\$0.01 par value; 500,000,000 shares authorized; 187,200,539 and 186,880,413 shares issued, respectively)	\$	2	\$	2
Paid-in-capital		6,824		6,781
Retained earnings		1,267		925
Accumulated other comprehensive loss		(23)		(45)
Treasury stock, at cost (5,342,477 and 5,269,324 shares, respectively)		(377)		(365)
Total common shareholders' equity		7,693		7,298
Long-term debt		10,926	_	10,341
Redeemable preferred stock at redemption value		3		3
Total long-term debt		10,929		10,344
Total capitalization		18,622		17,642
Current liabilities:				
Short-term debt		1,175		584
Current portion of long-term debt		281		57
Accounts payable		254		235
Accrued liabilities		706		701
Accrued taxes		49		176
Accrued interest		91		88
Liabilities related to assets held for sale				83
Other		255		217
Total current liabilities		2,811		2,141
Regulatory and other long-term liabilities:				_
Advances for construction		316		284
Deferred income taxes and investment tax credits		2,437		2,421
Regulatory liabilities		1,590		1,600
Operating lease liabilities		70		80
Accrued pension expense		235		285
Other		202		180
Total regulatory and other long-term liabilities		4,850		4,850
Contributions in aid of construction		1,504		1,442
Commitments and contingencies (See Note 16)				
Total capitalization and liabilities	\$	27,787	\$	26,075

American Water Works Company, Inc. and Subsidiary Companies Consolidated Statements of Operations

(In millions, except per share data)

	2022	2021	2020	
Operating revenues	\$ 3,792	\$ 3,930	\$ 3,777	
Operating expenses:				
Operation and maintenance	1,589	1,777	1,622	
Depreciation and amortization	649	636	604	
General taxes	281	321	303	
Total operating expenses, net	2,519	2,734	2,529	
Operating income	1,273	1,196	1,248	
Other income (expense):				
Interest expense	(433)	(403)	(397)	
Interest income	52	4	2	
Non-operating benefit costs, net	77	78	49	
Gain on sale of businesses	19	747	_	
Other, net	20	18	22	
Total other income (expense)	(265)	444	(324)	
Income before income taxes	1,008	1,640	924	
Provision for income taxes	188	377	215	
Net income attributable to common shareholders	<u>\$ 820</u>	\$ 1,263	\$ 709	
Basic earnings per share: (a)				
Net income attributable to common shareholders	\$ 4.51	\$ 6.96	\$ 3.91	
Diluted earnings per share: (a)				
Net income attributable to common shareholders	\$ 4.51	\$ 6.95	\$ 3.91	
Weighted average common shares outstanding:				
Basic	182	182	181	
Diluted	182	182	182	

⁽a) Amounts may not calculate due to rounding.

American Water Works Company, Inc. and Subsidiary Companies Consolidated Statements of Comprehensive Income (In millions)

	For the Years Ended December 31,					
		2022		2021		2020
Net income attributable to common shareholders	\$	820	\$	1,263	\$	709
Other comprehensive income (loss), net of tax:						
Change in employee benefit plan funded status, net of tax of \$5, \$0 and \$(4) in 2022, 2021 and 2020, respectively		14		(1)		(12)
Defined benefit pension plan actuarial loss, net of tax of \$1, \$1 and \$1 in 2022, 2021 and 2020, respectively		3		4		3
Unrealized gain (loss) on cash flow hedges, net of tax of \$1, \$1 and \$(1) in 2022, 2021 and 2020, respectively		5		1		(4)
Net other comprehensive income (loss)		22		4		(13)
Comprehensive income attributable to common shareholders	\$	842	\$	1,267	\$	696

American Water Works Company, Inc. and Subsidiary Companies Consolidated Statements of Cash Flows

(In millions)

		31,		
	2022	2021	2020	
CASH FLOWS FROM OPERATING ACTIVITIES				
Net income	\$ 820	\$ 1,263	\$ 709	
Adjustments to reconcile to net cash flows provided by operating activities:				
Depreciation and amortization	649	636	604	
Deferred income taxes and amortization of investment tax credits	80	230	207	
Provision for losses on accounts receivable	24	37	34	
(Gain) or loss on sale of businesses	(19)	(747)	_	
Pension and non-pension postretirement benefits	(47)	(41)	(14)	
Other non-cash, net	7	(23)	(20)	
Changes in assets and liabilities:				
Receivables and unbilled revenues	(114)	(74)	(97)	
Income tax receivable	(110)	21	(3)	
Pension and non-pension postretirement benefit contributions	(51)	(40)	(39)	
Accounts payable and accrued liabilities	(8)	66	(2)	
Accrued taxes	(118)	129	3	
Other assets and liabilities, net	(5)	(16)	44	
Net cash provided by operating activities	1,108	1,441	1,426	
CASH FLOWS FROM INVESTING ACTIVITIES				
Capital expenditures	(2,297)	(1,764)	(1,822)	
Acquisitions, net of cash acquired	(315)	(135)	(135)	
Proceeds from sale of assets, net of cash on hand	608	472	2	
Removal costs from property, plant and equipment retirements, net	(123)	(109)	(106)	
Net cash used in investing activities	(2,127)	(1,536)	(2,061)	
CASH FLOWS FROM FINANCING ACTIVITIES		<u></u>		
Proceeds from long-term debt	822	1,118	1,334	
Repayments of long-term debt	(15)	(372)	(342)	
(Repayments of) proceeds from term loan	<u> </u>	(500)	500	
Net short-term borrowings (repayments) with maturities less than three months	591	(198)	(5)	
Advances and contributions in aid of construction, net of refunds of \$19, \$25 and \$24 in 2022, 2021 and 2020, respectively	74	62	28	
Debt issuance costs and make-whole premium on early debt redemption	(7)	(26)	(15)	
Dividends paid	(467)	(428)	(389)	
Other, net	2	(1)	9	
Net cash provided by (used in) financing activities	1,000	(345)	1,120	
Net (decrease) increase in cash, cash equivalents and restricted funds	(19)	(440)	485	
Cash, cash equivalents and restricted funds at beginning of period	136	576	91	
Cash, cash equivalents and restricted funds at end of period	\$ 117	\$ 136	\$ 576	
Cash paid during the year for:				
Interest, net of capitalized amount	\$ 414	\$ 389	\$ 382	
Income taxes, net of refunds of \$2, \$6 and \$2 in 2022, 2021 and 2020, respectively	\$ 335	\$ 1	\$ 7	
Non-cash investing activity:	Ψ 333	ψ I	Ψ /	
Capital expenditures acquired on account but unpaid as of year end	\$ 330	\$ 292	\$ 221	
Seller promissory note from the sale of the Homeowner Services Group	\$ 	\$ 720	\$	
Contingent cash payment from the sale of the Homeowner Services Group	\$ —	\$ 75	\$ —	
	*	- 73	-	

American Water Works Company, Inc. and Subsidiary Companies Consolidated Statements of Changes in Shareholders' Equity

(In millions, except per share data)

	Common Stock						Treasu	ry Sto	ock			
	Shares	Par	Value	Paid-in Capital		Retained Earnings Accumulated Oth (Accumulated Deficit) Comprehensive Lo		Shares	At Cost		To	otal Shareholders' Equity
Balance as of December 31, 2019	185.9	\$	2	\$ 6,700	\$	(207)	\$ (36)	(5.1)	\$	(338)	\$	6,121
Net income attributable to common shareholders	_		_	_		709	_	_		_		709
Common stock issuances (a)	0.6		_	47		_	_	(0.1)		(10)		37
Net other comprehensive income	_		_	_		_	(13)	_		_		(13)
Dividends (\$2.20 declared per common share)	_		_	_		(400)	_	_		_		(400)
Balance as of December 31, 2020	186.5	\$	2	\$ 6,747	\$	102	\$ (49)	(5.2)	\$	(348)	\$	6,454
Net income attributable to common shareholders	_		_	_		1,263	_	_		_		1,263
Common stock issuances (a)	0.4			34		_	_	(0.1)		(17)		17
Net other comprehensive income	_		_	_		_	4	_		_		4
Dividends (\$2.41 declared per common share)	_		_	_		(440)	_	_		_		(440)
Balance as of December 31, 2021	186.9	\$	2	\$ 6,781	\$	925	\$ (45)	(5.3)	\$	(365)	\$	7,298
Net income attributable to common shareholders	_			_		820	_	_		_		820
Common stock issuances (a)	0.5			43		_	_	(0.1)		(12)		31
Net other comprehensive income	_		_	_		_	22	_		_		22
Dividends (\$2.62 declared per common share)	_			_		(478)	_	_		_		(478)
Balance as of December 31, 2022	187.4	\$	2	\$ 6,824	\$	1,267	\$ (23)	(5.4)	\$	(377)	\$	7,693

Includes stock-based compensation, employee stock purchase plan and direct stock reinvestment and direct stock purchase plan activity. (a)

American Water Works Company, Inc. and Subsidiary Companies Notes to Consolidated Financial Statements

(Unless otherwise noted, in millions, except per share data)

Note 1: Organization and Operation

American Water Works Company, Inc. (the "Company" or "American Water") is a holding company for regulated and market-based subsidiaries that provide water and wastewater services throughout the United States. References to "parent company" mean American Water Works Company, Inc., without its subsidiaries. The Company's primary business involves the ownership of regulated utilities that provide water and wastewater services in 14 states in the United States, collectively referred to as the "Regulated Businesses." The Company also operates other market-based businesses that provide water and wastewater services within non-reportable operating segments, collectively presented throughout this Annual Report on Form 10-K within "Other." The Company's primary market-based businesses included within Other are the Military Services Group ("MSG"), which enters into long-term contracts with the U.S. government to provide water and wastewater services on various military installations; and the former Homeowner Services Group ("HOS"), which was sold on December 9, 2021, and provided various warranty protection programs and other home services to residential customers.

Note 2: Significant Accounting Policies

Regulation

The Company's regulated utilities are subject to regulation by multiple state utility commissions or other entities engaged in utility regulation, collectively referred to as Public Utility Commissions ("PUCs"). As such, the Company follows authoritative accounting principles required for rate regulated utilities, which requires the effects of rate regulation to be reflected in the Company's Consolidated Financial Statements. PUCs generally authorize revenue at levels intended to recover the estimated costs of providing service, plus a return on net investments, or rate base. Regulators may also approve accounting treatments, long-term financing programs and cost of capital, operation and maintenance ("O&M") expenses, capital expenditures, taxes, affiliated transactions and relationships, reorganizations, mergers, acquisitions and dispositions, along with imposing certain penalties or granting certain incentives. Due to timing and other differences in the collection of a regulated utility's revenues, these authoritative accounting principles allow a cost that would otherwise be charged as an expense by a non-regulated entity, to be deferred as a regulatory asset if it is probable that such cost is recoverable through future rates. Conversely, these principles also require the creation of a regulatory liability for amounts collected in rates to recover costs expected to be incurred in the future, or amounts collected in excess of costs incurred and are refundable to customers. See Note 3—Regulatory Matters for additional information.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States ("GAAP") requires that management make estimates, assumptions and judgments that could affect the Company's financial condition, results of operations and cash flows. Actual results could differ from these estimates, assumptions and judgments. The Company considers its critical accounting estimates to include (i) the application of regulatory accounting principles and the related determination and estimation of regulatory assets and liabilities, (ii) revenue recognition and the estimates used in the calculation of unbilled revenue, (iii) accounting for income taxes, (iv) benefit plan assumptions and (v) the estimates and judgments used in determining loss contingencies. The Company's critical accounting estimates that are particularly sensitive to change in the near term are amounts reported for regulatory assets and liabilities, income taxes, benefit plan assumptions and contingency-related obligations.

Principles of Consolidation

The accompanying Consolidated Financial Statements include the accounts of American Water and all of its subsidiaries in which a controlling interest is maintained after the elimination of intercompany balances and transactions.

Property, Plant and Equipment

Property, plant and equipment consists primarily of utility plant utilized by the Company's regulated utilities. Additions to utility plant and replacement of retirement units of utility plant are capitalized and include costs such as materials, direct labor, payroll taxes and benefits, indirect items such as engineering and supervision, transportation and an allowance for funds used during construction ("AFUDC"). Costs for repair, maintenance and minor replacements are charged to O&M expense as incurred.

The cost of utility plant is depreciated using the straight-line average remaining life, group method. The Company's regulated utilities record depreciation in conformity with amounts approved by PUCs, after regulatory review of the information the Company submits to support its estimates of the assets' remaining useful lives.

Nonutility property consists primarily of buildings and equipment utilized by the Company's MSG business and for internal operations. This property is stated at cost, net of accumulated depreciation, which is calculated using the straight-line method over the useful lives of the assets.

When units of property, plant and equipment are replaced, retired or abandoned, the carrying value is credited against the asset and charged to accumulated depreciation. To the extent the Company recovers cost of removal or other retirement costs through rates after the retirement costs are incurred, a regulatory asset is recorded. In some cases, the Company recovers retirement costs through rates during the life of the associated asset and before the costs are incurred. These amounts result in a regulatory liability being reported based on the amounts previously recovered through customer rates, until the costs to retire those assets are incurred.

The costs incurred to acquire and internally develop computer software for internal use are capitalized as a unit of property. The carrying value of these costs amounted to \$369 million and \$374 million as of December 31, 2022 and 2021, respectively.

Cash and Cash Equivalents, and Restricted Funds

Substantially all cash is invested in interest-bearing accounts. All highly liquid investments with a maturity of three months or less when purchased are considered to be cash equivalents.

Restricted funds consist primarily of proceeds from financings for the construction and capital improvement of facilities, and deposits for future services under O&M projects. Proceeds are held in escrow or interest-bearing accounts until the designated expenditures are incurred. Restricted funds are classified on the Consolidated Balance Sheets as either current or long-term based upon the intended use of the funds.

Accounts Receivable and Unbilled Revenues

Accounts receivable include regulated utility customer accounts receivable, which represent amounts billed to water and wastewater customers generally on a monthly basis. Credit is extended based on the guidelines of the applicable PUCs and collateral is generally not required. Also included are market-based trade accounts receivable and nonutility customer receivables of the regulated subsidiaries. Unbilled revenues are accrued when service has been provided but has not been billed to customers and when costs exceed billings on market-based construction contracts.

Allowance for Uncollectible Accounts

Allowances for uncollectible accounts are maintained for estimated probable losses resulting from the Company's inability to collect receivables from customers. Accounts that are outstanding longer than the payment terms are considered past due. A number of factors are considered in determining the allowance for uncollectible accounts, including the length of time receivables are past due, previous loss history, current economic and societal conditions and reasonable and supportable forecasts that affect the collectability of receivables from customers. The Company generally writes off accounts when they become uncollectible or are over a certain number of days outstanding. See Note 7—Allowance for Uncollectible Accounts for additional information.

Materials and Supplies

Materials and supplies are stated at the lower of cost or net realizable value. Cost is determined using the average cost method.

Seller Promissory Note

The Company's seller promissory note is accounted for under Accounting Standards Codification ("ASC") Topic 310, *Receivables*, and is classified as held for investment and accounted for at amortized cost at the present value of consideration received for the sale of its HOS business. Interest income from the seller promissory note is accrued based on the principal amount outstanding and earned over the contractual life of the loan.

Leases

The Company has operating and finance leases involving real property, including facilities, utility assets, vehicles, and equipment. The Company determines if an arrangement is a lease at inception. Operating leases are included in operating lease right-of-use ("ROU") assets, accrued liabilities and operating lease liabilities on the Consolidated Balance Sheets. Finance leases are included in property, plant and equipment, accrued liabilities and other long-term liabilities on the Consolidated Balance Sheets. The Company has made an accounting policy election not to include operating leases with a lease term of twelve months or less.

ROU assets represent the right to use an underlying asset for the lease term and the lease liabilities represent the obligation to make lease payments arising from the lease. ROU assets and lease liabilities are generally recognized at the commencement date based on the present value of discounted lease payments over the lease term. As most of the Company's leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on the information available at the commencement date in determining the present value of discounted lease payments. The implicit rate is used when readily determinable. ROU assets also include any upfront lease payments and excludes lease incentives. The Company's lease terms may include options to extend or terminate the lease when it is reasonably certain that the option will be exercised. Lease expense is recognized on a straight-line basis over the lease term.

The Company has lease agreements with lease components (e.g., fixed payments including rent, real estate taxes and insurance costs) and non-lease components (e.g., common-area maintenance costs), which are generally accounted for separately; however, the Company accounts for the lease and non-lease components as a single lease component for certain leases. Certain lease agreements include variable rental payments adjusted periodically for inflation. Additionally, the Company applies a portfolio approach to effectively account for the ROU assets and lease liabilities. The Company's lease agreements do not contain any material residual value guarantees or material restrictive covenants.

Goodwill

Goodwill represents the excess of the purchase price paid over the estimated fair value of the assets acquired and liabilities assumed in the acquisition of a business. Goodwill is not amortized and must be allocated at the reporting unit level, which is defined as an operating segment or one level below, and tested for impairment at least annually, or more frequently if an event occurs or circumstances change that would more likely than not, reduce the fair value of a reporting unit below its carrying value.

The Company's goodwill is primarily associated with the acquisition of American Water by an affiliate of the Company's previous owner in 2003 and has been allocated to reporting units based on the fair values at the date of the acquisitions. For purposes of testing goodwill for impairment, the reporting units in the Regulated Businesses segment are aggregated into a single reporting unit. The goodwill of Other is comprised of the MSG reporting unit.

The Company's annual impairment testing is performed as of November 30 of each year. The Company assesses qualitative factors to determine whether quantitative testing is necessary. If it is determined, based upon qualitative factors, that the estimated fair value of a reporting unit is, more likely than not, greater than its carrying value, no further testing is required. If the Company bypasses the qualitative assessment or performs the qualitative assessment and determines that the estimated fair value of a reporting unit, is more likely than not, less than its carrying value, a quantitative, fair value-based assessment is performed. This quantitative testing compares the estimated fair value of the reporting unit to its respective net carrying value, including goodwill, on the measurement date. An impairment loss will be recognized in the amount equal to the excess of the reporting unit's carrying value compared to its estimated fair value. limited to the total amount of goodwill allocated to that reporting unit.

Application of goodwill impairment testing requires management judgment, including the identification of reporting units and determining the fair value of reporting units. Management estimates fair value using a discounted cash flow analysis. Significant assumptions used in these fair value estimations include, but are not limited to, forecasts of future operating results, discount rate and growth rate.

The Company believes the assumptions and other considerations used to value goodwill to be appropriate, however, if actual experience differs from the assumptions and considerations used in its analysis, the resulting change could have a material adverse impact on the Consolidated Financial Statements. See Note 8—Goodwill and Other Intangible Assets for additional information.

Impairment of Long-Lived Assets

Long-lived assets, other than goodwill, include property, plant and equipment and long-term investments. The Company evaluates long-lived assets for impairment when circumstances indicate the carrying value of those assets may not be recoverable. The Company determines if long-lived assets are potentially impaired by comparing the undiscounted expected future cash flows to the carrying value when indicators of impairment exist. When the undiscounted cash flow analysis indicates a long-lived asset may not be recoverable, the amount of the impairment loss is determined by measuring the excess of the carrying amount of the long-lived asset or asset group over its fair value.

The long-lived assets of the Company's regulated utilities are grouped on a separate entity basis for impairment testing, as they are integrated state-wide operations that do not have the option to curtail service and generally have uniform tariffs. A regulatory asset is charged to earnings if and when future recovery in rates of that asset is no longer probable.

The Company believes the assumptions and other considerations used to value long-lived assets to be appropriate, however, if actual experience differs from the assumptions and considerations used in its estimates, the resulting change could have a material adverse impact on the Consolidated Financial Statements.

Advances for Construction and Contributions in Aid of Construction

Regulated utility subsidiaries may receive advances for construction and contributions in aid of construction from customers, home builders and real estate developers to fund construction necessary to extend service to new areas.

Advances are refundable for limited periods of time as new customers begin to receive service or other contractual obligations are fulfilled. Included in other current liabilities as of December 31, 2022 and 2021 on the Consolidated Balance Sheets are estimated refunds of \$19 million and \$23 million, respectively. These amounts represent expected refunds during the next 12-month period.

Advances that are no longer refundable are reclassified to contributions. Contributions are permanent collections of plant assets or cash for a particular construction project. For ratemaking purposes, the amount of such contributions generally serves as a rate base reduction since the contributions represent non-investor supplied funds.

Generally, the Company depreciates utility plant funded by contributions and amortizes its contributions balance as a reduction to depreciation expense, producing a result which is functionally equivalent to reducing the original cost of the utility plant for the contributions. In accordance with applicable regulatory guidelines, some of the Company's utility subsidiaries do not amortize contributions, and any contribution received remains on the balance sheet indefinitely. Amortization of contributions in aid of construction was \$37 million, \$36 million and \$32 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Revenue Recognition

Under ASC Topic 606, Revenue From Contracts With Customers, and all related amendments (collectively, "ASC 606"), a performance obligation is a promise within a contract to transfer a distinct good or service, or a series of distinct goods and services, to a customer. Revenue is recognized when performance obligations are satisfied and the customer obtains control of promised goods or services. The amount of revenue recognized reflects the consideration to which the Company expects to be entitled to receive in exchange for goods or services. Under ASC 606, a contract's transaction price is allocated to each distinct performance obligation. To determine revenue recognition for arrangements that the Company determines are within the scope of ASC 606, the Company performs the following five steps: (i) identifies the contracts with a customer; (ii) identifies the performance obligations within the contract, including whether any performance obligations are distinct and capable of being distinct in the contract; (iii) determines the transaction price; (iv) allocates the transaction price to the performance obligations in the contract; and (v) recognizes revenue when, or as, the Company satisfies each performance obligation.

The Company's revenues from contracts with customers are discussed below. Customer payments for contracts are generally due within 30 days of billing and none of the contracts with customers have payment terms that exceed one year; therefore, the Company elected to apply the significant financing component practical expedient and no amount of consideration has been allocated as a financing component.

Regulated Businesses Revenue

Revenue from the Company's Regulated Businesses is generated primarily from water and wastewater services delivered to customers. These contracts contain a single performance obligation, the delivery of water and/or wastewater services, as the promise to transfer the individual good or service is not separately identifiable from other promises within the contracts and, therefore, is not distinct. Revenues are recognized over time, as services are provided. There are generally no significant financing components or variable consideration. Revenues include amounts billed to customers on a cycle basis and unbilled amounts calculated based on estimated usage from the date of the meter reading associated with the latest customer bill, to the end of the accounting period. The amounts that the Company has a right to invoice are determined by each customer's actual usage, an indicator that the invoice amount corresponds directly to the value transferred to the customer. The Company also recognizes revenue when it is probable that future recovery of previously incurred costs or future refunds that are to be credited to customers will occur through the ratemaking process.

Other Revenue

The Company has long-term, fixed fee contracts to operate and maintain water and wastewater systems for the U.S. government on various military installations and facilities owned by municipal customers. Billing and revenue recognition for the fixed fee revenues occurs ratably over the term of the contract, as customers simultaneously receive and consume the benefits provided by the Company. Additionally, these contracts allow the Company to make capital improvements to underlying infrastructure, which are initiated through separate modifications or amendments to the original contract, whereby stand-alone, fixed pricing is separately stated for each improvement. The Company has determined that these capital improvements are separate performance obligations, with revenue recognized over time based on performance completed at the end of each reporting period. Losses on contracts are recognized during the period in which the losses first become probable and estimable. Revenues recognized during the period in excess of billings on construction contracts are recorded as unbilled revenues, with billings in excess of revenues recorded as other current liabilities until the recognition criteria are met. Changes in contract performance and related estimated contract profitability may result in revisions to costs and revenues and are recognized in the period in which revisions are determined. See Note 4—Revenue Recognition for additional information.

Prior to December 9, 2021, through various warranty protection programs and other home services, the Company previously provided fixed fee services to residential customers for interior and exterior water and sewer lines, interior electric and gas lines, heating and cooling systems, water heaters and other home appliances, as well as power surge protection and other related services through its former HOS business. Most of the contracts had a one-year term and each service was a separate performance obligation, satisfied over time, as the customers simultaneously received and consumed the benefits provided from the service. Customers were obligated to pay for the protection programs ratably over 12 months or via a one-time, annual fee, with revenues recognized ratably over time for those services. Advances from customers were deferred until the performance obligation was satisfied.

Income Taxes

The Company and its subsidiaries participate in a consolidated federal income tax return for U.S. tax purposes. Members of the consolidated group are charged with the amount of federal income tax expense determined as if they filed separate returns.

Certain income and expense items are accounted for in different time periods for financial reporting than for income tax reporting purposes. The Company provides deferred income taxes on the difference between the tax basis of assets and liabilities and the amounts at which they are carried in the financial statements. These deferred income taxes are based on the enacted tax rates expected to be in effect when these temporary differences are projected to reverse. In addition, the regulated utility subsidiaries recognize regulatory assets and liabilities for the effect on revenues expected to be realized as the tax effects of temporary differences, previously flowed through to customers, reverse.

Investment tax credits have been deferred by the regulated utility subsidiaries and are being amortized to income over the average estimated service lives of the related assets.

The Company recognizes accrued interest and penalties related to tax positions as a component of income tax expense and accounts for sales tax collected from customers and remitted to taxing authorities on a net basis. See Note 14—Income Taxes for additional information.

Allowance for Funds Used During Construction

AFUDC is a non-cash credit to income with a corresponding charge to utility plant that represents the cost of borrowed funds or a return on equity funds devoted to plant under construction. The regulated utility subsidiaries record AFUDC to the extent permitted by the PUCs. The portion of AFUDC attributable to borrowed funds is shown as a reduction of interest, net on the Consolidated Statements of Operations. Any portion of AFUDC attributable to equity funds would be included in other, net on the Consolidated Statements of Operations. Presented in the table below is AFUDC for the years ended December 31:

	 2022	2021	 2020
Allowance for other funds used during construction	\$ 20	\$ 27	\$ 30
Allowance for borrowed funds used during construction	14	10	13

Derivative Financial Instruments

The Company uses derivative financial instruments primarily for purposes of hedging exposures to fluctuations in interest rates. These derivative contracts are entered into for periods consistent with the related underlying exposures and do not constitute positions independent of those exposures. The Company does not enter into derivative contracts for speculative purposes and does not use leveraged instruments.

All derivatives are recognized on the balance sheet at fair value. On the date the derivative contract is entered into, the Company designates the derivative as a hedge of a forecasted transaction or of the variability of cash flows to be received or paid related to a recognized asset or liability (cash-flow hedge).

The gains and losses on the effective portion of cash-flow hedges are recorded in other comprehensive income, until earnings are affected by the variability of cash flows. Any ineffective portion of designated cash-flow hedges is recognized in current-period earnings.

Cash flows from derivative contracts are included in net cash provided by operating activities on the Consolidated Statements of Cash Flows. See Note 11—Long-Term Debt for additional information.

Pension and Other Postretirement Benefits

The Company maintains defined benefit pension plans and other postretirement benefit plans for eligible employees and retirees. The plan obligation and costs of providing benefits under these plans are annually measured as of December 31. The measurement involves various factors, assumptions and accounting elections. The impact of assumption changes or experience different from that assumed on pension and other postretirement benefit obligations is recognized over time rather than immediately recognized in the Consolidated Statements of Operations and the Consolidated Statements of Comprehensive Income. Cumulative gains and losses that are in excess of 10% of the greater of either the projected benefit obligation or the fair value of plan assets are amortized over the expected average remaining future service period of the current active membership for the plans, with the exception of the American Water Pension Plan for Certain Inactive Participants ("AWPP Inactive"), which is amortized over the average remaining life expectancy of the inactive participants. See Note 15—Employee Benefits for additional information.

The Company's policy is to recognize curtailments when the total expected future service of plan participants is reduced by greater than 10% due to an event that results in terminations and/or retirements.

New Accounting Standards

Presented in the table below are new accounting standards that were adopted by the Company in 2022:

Standard	Description	Date of Adoption	Application	Effect on the Consolidated Financial Statements
Accounting for Convertible Instruments and Contracts in an Entity's Own Equity	Simplification of financial reporting associated with accounting for convertible instruments and contracts in an entity's own equity. The standard reduced the number of accounting models for convertible debt instruments and convertible preferred stock. This will result in fewer embedded conversion features being separately recognized from the host contract. Earnings per share ("EPS") calculations have been simplified for certain instruments.	January 1, 2022	Modified retrospective	The standard did not have a material impact on the Consolidated Financial Statements.
Disclosures by Business Entities about Government Assistance	The amendments in this update require additional disclosures regarding government grants and contributions. These disclosures require information on the following three items about government transactions to be provided: information on the nature of transactions and related accounting policy used to account for transactions, the line items on the balance sheet and income statement affected by these transactions including amounts applicable to each line, and significant terms and conditions of the transactions, including commitments and contingencies.	January 1, 2022	Prospective	The standard did not have a material impact on the Consolidated Financial Statements.
Reference Rate Reform	This update provides an additional two-year deferral on the sunset date for temporary relief during the reference rate reform transition period. After December 31, 2024, the Company will no longer be permitted to apply the relief for reference rate reform.	December 21, 2022	Prospective	The standard did not have a material impact on the Consolidated Financial Statements
		90		

Presented in the table below are recently issued accounting standards that have not yet been adopted by the Company as of December 31, 2022:

Standard	Description	Date of Adoption	Application	Estimated Effect on the Consolidated Financial Statements
Accounting for Contract Assets and Contract Liabilities from Contracts with Customers	The guidance requires an acquirer recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with Accounting Standards Codification Topic 606, as if it had originated the contracts. The amendments in this update also provide certain practical expedients for acquirers when recognizing and measuring acquired contract assets and contract liabilities from revenue contracts in a business combination.	January 1, 2023; early adoption permitted	Prospective	The Company is evaluating any impact on its Consolidated Financial Statements, as well as the timing of adoption.
Troubled Debt Restructurings and Vintage Disclosures	The main provisions of this standard eliminate the receivables accounting guidance for troubled debt restructurings ("TDRs") by creditors while enhancing disclosure requirements when a borrower is experiencing financial difficulty. Entities must apply the loan refinancing and restructuring guidance for receivables to determine whether a modification results in a new loan or a continuation of an existing loan. Additionally, the amendments in this update require that an entity disclose current-period gross write-offs by year of origination for financing receivables and net investment in leases.	January 1, 2023; early adoption permitted	Prospective, with a modified retrospective option for amendments related to the recognition and measurement of TDRs.	The Company is evaluating any impact on its Consolidated Financial Statements, as well as the timing of adoption.

Reclassifications

Certain reclassifications have been made to prior periods in the Consolidated Financial Statements and Notes to conform to the current presentation.

Note 3: Regulatory Matters

General Rate Cases

Presented in the table below are annualized incremental revenues, including reductions for the amortization of the excess accumulated deferred income taxes ("EADIT") that are generally offset in income tax expense, assuming a constant water sales volume and customer count, resulting from general rate case authorizations that became effective during 2022:

(In millions)	Effective Date	Amount	
General rate cases by state:			
New Jersey	September 1, 2022	\$	46
Hawaii	July 1, 2022		2
West Virginia	February 25, 2022		13
California, Step Increase	January 1, 2022		9
Pennsylvania, Step Increase	January 1, 2022		20
Total general rate case authorizations		\$	90

Presented in the table below are annualized incremental revenues, including reductions for the amortization of EADIT that are generally offset in income tax expense, assuming a constant water sales volume and customer count, resulting from general rate case authorizations that became effective on or after January 1, 2023:

(In millions)	Effective Date	Amount	
General rate cases by state:			
Pennsylvania	January 28, 2023	\$	138
Illinois	January 1, 2023		67
California, Step Increase	January 1, 2023		13
Total general rate case authorizations		\$	218

On December 15, 2022, the Illinois Commerce Commission issued an order approving the adjustment of base rates requested in a rate case filed on February 10, 2022, by the Company's Illinois subsidiary. As updated in the Illinois subsidiary's June 29, 2022 rebuttal filing, the request sought \$83 million in additional annualized revenues excluding previously recovered infrastructure surcharges. The general rate case order approved a \$67 million annualized increase in water and wastewater system revenues excluding previously recovered infrastructure surcharges, effective January 1, 2023, based on an authorized return on equity of 9.8%, authorized rate base of \$1.64 billion, a common equity ratio of 49.0% and a debt ratio of 51.0%. The annualized revenue increase is being driven primarily by significant water and wastewater system capital investments since the Illinois subsidiary's 2017 rate case order that have been completed or are planned through December 31, 2023, expected higher pension and other postretirement benefit costs, and increases in production costs, including chemicals, fuel and power costs.

On December 8, 2022, the Pennsylvania Public Utility Commission issued an order approving the joint settlement of the rate case filed on April 29, 2022, by the Company's Pennsylvania subsidiary. The general rate case order approved a \$138 million annualized increase in water and wastewater revenues and authorizes implementation of the new water and wastewater rates effective January 28, 2023. The rate case proceeding was resolved through a "black box" settlement agreement and did not specify an approved return on equity ("ROE"). The annualized revenue increase is driven primarily by significant incremental capital investments since the Pennsylvania subsidiary's 2021 rate case order that will be completed through December 31, 2023, increases in pension and other postretirement benefits expense and increases in production costs, including chemicals, fuel and power costs. The general rate case order also includes recovery of the Company's Pennsylvania subsidiary's COVID-19 deferral balance.

On August 17, 2022, the Company's New Jersey subsidiary was authorized additional annual revenues of \$46 million in its general rate case, effective September 1, 2022, based on an authorized return on equity of 9.6%, authorized rate base of \$4.15 billion, a common equity ratio of 54.6% and a long-term debt ratio of 45.4%. The request incorporated updated estimates of production costs, including chemicals, fuel and power costs. Beginning January 1, 2023, the Company's New Jersey subsidiary will defer as a regulatory asset or liability, as appropriate, the difference between its pension expense and other postretirement benefits expense and those amounts included in base rates. The deferral period for this regulatory asset or liability will be two years or, if earlier, will end at the conclusion of the Company's New Jersey subsidiary's next general rate case. The Company's New Jersey subsidiary also withdrew its request, without prejudice, to recover its existing authorized COVID-19-related regulatory asset in the general rate case and will seek recovery in a separate proceeding within the process established in the New Jersey Board of Public Utilities' (the "NJBPU") generic COVID-19-related proceeding.

On February 24, 2022, the Company's West Virginia subsidiary ("WVAWC") was authorized additional annual revenues of \$13 million in its general rate case, effective February 25, 2022, based on an authorized return on equity of 9.8%, authorized rate base of \$734 million and a common equity ratio of 47.9%. Staff of the Public Service Commission of West Virginia moved for reconsideration of the final order on several grounds. WVAWC filed its response to the Staff's Petition for Reconsideration on March 28, 2022, in support of the authorized revenue requirement. On October 21, 2022, the Public Service Commission of West Virginia denied the motion for reconsideration.

Pending General Rate Case Filings

On July 1, 2022, the Company's California subsidiary filed a general rate case requesting an increase in 2024 revenue of \$56 million and a total increase in revenue over the 2024 to 2026 period of \$95 million, with all increases compared against 2022 revenues. The Company updated its filing in January 2023 to capture the authorized step increase effective January 1, 2023. The filing was also updated to incorporate a decoupling proposal and a revision to the Company's sales and associated variable expense forecast. The revised requested additional annualized revenues for the test year 2024 is now \$37 million, compared against 2023 revenues. This excludes the proposed step rate and attrition rate increase for 2025 and 2026 of \$20 million and \$19 million, respectively. The total revenue requirement request for the three-year rate case cycle, incorporating updates to present rate revenues and forecasted demand, is \$76 million.

On July 1, 2022, the Company's Missouri subsidiary filed a general rate case requesting \$105 million in additional annualized revenues.

On November 15, 2021, the Company's Virginia subsidiary filed a general rate case requesting \$14 million in additional annualized revenues. Interim rates were effective on May 1, 2022, and the difference between interim and final approved rates is subject to refund. On September 26, 2022, a settlement agreement, supported by all parties except one, was filed with the Virginia State Corporation Commission for a \$11 million annual revenue increase. Public hearings were held on September 27 and 28, 2022. A final decision on this matter is expected in the first quarter of 2023.

The Company's California subsidiary submitted its application on May 3, 2021, to set its cost of capital for 2022 through 2024. According to the CPUC's procedural schedule, a decision setting the authorized cost of capital is expected to be issued in the first quarter of 2023.

Infrastructure Surcharges

A number of states have authorized the use of regulatory mechanisms that permit rates to be adjusted outside of a general rate case for certain costs and investments, such as infrastructure surcharge mechanisms that permit recovery of capital investments to replace aging infrastructure. Presented in the table below are annualized incremental revenues, assuming a constant water sales volume and customer count, resulting from infrastructure surcharge authorizations that became effective during 2022:

(In millions)	Effective Date	Amount	
Infrastructure surcharges by state:			
New Jersey	(a)	\$	11
Pennsylvania	(b)		19
Missouri	(c)		30
Tennessee	August 8, 2022		3
Kentucky	July 1, 2022		3
Indiana	March 21, 2022		8
West Virginia	March 1, 2022		3
Illinois	January 1, 2022		6
Total infrastructure surcharge authorizations		\$	83

- (a) In 2022, \$1 million was effective December 30 and \$10 million was effective June 27.
- (b) In 2022, \$8 million was effective on October 1, \$9 million was effective July 1 and \$2 million was effective April 1.
- (c) In 2022, \$18 million was effective August 11 and \$12 million was effective February 1.

Presented in the table below are annualized incremental revenues, assuming a constant water sales volume and customer count, resulting from infrastructure surcharge authorizations that became effective on or after January 1, 2023:

(In millions)	Effective Date		Amount
Infrastructure surcharge filings by state:		•	
Missouri	January 16, 2023	\$	15
West Virginia	January 1, 2023		7
Pennsylvania	January 1, 2023		3
Total infrastructure surcharge filings		\$	25

Pending Infrastructure Surcharge Filings

On January 20, 2023, the Company's Indiana subsidiary filed an infrastructure surcharge proceeding requesting \$21 million in additional annualized revenue

On November 18, 2022, the Company's Indiana subsidiary filed an infrastructure surcharge proceeding requesting \$7 million in additional annualized revenues.

Other Regulatory Matters

In September 2020, the CPUC released a decision under its Low-Income Rate Payer Assistance program rulemaking that required the Company's California subsidiary to file a proposal to alter its water revenue adjustment mechanism in its next general rate case filing in 2022, which would become effective in January 2024. On October 5, 2020, the Company's California subsidiary filed an application for rehearing of the decision and following the CPUC's denial of its rehearing application in September 2021, the Company's California subsidiary filed a petition for writ of review with the California Supreme Court on October 27, 2021. On May 18, 2022, the California Supreme Court issued a writ of review for the Company's California subsidiary's petition and the petitions filed by other entities challenging the decision. Independent of the judicial challenge, California passed Senate Bill 1469, which allows the CPUC to consider and authorize the implementation of a mechanism that separates the water corporation's revenue and its water sales. Legislation was signed by the Governor on September 30, 2022, and became effective on January 1, 2023. In response to the legislation, on January 27, 2023, the Company's California subsidiary filed an updated application requesting the CPUC to consider a Water Resources Sustainability Plan decoupling mechanism in its pending 2022 general rate case, which would be effective 2024 through 2026.

On March 2, 2021, an administrative law judge ("ALJ") in the Office of Administrative Law of New Jersey filed an initial decision with the NJBPU that recommended denial of a petition filed by the Company's New Jersey subsidiary, which sought approval of acquisition adjustments in rate base of \$29 million associated with the acquisitions of Shorelands Water Company, Inc. in 2017 and the Borough of Haddonfield's water and wastewater systems in 2015. On July 29, 2021, the NJBPU issued an order adopting the ALJ's initial decision without modification. The Company's New Jersey subsidiary filed a Notice of Appeal with the New Jersey Appellate Division on September 10, 2021. The Company's New Jersey subsidiary filed its brief in support of the appeal on March 4, 2022. Response and Reply briefs were filed on June 22, 2022, and August 4, 2022, respectively. There is no financial impact to the Company as a result of the NJBPU's order, since the acquisition adjustments are currently recorded as goodwill on the Consolidated Balance Sheets.

Regulatory Assets

Regulatory assets represent costs that are probable of recovery from customers in future rates. Approximately 50% of the Company's total regulatory asset balance at December 31, 2022 earns a return. Presented in the table below is the composition of regulatory assets as of December 31:

	2022			2021		
Deferred pension expense	\$	251	\$	323		
Removal costs recoverable through rates		307		313		
Regulatory balancing accounts		26		52		
Other		406		439		
Less: Regulatory assets included in assets held for sale (a)				(76)		
Total regulatory assets	\$	990	\$	1,051		

(a) These regulatory assets are related to the sale of the Company's New York subsidiary, which was completed on January 1, 2022, and are included in assets held for sale on the Consolidated Balance Sheets as of December 31, 2021. See Note 5—Acquisitions and Divestitures for additional information.

The Company's deferred pension expense includes a portion of the underfunded status that is probable of recovery through rates in future periods of \$251 million and \$317 million as of December 31, 2022 and 2021, respectively. The remaining portion is the pension expense in excess of the amount contributed to the pension plans which is deferred by certain subsidiaries and will be recovered in future service rates as contributions are made to the pension plan.

Removal costs recoverable through rates represent costs incurred for removal of property, plant and equipment or other retirement costs.

Regulatory balancing accounts accumulate differences between revenues recognized and authorized revenue requirements until they are collected from customers or are refunded. Regulatory balancing accounts include low income programs and purchased power and water accounts.

Other regulatory assets include the financial impacts relating to the COVID-19 pandemic, purchase premium recoverable through rates, tank painting costs, certain construction costs for treatment facilities, property tax stabilization, employee-related costs, business services project expenses, coastal water project costs, rate case expenditures and environmental remediation costs among others. These costs are deferred because the amounts are being recovered in rates or are probable of recovery through rates in future periods.

The Company has current regulatory assets of \$40 million and \$16 million included in other current assets on the Consolidated Balance Sheet as of December 31, 2022 and 2021, respectively, which is primarily made up of rate adjustment mechanisms.

Regulatory Liabilities

Regulatory liabilities generally represent amounts that are probable of being credited or refunded to customers through the rate making process. Also, if costs expected to be incurred in the future are currently being recovered through rates, the Company records those expected future costs as regulatory liabilities. Presented in the table below is the composition of regulatory liabilities as of December 31:

	 2022	 2021
Income taxes recovered through rates	\$ 1,127	\$ 1,093
Removal costs recovered through rates	275	291
Postretirement benefit liability	100	153
Other	88	110
Less: Regulatory liabilities included in liabilities related to assets held for sale (a)	 	 (47)
Total regulatory liabilities	\$ 1,590	\$ 1,600

(a) These regulatory liabilities are related to the sale of the Company's New York subsidiary, which was completed on January 1, 2022, and are included in liabilities related to assets held for sale on the Consolidated Balance Sheets as of December 31, 2021. See Note 5—Acquisitions and Divestitures for additional information.

Income taxes recovered through rates relate to deferred taxes that will likely be refunded to the Company's customers. On December 22, 2017, the Tax Cuts and Jobs Act of 2017 ("TCJA") was signed into law, which, among other things, enacted significant and complex changes to the Internal Revenue Code of 1986, as amended, including a reduction in the federal corporate income tax rate from 35% to 21% as of January 1, 2018. The enactment of the TCJA required a re-measurement of the Company's deferred income taxes. The portion of this re-measurement related to the Regulated Businesses was substantially offset by a regulatory liability as EADIT will be used to benefit its regulated customers in future rates. All of the Company's regulated subsidiaries are amortizing EADIT and crediting customers.

Removal costs recovered through rates are estimated costs to retire assets at the end of their expected useful lives that are recovered through customer rates over the lives of the associated assets.

On August 31, 2018, the Postretirement Medical Benefit Plan was remeasured to reflect an announced plan amendment which changed benefits for certain union and non-union plan participants. As a result of the remeasurement, the Company recorded a \$227 million reduction to the net accumulated postretirement benefit obligation, with a corresponding regulatory liability.

Other regulatory liabilities include the financial impacts relating to the COVID-19 pandemic, TCJA reserve on revenue, pension and other postretirement benefit balancing accounts, legal settlement proceeds, deferred gains and various regulatory balancing accounts.

The Company has current regulatory liabilities of \$5 million and \$8 million included in other current liabilities on the Consolidated Balance Sheets as of December 31, 2022 and 2021, respectively, which primarily is made up of TCJA reserve on revenue.

Note 4: Revenue Recognition

Disaggregated Revenues

Presented in the table below are operating revenues disaggregated for the year ended December 31, 2022:

	Revenues from Contracts with Customers		Other Revenues Not from Contracts with Customers (a)		Total Operating Revenues	
Regulated Businesses:		_				_
Water services:						
Residential	\$	1,938	\$	3	\$	1,941
Commercial		709		1		710
Fire service		147				147
Industrial		152		1		153
Public and other		252				252
Total water services		3,198		5		3,203
Wastewater services:						
Residential		173		1		174
Commercial		45				45
Industrial		4				4
Public and other		19				19
Total wastewater services		241		1		242
Miscellaneous utility charges		36				36
Alternative revenue programs		_		15		15
Lease contract revenue		<u> </u>		9		9
Total Regulated Businesses		3,475		30		3,505
Other		288		(1)		287
Total operating revenues	\$	3,763	\$	29	\$	3,792

⁽a) Includes revenues associated with provisional rates, alternative revenue programs, lease contracts and intercompany rent, which are outside the scope of ASC 606, and accounted for under other existing GAAP.

Presented in the table below are operating revenues disaggregated for the year ended December 31, 2021:

	Revenues from Contracts with Customers		Other Revenues Not from Contracts with Customers (a)		Total Operating Revenues	
Regulated Businesses:		_		_		_
Water services:						
Residential	\$	1,935	\$		\$	1,935
Commercial		676				676
Fire service		151				151
Industrial		141		_		141
Public and other		230				230
Total water services		3,133				3,133
Wastewater services:						
Residential		151		_		151
Commercial		37				37
Industrial		4		_		4
Public and other		16				16
Total wastewater services		208		_		208
Miscellaneous utility charges		26				26
Alternative revenue programs				9		9
Lease contract revenue				8		8
Total Regulated Businesses		3,367		17		3,384
Other		547		(1)		546
Total operating revenues	\$	3,914	\$	16	\$	3,930

⁽a) Includes revenues associated with provisional rates, alternative revenue programs, lease contracts and intercompany rent, which are outside the scope of ASC 606, and accounted for under other existing GAAP.

Presented in the table below are operating revenues disaggregated for the year ended December 31, 2020:

	Revenues from Contracts with Customers		Other Revenues Not from Contracts with Customers (a)		rating Revenues
Regulated Businesses:	_		_		_
Water services:					
Residential	\$ 1,895	\$	_	\$	1,895
Commercial	627		_		627
Fire service	147				147
Industrial	133		_		133
Public and other	 201		<u> </u>		201
Total water services	3,003		_		3,003
Wastewater services:					
Residential	134				134
Commercial	34		_		34
Industrial	3				3
Public and other	 14		<u> </u>		14
Total wastewater services	185		_		185
Miscellaneous utility charges	32		_		32
Alternative revenue programs	_		25		25
Lease contract revenue			10		10
Total Regulated Businesses	 3,220		35		3,255
Other	 523		(1)		522
Total operating revenues	\$ 3,743	\$	34	\$	3,777

⁽a) Includes revenues associated with provisional rates, alternative revenue programs, lease contracts and intercompany rent, which are outside the scope of ASC 606, and accounted for under other existing GAAP.

Contract Balances

Contract assets and contract liabilities are the result of timing differences between revenue recognition, billings and cash collections. In the Company's MSG, certain contracts are billed as work progresses in accordance with agreed-upon contractual terms, either at periodic intervals or upon achievement of contractual milestones. Contract assets are recorded when billing occurs subsequent to revenue recognition and are reclassified to accounts receivable when billed and the right to consideration becomes unconditional. Contract liabilities are recorded when the Company receives advances from customers prior to satisfying contractual performance obligations, particularly for construction contracts, and are recognized as revenue when the associated performance obligations are satisfied.

Contract assets of \$86 million, \$71 million and \$39 million are included in unbilled revenues on the Consolidated Balance Sheets as of December 31, 2022, 2021 and 2020, respectively. There were \$161 million of contract assets added during 2022, and \$146 million of contract assets were transferred to accounts receivable during 2022. There were \$71 million of contract assets added during 2021, and \$39 million of contract assets were transferred to accounts receivable during 2021.

Contract liabilities of \$91 million, \$19 million and \$35 million are included in other current liabilities on the Consolidated Balance Sheets as of December 31, 2022, 2021 and 2020, respectively. There were \$189 million of contract liabilities added during 2022, and \$117 million of contract liabilities were recognized as revenue during 2022. There were \$152 million of contract liabilities added during 2021, and \$168 million of contract liabilities were recognized as revenue during 2021.

Remaining Performance Obligations

Remaining performance obligations ("RPOs") represent revenues the Company expects to recognize in the future from contracts that are in progress. The Company enters into agreements for the provision of services to water and wastewater facilities for the U.S. military, municipalities and other customers. As of December 31, 2022, the Company's O&M and capital improvement contracts in MSG and the Contract Services Group have RPOs. Contracts with the U.S. government for work on various military installations expire between 2051 and 2071 and have RPOs of \$7.0 billion as of December 31, 2022, as measured by estimated remaining contract revenue. Such contracts are subject to customary termination provisions held by the U.S. government, prior to the agreed-upon contract expiration. Contracts with municipalities and commercial customers expire between 2026 and 2038 and have RPOs of \$589 million as of December 31, 2022, as measured by estimated remaining contract revenue. Some of the Company's long-term contracts to operate and maintain the federal government's, a municipality's or other party's water or wastewater treatment and delivery facilities include responsibility for certain maintenance for some of those facilities, in exchange for an annual fee. Unless specifically required to perform certain maintenance activities, the maintenance costs are recognized when the maintenance is performed.

Note 5: Acquisitions and Divestitures

Regulated Businesses

Closed Acquisitions

During 2022, the Company closed on 26 acquisitions of various regulated water and wastewater systems for a total aggregate purchase price of \$335 million, of which \$315 million was funded in 2022, which added approximately 70,000 water and wastewater customers, including the acquisition of the City of York wastewater system assets noted below. Assets acquired from these acquisitions, principally utility plant, totaled \$337 million and liabilities assumed totaled \$6 million. Several of these acquisitions were accounted for as business combinations. The preliminary purchase price allocations related to acquisitions accounted for as business combinations will be finalized once the valuation of assets acquired has been completed, no later than one year after their acquisition date.

On May 27, 2022, the Company's Pennsylvania subsidiary acquired the public wastewater collection and treatment system assets from the York City Sewer Authority and the City of York for a purchase price of \$235 million, in cash, \$20 million of which was funded as a deposit to the seller in April 2021 in connection with the execution of the acquisition agreement. The system assets serve, directly and indirectly through bulk contracts, more than 45,000 customers. The acquisition was accounted for as a business combination and the preliminary purchase price allocation will be finalized once the valuation of assets acquired has been completed, no later than one year after the acquisition date. The preliminary purchase price allocation consisted primarily of \$231 million of utility plant and \$4 million of goodwill, which is reported in the Company's Regulated Businesses segment.

During 2021, the Company closed on 23 acquisitions of various regulated water and wastewater systems for a total aggregate purchase price of \$112 million. Assets acquired from these acquisitions, principally utility plant, totaled \$114 million and liabilities assumed totaled \$2 million. Several of these acquisitions were accounted for as business combinations.

The pro forma impact of the Company's acquisitions was not material to the Consolidated Statements of Operations for the years ended December 31, 2022, 2021 and 2020.

Pending Acquisitions

On October 11, 2022, the Company's Pennsylvania subsidiary entered into an agreement to acquire the wastewater assets of the Butler Area Sewer Authority for a total purchase price of \$232 million in cash, subject to adjustment as provided for in the Asset Purchase Agreement. This system provides wastewater service for approximately 14,700 customer connections. The Company expects to close this acquisition by the end of 2023, pending regulatory approval.

On March 29, 2021, the Company's New Jersey subsidiary entered into an agreement to acquire the water and wastewater assets of Egg Harbor City for \$22 million. The water and wastewater systems currently serve approximately 1,500 customers each, or 3,000 combined, and are being sold through the New Jersey Water Infrastructure Protection Act process. The Company expects to close this acquisition in early 2023.

Sale of New York American Water Company, Inc.

On January 1, 2022, the Company completed the previously disclosed sale of its regulated utility operations in New York to Liberty Utilities (Eastern Water Holdings) Corp. ("Liberty"), an indirect, wholly owned subsidiary of Algonquin Power & Utilities Corp. Liberty purchased from the Company all of the capital stock of the Company's New York subsidiary for a purchase price of \$608 million in cash. The sale was approved by the New York State Department of Public Service on December 16, 2021. The Company's regulated New York operations represented approximately 127,000 customers in the State of New York. The assets and related liabilities of the New York subsidiary were classified as held for sale on the Consolidated Balance Sheets as of December 31, 2021.

Presented in the table below are the components of assets held for sale and liabilities related to assets held for sale of the New York subsidiary as of December 31, 2021:

		December 31, 2021
Property, plant and equipment	\$	556
Current assets		18
Regulatory assets		76
Goodwill		27
Other assets		6
Assets held for sale	\$	683
Current liabilities	·	13
Regulatory liabilities		47
Other liabilities		23
Liabilities related to assets held for sale	\$	83

Sale of Michigan American Water Company

On February 4, 2022, the Company completed the sale of its operations in Michigan for \$6 million in cash.

Sale of Homeowner Services Group

On December 9, 2021 (the "Closing Date"), the Company sold all of the equity interests in subsidiaries that comprised HOS to a wholly owned subsidiary of funds advised by Apax Partners LLP, a global private equity advisory firm (the "Buyer"), for total consideration of approximately \$1.275 billion, resulting in pre-tax gain of \$748 million. The consideration is comprised of \$480 million in cash, a seller promissory note issued by the Buyer in the principal amount of \$720 million, and a contingent cash payment of \$75 million payable upon satisfaction of certain conditions on or before December 31, 2023. See Note 18—Fair Value of Financial Information for additional information relating to the seller promissory note and contingent cash payment. For the year ended December 31, 2022, the Company recorded post-closing adjustments, primarily related to working capital, of pre-tax income of \$20 million, which is included in Gain on sale of businesses on the Consolidated Statements of Operations.

The seller note has a five-year term, is payable in cash, and bears interest at a rate of 7.00% per year during the term. The Company recognized \$50 million of interest income during the year ended December 31, 2022, from the seller note. The repayment obligations of the Buyer under the seller note have been secured by a first priority security interest in certain property of the Buyer and the former HOS subsidiaries, including their cash and securities accounts, as well as a pledge of the equity interests in each of those subsidiaries, subject to certain limitations and exceptions. The seller note requires compliance with affirmative and negative covenants (subject to certain conditions, limitations and exceptions), including a covenant limiting the incurrence by the Buyer and certain affiliates of additional indebtedness in excess of certain thresholds, but does not include any financial maintenance covenants.

Beginning December 9, 2024, the Company has a put right pursuant to which it may require the seller note to be repaid in full at par, plus accrued and unpaid interest, except that upon the occurrence of a disruption event in the broadly syndicated term loan "B" debt financing market, repayment by the Buyer pursuant to the Company's exercise of the put right will be delayed until the market disruption event ends.

The seller note may not be prepaid at the Buyer's election except in certain limited circumstances before the fourth anniversary of the Closing Date. If the Buyer seeks to repay the seller note in breach of this non-call provision, an event of default will occur under the seller note and the Company may, among other actions, demand repayment in full together with a premium ranging from 105.5% to 107.5% of the outstanding principal amount of the loan and a customary "make-whole" payment.

The Company and the Buyer also entered into a revenue share agreement, pursuant to which the Company is to receive 10% of the revenue generated from customers who are billed for home warranty services through an applicable Company subsidiary (an "on-bill" arrangement), and 15% of the revenue generated from any future on-bill arrangements entered into after the Closing Date. Unless earlier terminated, this agreement has a term of up to 15 years, which may be renewed for up to two five-year periods. The Company recognized \$9 million of income during the year ended December 31, 2022, from the revenue share agreements, which is included in Other, net on the Consolidated Statements of Operations.

Note 6: Property, Plant and Equipment

Presented in the table below are the major classes of property, plant and equipment by category as of December 31:

	2022		2021		2022 2021		Range of Remaining Useful Lives	Weighted Average Useful Life
Utility plant:				_				
Land and other non-depreciable assets	\$	239	\$	210				
Sources of supply		1,003		938	10 to 127 years	46 years		
Treatment and pumping facilities		4,298		4,198	3 to 101 years	39 years		
Transmission and distribution facilities		12,971		12,308	9 to 128 years	69 years		
Services, meters and fire hydrants		5,162		4,888	5 to 90 years	32 years		
General structures and equipment		2,289		2,200	1 to 109 years	15 years		
Waste collection		1,539		1,363	5 to 113 years	56 years		
Waste treatment, pumping and disposal		1,129		912	2 to 153 years	38 years		
Construction work in progress		974		934				
Other (a)		23		(664)				
Total utility plant		29,627		27,287				
Nonutility property		109		126	3 to 50 years	10 years		
Total property, plant and equipment	\$	29,736	\$	27,413				

⁽a) This includes utility plant acquisition adjustment balances in addition to property, plant and equipment related to the sale of the Company's New York subsidiary, which was completed on January 1, 2022, and is included in assets held for sale on the Consolidated Balance Sheets as of December 31, 2021. See Note 5—Acquisitions and Divestitures for additional information.

Property, plant and equipment depreciation expense amounted to \$552 million, \$550 million and \$520 million for the years ended December 31, 2022, 2021 and 2020, respectively and was included in depreciation and amortization expense on the Consolidated Statements of Operations. The provision for depreciation expressed as a percentage of the aggregate average depreciable asset balances was 2.60%, 2.77% and 2.82% for years December 31, 2022, 2021 and 2020, respectively. Additionally, the Company had capital expenditures acquired on account but unpaid of \$330 million and \$292 million included in accrued liabilities on the Consolidated Balance Sheets as of December 31, 2022 and 2021, respectively.

In 2019, the Company completed and submitted its project completion certification to the New Jersey Economic Development Authority ("NJEDA") in connection with its capital investment in its corporate headquarters in Camden, New Jersey. The NJEDA determined that the Company was qualified to receive \$164 million in tax credits over a 10-year period. In October 2022, the NJEDA issued the Company a revised tax credit certificate in the amount of \$161 million in tax credits to be received over the same 10-year period. The NJEDA denied previously approved capitalized interest cost amounting to \$2.8 million. As a result, the Company adjusted the amounts included in Property, plant and equipment.

The Company is required to meet various annual requirements in order to monetize one-tenth of the tax credits annually and is subject to a claw-back period if the Company does not meet certain NJEDA requirements of the tax credit program in years 11 through 15.

One of the requirements to qualify for the release of credits annually is that the Company maintain a certain level of eligible positions at the qualified business facility ("QBF"). Prior to March 2020, a full-time employee must have spent at least 80% of their time at the QBF to meet the definition of eligible position or full-time job. On July 2, 2021, New Jersey's Governor signed legislation that revised provisions of the Economic Recovery Act of 2020, which lowered the 80% requirement for spending time at the QBF to 60% of the employee's time.

During the COVID-19 pandemic, the NJEDA implemented certain accommodations that temporarily waived the requirement that a full-time employee spend the requisite percentage of time at the QBF to be eligible for the award under the program. This waiver expired on June 30, 2022.

On December 22, 2022, the New Jersey Governor signed legislation which provides an additional waiver to eligible businesses for the period of July 1, 2022 to December 31, 2023. Specifically, it allows businesses to waive the 60% on-site requirement if (i) full-time workers spend at least 10% of their work hours at the QBF and (ii) the business pays NJEDA 5% of the amount of the tax credit the business receives for the 2022 tax period. The legislation also (i) extends the time within which a business may terminate their participation in the program to December 31, 2023, without the NJEDA recapturing previously distributed credits; (ii) extends the time allowed under current law for a business to suspend its obligations under the incentive agreement; (iii) extends the provision to include the 2022 and 2023 tax periods; and (iv) renews and extends the right of a business to reduce the required full-time employees specified in the incentive agreement to be eligible to receive the credit. The Company is considering all of its options as a result of the most recent legislation.

In December 2022, the NJEDA issued the utilization certificate for the 2019 tax credits to the Company in the amount of \$16 million. The Company sold these tax credits to external parties in December 2022 for \$15 million. The loss on sale of credits was recorded to Other income (expense) in the Consolidated Results of Operations for the year ended December 31, 2022. As a result, the Company had assets of \$48 million and \$97 million in Other current assets and Other long-term assets, respectively, on the Consolidated Balance Sheets as of December 31, 2022. The Company has made the necessary annual filings for the years ended December 31, 2020 and 2021, and expects to make the 2022 filing by April 30, 2023. The remaining submitted filings are under review by the NJEDA and it is expected that the Company will receive final NJEDA approval and monetize the credits in 2023.

Note 7: Allowance for Uncollectible Accounts

Presented in the table below are the changes in the allowances for uncollectible accounts for the years ended December 31:

	2022		2021		2020	
Balance as of January 1	\$	(75)	\$	(60)	\$	(41)
Amounts charged to expense		(24)		(37)		(34)
Amounts written off		27		35		23
Other, net (a)	<u> </u>	12		(13)		(8)
Balance as of December 31	\$	(60)	\$	(75)	\$	(60)

⁽a) This portion of the allowance for uncollectible accounts is primarily related to COVID-19 related regulatory asset activity. The 2021 and 2020 activity also includes the portion of the allowance related to the Company's New York subsidiary, which was completed on January 1, 2022, and is included in assets held for sale on the Consolidated Balance Sheets as of December 31, 2021. See Note 5—Acquisitions and Divestitures for additional information.

Note 8: Goodwill and Other Intangible Assets

Goodwill

Presented in the table below are the changes in the carrying value of goodwill for the years ended December 31, 2022 and 2021:

	Regulated Businesses				Other					Consolidated					
		Cost		ccumulated mpairment		Cost		Accumulated Impairment		Cost		Accumulated Impairment		Total Net	
Balance as of January 1, 2021	\$	3,461	\$	(2,332)	\$	483	\$	(108)	\$	3,944	\$	(2,440)	\$	1,504	
Acquisition related adjustments		(7)		_				_		(7)				(7)	
Goodwill included in assets held for sale (a)		12		_				_		12				12	
Goodwill reduced through sale of HOS						(370)		<u> </u>		(370)				(370)	
Balance as of December 31, 2021	\$	3,466	\$	(2,332)	\$	113	\$	(108)	\$	3,579	\$	(2,440)	\$	1,139	
Goodwill from acquisitions		4		_		_		_		4		_		4	
Balance as of December 31, 2022	\$	3,470	\$	(2,332)	\$	113	\$	(108)	\$	3,583	\$	(2,440)	\$	1,143	

⁽a) This goodwill is related to the sale of the Company's New York subsidiary, which was completed on January 1, 2022, and is included in assets held for sale on the Consolidated Balance Sheets as of December 31, 2021. See Note 5 —Acquisitions and Divestitures for additional information.

In 2021, the Company reduced goodwill by \$370 million included in Other through the sale of HOS. See Note 5—Acquisitions and Divestitures for additional information relating to the sale of HOS.

The Company completed its annual impairment testing of goodwill as of November 30, 2022, which included qualitative assessments of its Regulated Businesses and MSG reporting units. Based on these assessments, the Company determined that there were no factors present that would indicate that the fair value of these reporting units was less than their respective carrying values as of November 30, 2022.

In 2022, the Company acquired goodwill of \$4 million associated with one of its acquisitions in the Regulated Businesses segment.

Intangible Assets

The Company held finite-lived intangible assets, including customer relationships and other intangible assets prior to the sale of HOS during the fourth quarter of 2021. All of the Company's finite-lived intangible assets were sold as part of the HOS sale transaction. As a result, there was no gross carrying value or net book value of customer relationships and other intangible assets remaining as of December 31, 2022 and December 31, 2021. Intangible asset amortization expense amounted to \$9 million and \$12 million for the years ended December 31, 2021 and 2020, respectively. There was no amortization expense related to customer relationships and other intangible assets for the year ended December 31, 2022.

Note 9: Shareholders' Equity

Dividend Reinvestment and Direct Stock Purchase Plan

Under the Company's dividend reinvestment and direct stock purchase plan (the "DRIP"), shareholders may reinvest cash common stock dividends and purchase additional shares of Company common stock, up to certain limits, through the plan administrator without paying brokerage commissions. Shares purchased by participants through the DRIP may be newly issued shares, treasury shares, or at the Company's election, shares purchased by the plan administrator in the open market or in privately negotiated transactions. Purchases generally will be made and credited to DRIP accounts once each week. As of December 31, 2022, there were approximately 4.2 million shares available for future issuance under the DRIP.

Anti-dilutive Stock Repurchase Program

In February 2015, the Company's Board of Directors authorized an anti-dilutive stock repurchase program, which allows the Company to purchase up to 10 million shares of its outstanding common stock from time to time over an unrestricted period of time. The Company did not repurchase shares of common stock during the years ended December 31, 2022 and 2021. As of December 31, 2022, there were 5.1 million shares of common stock available for purchase under the program.

Accumulated Other Comprehensive Loss

Presented in the table below are the changes in accumulated other comprehensive loss by component, net of tax, for the years ended December 31, 2022 and 2021:

	Defined Benefit Plans									
	Employee Benefit Plan Funded Status		Amortization of Prior Service Cost		Amortization of Actuarial Loss		Gain (Loss) on Cash Flow Hedge		Accumulated Other Comprehensive Loss	
Beginning balance as of January 1, 2021	\$	(106)	\$	1	\$	63	\$	(7)	\$ (49)	
Other comprehensive income (loss) before reclassification		(1)				_		1	_	
Amounts reclassified from accumulated other comprehensive loss				_		4		<u> </u>	4	
Net other comprehensive income (loss)		(1)		_		4		1	4	
Ending balance as of December 31, 2021	\$	(107)	\$	1	\$	67	\$	(6)	\$ (45)	
Other comprehensive income (loss) before reclassification		14		_		_		5	19	
Amounts reclassified from accumulated other comprehensive loss						3		<u> </u>	3	
Net other comprehensive income (loss)		14		_		3		5	22	
Ending balance as of December 31, 2022	\$	(93)	\$	1	\$	70	\$	(1)	\$ (23)	

The Company does not reclassify the amortization of defined benefit pension cost components from accumulated other comprehensive loss directly to net income in its entirety, as a portion of these costs have been deferred as a regulatory asset. These accumulated other comprehensive loss components are included in the computation of net periodic pension cost. See Note 15—Employee Benefits for additional information.

The amortization of the gain (loss) on cash flow hedges is reclassified to net income during the period incurred and is included in interest, net in the accompanying Consolidated Statements of Operations.

Dividends and Distributions

The Company's Board of Directors authorizes the payment of dividends. The Company's ability to pay dividends on its common stock is subject to having access to sufficient sources of liquidity, net income and cash flows of the Company's subsidiaries, the receipt of dividends and direct and indirect distributions from, and repayments of indebtedness of, the Company's subsidiaries, compliance with Delaware corporate and other laws, compliance with the contractual provisions of debt and other agreements and other factors.

The Company's dividend rate on its common stock is determined by the Board of Directors on a quarterly basis and takes into consideration, among other factors, current and possible future developments that may affect the Company's income and cash flows. When dividends on common stock are declared, they are typically paid in March, June, September and December. Historically, dividends have been paid quarterly to holders of record as of a date less than 30 days prior to the distribution date. Since the dividends on the Company's common stock are not cumulative, only declared dividends are paid.

During 2022, 2021 and 2020, the Company paid \$467 million, \$428 million and \$389 million in cash dividends, respectively. Presented in the table below is the per share cash dividends paid for the years ended December 31:

	2022			2021	2020		
December	\$	0.6550	\$	0.6025	\$	0.55	
September	\$	0.6550	\$	0.6025	\$	0.55	
June	\$	0.6550	\$	0.6025	\$	0.55	
March	\$	0.6025	\$	0.55	\$	0.50	

On December 7, 2022, the Company's Board of Directors declared a quarterly cash dividend payment of \$0.6550 per share payable on March 1, 2023, to shareholders of record as of February 7, 2023.

Under applicable law, the Company's subsidiaries may pay dividends on their capital stock or other equity only from retained, undistributed or current earnings. A significant loss recorded at a subsidiary may limit the amount of the dividend that the subsidiary can pay. The ability of the Company's subsidiaries to pay upstream dividends, make other upstream distributions or repay indebtedness to parent company or American Water Capital Corp. ("AWCC"), the Company's wholly owned financing subsidiary, as applicable, is subject to compliance with applicable corporate, tax and other laws, regulatory restrictions and financial and other contractual obligations, including, for example, (i) regulatory capital, surplus or net worth requirements, (ii) outstanding debt service obligations, (iii) requirements to make preferred and preference stock dividend payments, and (iv) other contractual agreements, covenants or obligations made or entered into by the Company and its subsidiaries.

Regulatory Restrictions on Indebtedness

The issuance of long-term debt or equity securities by the Company or long-term debt by AWCC does not require authorization of any state PUC if no guarantee or pledge of the regulated subsidiaries is utilized. Based on the needs of the Regulated Businesses and parent company, AWCC may borrow funds or issue its debt in the capital markets and then, through intercompany loans, provide these borrowings to the Regulated Businesses or parent company. PUC authorization is generally required for the regulated subsidiaries to incur long-term debt. The Company's regulated subsidiaries normally obtain these required PUC authorizations on a periodic basis to cover their anticipated financing needs for a period of time, or, as necessary, in connection with a specific financing or refinancing of debt.

Note 10: Stock Based Compensation

The Company has granted stock units, stock awards and dividend equivalents to non-employee directors, officers and employees pursuant to the terms of the 2017 Omnibus Equity Compensation Plan (the "2017 Omnibus Plan"), approved by the Company's shareholders in May 2017. Stock units under the 2017 Omnibus Plan generally vest based on (i) continued employment with the Company ("RSUs"), or (ii) continued employment with the Company where distribution of the shares is subject to the satisfaction in whole or in part of stated performance-based goals ("PSUs"). A total of 7.2 million shares of common stock may be issued under the 2017 Omnibus Plan. As of December 31, 2022, 6.3 million shares were available for grant under the 2017 Omnibus Plan. The 2017 Omnibus Plan provides that grants of awards may be in any of the following forms: incentive stock options, nonqualified stock options, stock appreciation rights, stock units, stock awards, other stock-based awards and dividend equivalents. Dividend equivalents may be granted only on stock units or other stock-based awards. The 2017 Omnibus Plan expires in 2027.

The Company had granted stock options, stock units, including RSUs and PSUs, and dividend equivalents to non-employee directors, officers and other key employees of the Company under its 2007 Omnibus Equity Compensation Plan (the "2007 Plan"). The 2007 Plan has been replaced by the 2017 Omnibus Plan, as defined above, and no additional awards may be granted under the 2007 Plan. However, shares may still be issued under the 2007 Plan pursuant to the terms of awards previously issued under that plan prior to May 12, 2017.

The cost of services received from employees in exchange for the issuance of restricted stock awards is measured based on the grant date fair value of the awards issued. The value of stock unit awards at the date of the grant is amortized through expense over the requisite service period. All awards granted in 2022, 2021 and 2020 are classified as equity. The Company recognizes compensation expense for stock awards over the vesting period of the award. The Company stratified its grant populations and used historic employee turnover rates to estimate employee forfeitures. The estimated rate is compared to the actual forfeitures at the end of the reporting period and adjusted as necessary. There have been no significant adjustments to the forfeiture rates during 2022, 2021 and 2020. There were no grants of stock options to employees after 2016, and there were no stock options outstanding as of December 31, 2022. Presented in the table below is the stock-based compensation expense recorded in O&M expense in the accompanying Consolidated Statements of Operations for the years ended December 31:

	2022			2021	2020		
RSUs and PSUs	\$	26	\$	15	\$	19	
Nonqualified employee stock purchase plan		2		2		2	
Stock-based compensation	·	28		17		21	
Income tax benefit		(6)		(4)		(5)	
Stock-based compensation expense, net of tax	\$	22	\$	13	\$	16	

There were no significant stock-based compensation costs capitalized during the years ended December 31, 2022, 2021 and 2020.

Subject to limitations on deductibility imposed by the Federal income tax code, the Company receives a tax deduction based on the intrinsic value of the award at the exercise date for stock options and the distribution date for stock units. For each award, throughout the requisite service period, the Company records the tax impacts related to compensation costs as deferred income tax assets. The tax deductions in excess of the deferred benefits recorded throughout the requisite service period are recorded to the Consolidated Statements of Operations and are presented in the financing section of the Consolidated Statements of Cash Flows.

Stock Units

During 2022, 2021 and 2020, the Company granted RSUs to certain employees under the 2017 Omnibus Plan. RSUs generally vest based on continued employment with the Company over periods ranging from one to three years. The RSUs are valued at the closing price of the Company's common stock on the date of the grant and the majority vest ratably over a three-year service period. These RSUs are amortized through expense over the requisite service period using the straight-line method.

During 2022, 2021 and 2020, the Company granted stock units to non-employee directors under the 2017 Omnibus Plan. The stock units were vested in full on the date of grant; however, distribution of the shares will be made within 30 days of the earlier of (i) 15 months after the date of the last annual meeting of shareholders, subject to any deferral election by the director, or (ii) the participant's separation from service. Because these stock units vested on the grant date, the total grant date fair value was recorded in operation and maintenance expense on the grant date.

Presented in the table below is RSU and director stock unit activity for the year ended December 31, 2022:

	Shares (in thousands)	Weighted Average Grant Date Fair Value (per share)		
Non-vested total as of December 31, 2021	48	\$	112.22	
Granted	59		149.73	
Vested	(47)		132.59	
Forfeited	(9)		149.60	
Non-vested total as of December 31, 2022	51	\$	130.43	

As of December 31, 2022, \$5 million of total unrecognized compensation cost related to the nonvested RSUs is expected to be recognized over the weighted average remaining life of 1.69 years. The total fair value of stock units and RSUs vested was \$6 million, \$9 million and \$5 million for the years ended December 31, 2022, 2021 and 2020, respectively.

During 2022, 2021 and 2020, the Company granted PSUs to certain employees under the 2017 Omnibus Plan. The majority of PSUs vest ratably based on continued employment with the Company over the three-year performance period (the "Performance Period"). Distribution of the performance shares is contingent upon the achievement of one or more internal performance measures and, separately, a relative total shareholder return performance measure, over the Performance Period.

Presented in the table below is PSU activity for the year ended December 31, 2022:

	Shares (in thousands)	Fair Value (per share)		
Non-vested total as of December 31, 2021	232	\$ 139.40		
Granted	170	115.12		
Vested	(150)	105.11		
Forfeited	(21)	148.83		
Non-vested total as of December 31, 2022	231	\$ 142.92		

As of December 31, 2022, \$6 million of total unrecognized compensation cost related to the nonvested PSUs is expected to be recognized over the weighted average remaining life of 0.93 years. The total fair value of PSUs vested was \$24 million, \$22 million and \$18 million for the years ended December 31, 2022, 2021 and 2020, respectively.

PSUs granted with one or more internal performance measures are valued at the market value of the closing price of the Company's common stock on the date of grant. PSUs granted with a relative total shareholder return condition are valued using a Monte Carlo simulation model. Expected volatility is based on historical volatilities of traded common stock of the Company and comparative companies using daily stock prices over the past three years. The expected term is three years and the risk-free interest rate is based on the three-year U.S. Treasury rate in effect as of the measurement date. Presented in the table below are the weighted average assumptions used in the Monte Carlo simulation and the weighted average grant date fair values of PSUs granted for the years ended December 31:

	2022	2021	2020
Expected volatility	29.69%	28.59%	16.65%
Risk-free interest rate	1.90%	0.22%	1.28%
Expected life (years)	3.0	3.0	3.0
Grant date fair value per share	\$99.23	\$229.22	\$159.64

The grant date fair value of PSUs that vest ratably and have market and/or performance conditions are amortized through expense over the requisite service period using the graded-vesting method.

Employee Stock Purchase Plan

The Company maintains a nonqualified employee stock purchase plan (the "ESPP") that expires in 2027 through which employee participants (which excludes certain of the Company's executives) may use payroll deductions to acquire Company common stock at a purchase price of 85% of the fair market value of the common stock at the end of a three-month purchase period. A total of 2.0 million shares may be issued under the ESPP, and as of December 31, 2022, there were 1.5 million shares of common stock reserved for issuance under the ESPP. The ESPP is considered compensatory. During the years ended December 31, 2022, 2021 and 2020, the Company issued approximately 82,000, 80,000 and 86,000 shares, respectively, under the ESPP.

Note 11: Long-Term Debt

The Company obtains long-term debt through AWCC primarily to fund capital expenditures of the Regulated Businesses and to lend funds to parent company to refinance debt and for other purposes. Presented in the table below are the components of long-term debt as of December 31:

	Rate Weighted Average Rate		Weighted Average Rate Maturity		2022		2022		2022		2021
Long-term debt of AWCC: (a)											
Senior notes—fixed rate	2.30%-8.27%	3.88%	2023-2051	\$	9,765	\$	8,965				
Private activity bonds and government funded debt—fixed	0.600/.0.450/	1 (20/	2022 2021		100		100				
rate	0.60%-2.45%	1.63%	2023-2031		189		190				
Long-term debt of other American Water subsidiaries:											
Private activity bonds and government funded debt—fixed											
rate	0.00%-5.50%	1.80%	2023-2051		749		739				
Mortgage bonds—fixed rate	6.35%-9.19%	7.36%	2023-2039		534		534				
Mandatorily redeemable preferred stock	8.47%-9.75%	8.64%	2024-2036		3		4				
Finance lease obligations	12.25%	12.25%	2026				1				
Long-term debt		3.87%			11,240		10,433				
Unamortized debt discount, net (b)					(11)		(9)				
Unamortized debt issuance costs					(19)		(23)				
Less current portion of long-term debt					(281)		(57)				
Total long-term debt				\$	10,929	\$	10,344				

⁽a) This indebtedness is considered "debt" for purposes of a support agreement between parent company and AWCC, which serves as a functional equivalent of a full and unconditional guarantee by parent company of AWCC's payment obligations under such indebtedness.

All mortgage bonds and \$740 million of the private activity bonds and government funded debt held by the Company's subsidiaries were collateralized as of December 31, 2022.

⁽b) Includes debt discount, net of fair value adjustments previously recognized in acquisition purchase accounting.

Long-term debt indentures contain a number of covenants that, among other things, limit, subject to certain exceptions, AWCC from issuing debt secured by the Company's consolidated assets. Certain long-term note indentures require the Company to maintain a ratio of consolidated total indebtedness to consolidated total capitalization (each as defined under the note indentures) of not more than 0.70 to 1.00. The ratio as of December 31, 2022, was 0.62 to 1.00. In addition, the Company has \$891 million of notes which include the right to redeem the notes at par value, in whole or in part, from time to time, subject to certain restrictions, with a weighted average interest rate of 1.87%.

Presented in the table below are future sinking fund payments and debt maturities:

	 Amount
2023	\$ 281
2024	476
2025	598
2026	443
2027	688
Thereafter	8,754

Presented in the table below are the issuances of long-term debt in 2022:

Company	Туре	Rate	Weighted Average Rate	Maturity	Aı	mount
AWCC	Senior notes—fixed rate	4.45%	4.45%	2032	\$	800
Other American Water subsidiaries	Private activity bonds and government funded debt—fixed rate	0.00%-1.75%	1.03%	2027-2042		22
Total issuances					\$	822

The Company incurred debt issuance costs of \$7 million related to the above issuances.

Presented in the table below are the retirements and redemptions of long-term debt in 2022 through sinking fund provisions, optional redemption or payment at maturity:

Company	Туре	Rate	Weighted Average Rate	Maturity	An	nount
AWCC	Private activity bonds and government funded debt—fixed rate	1.79%-2.31%	2.24%	2024-2031	\$	1
Other American Water subsidiaries	Private activity bonds and government funded debt—fixed rate	0.00%-5.50%	1.50%	2022-2051		13
Other American Water subsidiaries	Mandatorily redeemable preferred stock	8.49%	8.49%	2022		1
Total retirements and redemptions					\$	15

On May 5, 2022, AWCC issued \$800 million aggregate principal amount of its 4.45% senior notes due 2032. At closing, AWCC received, after deduction of underwriting discounts and before deduction of offering expenses, net proceeds of approximately \$792 million. AWCC used the net proceeds of the offering: (i) to lend funds to parent company and its regulated subsidiaries; (ii) to repay AWCC's commercial paper obligations; and (iii) for general corporate purposes.

One of the principal market risks to which the Company is exposed is changes in interest rates. In order to manage the exposure, the Company follows risk management policies and procedures, including the use of derivative contracts such as treasury lock agreements. The Company also reduces exposure to interest rates by managing commercial paper and debt maturities. The Company does not enter into derivative contracts for speculative purposes and does not use leveraged instruments. The derivative contracts entered into are for periods consistent with the related underlying exposures. The Company is exposed to the risk that counterparties to derivative contracts will fail to meet their contractual obligations and minimizes this risk by dealing only with leading, creditworthy financial institutions having long-term credit ratings of "A" or better.

In April 2022, the Company entered into several 10-year treasury lock agreements, with notional amounts totaling \$400 million, and an average fixed interest rate of 2.89%. The Company designated these treasury lock agreements as cash flow hedges, with their fair value recorded in accumulated other comprehensive gain or loss. In May 2022, the Company terminated the treasury lock agreements, realizing a net gain of approximately \$4 million, to be amortized through interest, net over a 10-year period, in accordance with the tenor of the debt issuance on May 5, 2022.

In November and December 2022, the Company entered into four 10-year treasury lock agreements, with notional amounts totaling \$100 million, to reduce interest rate exposure on debt expected to be issued in 2023. These treasury lock agreements terminate in January 2024, and have an average fixed rate of 3.56%. In January 2023, the Company entered into three additional 10-year treasury lock agreements, with notional amounts totaling \$100 million, to reduce interest rate exposure on debt expected to be issued in 2023. These treasury lock agreements terminate in January 2024, and have an average fixed rate of 3.35%. The Company designated these treasury lock agreements as cash flow hedges, with their fair value recorded in accumulated other comprehensive gain or loss. Upon termination, the cumulative gain or loss recorded in accumulated other comprehensive gain or loss will be amortized through interest, net over the term of the new debt.

No ineffectiveness was recognized on hedging instruments for the years ended December 31, 2022, 2021 or 2020.

Note 12: Short-Term Debt

Liquidity needs for capital investment, working capital and other financial commitments are generally funded through cash flows from operations, public and private debt offerings, commercial paper markets and, if and to the extent necessary, borrowings under the AWCC revolving credit facility, and, in the future, issuances of equity. Additionally, proceeds from the aforementioned sales of HOS and the Company's New York subsidiary have been used primarily for capital investment in the Regulated Businesses. The revolving credit facility provides \$2.75 billion in aggregate total commitments from a diversified group of financial institutions. The termination date of the credit agreement with respect to AWCC's revolving credit facility is October 2027. The facility is used principally to support AWCC's commercial paper program, to provide additional liquidity support and to provide a sub-limit of up to \$150 million for letters of credit. Letters of credit are non-debt instruments maintained to provide credit support for certain transactions as requested by third parties. Subject to satisfying certain conditions, the credit agreement also permits AWCC to increase the maximum commitment under the facility by up to an aggregate of \$500 million and to request extensions of its expiration date for up to two one-year periods. As of December 31, 2022, AWCC had no outstanding borrowings and \$78 million of outstanding letters of credit under the revolving credit facility, with \$1.50 billion available to fulfill the Company's short-term liquidity needs and to issue letters of credit. The Company regularly evaluates the capital markets and closely monitors the financial condition of the financial institutions with contractual commitments in its revolving credit facility. Interest rates on advances under the facility are based on a credit spread to the Secured Overnight Financing Rate (or applicable market replacement rate) or base rate, each determined in accordance with Moody Investors Service's and S&P Global Ratings' then a

On October 26, 2022, AWCC and certain lenders amended and restated the credit agreement with respect to the revolving credit facility to, among other things, increase the maximum commitments under the facility from \$2.25 billion to \$2.75 billion and to extend the expiration date of the facility from March 2025 to October 2027. Also, effective October 26, 2022, the maximum aggregate principal amount of short-term borrowings authorized under AWCC's commercial paper program was increased from \$2.10 billion to \$2.60 billion.

On March 20, 2020, AWCC entered into a Term Loan Credit Agreement, by and among parent company, AWCC and the lenders party thereto (the "Term Loan Facility"). The Term Loan Facility commitments terminated at maturity on March 19, 2021, and the \$500 million of principal outstanding under the Term Loan Facility was repaid in full. Borrowings under the Term Loan Facility bore interest at a variable annual rate based on LIBOR, plus a margin of 0.80%.

Short-term debt consists of commercial paper and credit facility borrowings totaling \$1,177 million and \$584 million as of December 31, 2022 and 2021, respectively, or net of discount \$1,175 million and \$584 million as of December 31, 2022 and 2021, respectively. The weighted average interest rate on AWCC's outstanding short-term borrowings was approximately 4.41%, for the year ended December 31, 2022. The weighted average interest rate on AWCC's outstanding short-term borrowings was 0.20%, for the year ended December 31, 2021. As of December 31, 2022, there were no commercial paper borrowings outstanding with maturities greater than three months.

Presented in the tables below is the aggregate credit facility commitments, commercial paper limit and letter of credit availability under the revolving credit facility, as well as the available capacity for each, as of December 31:

		2022						
	Со	Commercial Paper Limit Letters of Credit				Total (a)		
(In millions)								
Total availability	\$	2,600	\$	150	\$	2,750		
Outstanding debt		(1,177)		(78)		(1,255)		
Remaining availability as of December 31, 2022	\$	1,423	\$	72	\$	1,495		

a) Total remaining availability of \$1.50 billion as of December 31, 2022, may be accessed through revolver draws.

		2021						
	Commerc	ial Paper Limit	Letters of Credit			Total (a)		
(In millions)								
Total availability	\$	2,100	\$	150	\$	2,250		
Outstanding debt		(584)		(76)		(660)		
Remaining availability as of December 31, 2021	\$	1,516	\$	74	\$	1,590		

(a) Total remaining availability of \$1.59 billion as of December 31, 2021, may be accessed through revolver draws.

Presented in the table below is the Company's total available liquidity as of December 31, 2022 and 2021, respectively:

	 Cash and Cash Equivalents	Ava	ilability on Revolving Credit Facility	Total A	vailable Liquidity
(In millions)					
Available liquidity as of December 31, 2022	\$ 85	\$	1,495	\$	1,580
Available liquidity as of December 31, 2021	\$ 116	\$	1,590	\$	1,706

Presented in the table below is the short-term borrowing activity for AWCC for the years ended December 31:

	 2022	 2021
Average borrowings	\$ 505	\$ 910
Maximum borrowings outstanding	1,177	1,647
Weighted average interest rates, as of December 31	4.41 %	0.20 %

The credit facility requires the Company to maintain a ratio of consolidated debt to consolidated capitalization of not more than 0.70 to 1.00. The ratio as of December 31, 2022 was 0.62 to 1.00.

None of the Company's borrowings are subject to default or prepayment as a result of a downgrading of securities, although such a downgrading could increase fees and interest charges under AWCC's revolving credit facility.

Note 13: General Taxes

Presented in the table below are the components of general tax expense for the years ended December 31:

	 2022	 2021	 2020
Property and capital stock	\$ 108	\$ 149	\$ 140
Gross receipts and franchise	124	121	116
Payroll	36	39	36
Other general	13	12	11
Total general taxes	\$ 281	\$ 321	\$ 303

Note 14: Income Taxes

Presented in the table below are the components of income tax expense for the years ended December 31:

	2022		2021		 2020
Current income taxes:					
State	\$	26	\$	72	\$ 8
Federal		82		75	 <u> </u>
Total current income taxes	\$	108	\$	147	\$ 8
Deferred income taxes:					
State	\$	24	\$	10	\$ 49
Federal		57		221	159
Amortization of deferred investment tax credits		(1)		(1)	(1)
Total deferred income taxes		80		230	 207
Provision for income taxes	\$	188	\$	377	\$ 215

Presented in the table below is a reconciliation between the statutory federal income tax rate and the Company's effective tax rate for the years ended December 31:

	2022	2021	2020
Income tax at statutory rate	21.0 %	21.0 %	21.0 %
Increases (decreases) resulting from:			
State taxes, net of federal taxes	4.1 %	3.9 %	4.8 %
EADIT	(6.5)%	(3.6)%	(2.1)%
Tax impact due to the sale of HOS	<u> </u>	1.6 %	<u> </u>
Other, net	0.1 %	0.1 %	(0.4)%
Effective tax rate	18.7 %	23.0 %	23.3 %

Presented in the table below are the components of the net deferred tax liability as of December 31:

	2022		2021	
Deferred tax assets:				
Advances and contributions	\$	351	\$	439
Tax losses and credits		19		10
Regulatory income tax assets		203		301
Pension and other postretirement benefits		64		50
Other		140		144
Total deferred tax assets		777		944
Valuation allowance		(11)		(10)
Total deferred tax assets, net of allowance	\$	766	\$	934
Deferred tax liabilities:				
Property, plant and equipment	\$	2,872	\$	3,087
Deferred pension and other postretirement benefits		64		69
Other		249		180
Total deferred tax liabilities		3,185		3,336
Total deferred tax liabilities, net of deferred tax assets	\$	(2,419)	\$	(2,402)

The Company recognized no federal net operating loss ("NOL") carryforwards as of December 31, 2022 and 2021. The Company fully utilized its federal NOL carryforwards in 2021 due to the sale of HOS, and therefore, no valuation allowance is required.

As of December 31, 2022 and 2021, the Company had state NOLs of \$240 million and \$123 million, respectively, a portion of which are offset by a valuation allowance as the Company does not believe these NOLs are more likely than not to be realized. The state NOL carryforwards expire in 2023 through 2042.

The Company files income tax returns in the United States federal jurisdiction and various state and foreign jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state or local or non-U.S. income tax examinations by tax authorities for years on or before 2015. The Company has state income tax examinations in progress and does not expect material adjustments to result.

Presented in the table below are the changes in gross liability, excluding interest and penalties, for unrecognized tax benefits:

 Amount
\$ 122
23
 (5)
\$ 140
26
 (8)
\$ 158
\$ \$

The Company's tax positions relate primarily to the deductions claimed for repair and maintenance costs on its utility plant. The Company does not anticipate material changes to its unrecognized tax benefits within the next year. As discussed above, the Company utilized its remaining federal NOLs in 2021, and therefore this federal tax attribute will not be available to reduce the federal liabilities for uncertain tax positions or interest accrued as presented on the Company's Consolidated Financial Statements.

If the Company sustains all of its positions as of December 31, 2022, an unrecognized tax benefit of \$10 million, excluding interest and penalties, would impact the Company's effective tax rate. The Company had an immaterial amount of interest and penalties related to its tax positions as of December 31, 2022 and 2021.

Presented in the table below are the changes in the valuation allowance:

AIII	ount
\$	21
	(2)
\$	19
	(9)
\$	10
	1
\$	11
	\$ \$ \$

Amount

Note 15: Employee Benefits

Overview of Pension and Other Postretirement Benefits Plans

The Company maintains noncontributory defined benefit pension plans covering eligible employees of its regulated utility and shared services operations. Benefits under the plans are based on the employee's years of service and compensation. The pension plans have been closed for all new employees. The pension plans were closed for most employees hired on or after January 1, 2006. Union employees hired on or after January 1, 2001, except for specific eligible groups specified in the plan, had their accrued benefit frozen and will be able to receive this benefit as a lump sum upon termination or retirement. Union employees hired on or after January 1, 2001, and non-union employees hired on or after January 1, 2006, are provided with a defined contribution plan that includes a 5.25% of base pay Company-funded defined contribution account. The Company does not participate in a multi-employer plan. The Company also has unfunded noncontributory supplemental nonqualified pension plans that provide additional retirement benefits to certain employees.

The Company's pension funding practice is to contribute at least the greater of the minimum amount required by the Employee Retirement Income Security Act of 1974 or the normal cost. Further, the Company will consider additional cash contributions and/or available prefunding balances if needed to avoid "at risk" status and benefit restrictions under the Pension Protection Act of 2006 ("PPA"). The Company may also consider increased contributions, based on other financial requirements and the plans' funded position. Pension expense in excess of the amount contributed to the pension plans is deferred by certain regulated subsidiaries pending future recovery in rates charged for utility services as contributions are made to the plans. See Note 3—Regulatory Matters for additional information. Pension plan assets are invested in a number of actively managed, commingled funds, and limited partnerships including equities, fixed income securities, guaranteed annuity contracts with insurance companies, real estate funds and real estate investment trusts ("REITs").

In December 2022, the Company amended the American Water Pension Plan ("AWPP"), a tax-qualified defined benefit pension plan, to restructure it as of December 31, 2022. The restructuring involved the spin-off of certain inactive participants from the existing AWPP into a separate tax-qualified defined benefit pension plan, AWPP Inactive. Benefits offered to the plan participants remain unchanged. Actuarial gains and losses associated with AWPP Inactive will be amortized over the average remaining life expectancy of the inactive participants, which increases the amortization period from approximately 7 years to 18 years. The longer amortization period is expected to lower the Company's pre-tax pension expense by approximately \$5 million in 2023. The actuarial gains and losses associated with the AWPP will continue to be amortized over the average remaining service period for active participants. The Company remeasured the pension plan obligation and assets for each plan as of December 31, 2022.

The Company maintains other postretirement benefit plans providing varying levels of medical and life insurance to eligible retirees. The retiree welfare plans are closed for union employees hired on or after January 1, 2006. The plans had previously closed for non-union employees hired on or after January 1, 2002. The Company's policy is to fund other postretirement benefit costs up to the amount recoverable through rates. Assets of the plans are invested in a number of actively managed funds in the form of separate accounts, commingled funds and limited partnerships, including equities and fixed income securities.

Pension Plan Assets

The investment policy guideline of the pension plan is focused on diversification, improving returns and reducing the volatility of the funded status over a long-term horizon. The investment policy guidelines of the postretirement plans focus on the appropriate strategy given the funded status of the plans. None of the Company's securities are included in pension or other postretirement benefit plan assets.

The Company uses fair value for all classes of assets in the calculation of market-related value of plan assets. As of December 31, 2022, the fair values and asset allocations of the pension plan assets include the AWPP, AWPP Inactive, and the Shorelands Water Company, Inc. Pension Plan.

As a result of the sale of the Company's New York subsidiary on January 1, 2022, there was a transfer of plan assets from the Company to Liberty. The assets transferred were not a significant percentage of the Company's overall pension and other postretirement benefit plans.

Presented in the tables below are the fair values and asset allocations of the pension plan assets as of December 31, 2022 and 2021, respectively, by asset category:

Asset Category	2023 Target Allocation	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Percentage of Plan Assets as of December 31, 2022
Cash	9	\$ 36	\$ 36	\$ —	\$ —	3 %
Equity securities:	37 %					
U.S. large cap		142	142	_	_	10 %
U.S. small cap		79	79	_	_	6 %
International		386	2	264	120	27 %
Real estate fund		154	_	_	154	11 %
REITs		6	_	6	_	<u> </u>
Fixed income securities:	63 %					
U.S. Treasury securities and government bonds		126	119	7	_	9 %
Corporate bonds		418	_	418	_	30 %
Mortgage-backed securities		8	_	8	_	1 %
Municipal bonds		21	_	21	_	1 %
Long duration bond fund		3	_	3	_	— %
Guarantee annuity contracts		34	_	_	34	2 %
Total	100 %	\$ 1,413	\$ 378	\$ 727	\$ 308	100 %

			Quoted Prices in Active			
Asset Category	2022 Target Allocation	Total	Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Percentage of Plan Assets as of December 31, 2021
Cash		\$ 54	\$ 54	\$ —	\$ —	3 %
Equity securities:	50 %					
U.S. large cap		217	217	_	_	11 %
U.S. small cap		113	113	_	_	6 %
International		516	7	354	155	26 %
Real estate fund		141	_	_	141	7 %
REITs		9	_	9	_	<u> </u>
Fixed income securities:	50 %					
U.S. Treasury securities and government bonds		256	249	7	_	13 %
Corporate bonds		601	_	601	_	30 %
Mortgage-backed securities		9	_	9	_	— %
Municipal bonds		25	_	25	_	1 %
Long duration bond fund		10	7	3	_	1 %
Guarantee annuity contracts		40			40	2 %
Total	100 %	\$ 1,991	\$ 647	\$ 1,008	\$ 336	100 %

Presented in the tables below are a reconciliation of the beginning and ending balances of the fair value measurements using significant unobservable inputs (Level 3) for 2022 and 2021, respectively:

	1	Level 5
Balance as of January 1, 2022	\$	336
Actual return on assets		(1)
Purchases, issuances and settlements, net		(27)
Balance as of December 31, 2022	\$	308
	1	Level 3
Balance as of January 1, 2021	\$	356
Actual return on assets		41
Purchases, issuances and settlements, net		(61)
Balance as of December 31, 2021	\$	336

Other Postretirement Benefit Plan Assets

The Company's postretirement benefit plans have different levels of funded status and the assets are held under various trusts. The investments and risk mitigation strategies for the plans are tailored specifically for each trust. In setting new strategic asset mixes, consideration is given to the likelihood that the selected asset allocation will effectively fund the projected plan liabilities and meet the risk tolerance criteria of the Company periodically updates the long-term, strategic asset allocations for these plans through asset liability studies and uses various analytics to determine the optimal asset allocation. Considerations include plan liability characteristics, liquidity needs, funding requirements, expected rates of return and the distribution of returns.

Upon evaluating prior plan changes, Company funding and market performance, in December 2022, the Company completed plan amendments to spin-off and merge a portion of the American Water Retiree Welfare Plan ("Retiree Welfare Plan"), with and into the Company's medical plan for active employees ("Active Medical Plan"), in order to repurpose the overfunded portion of the Bargained Retiree Voluntary Employees' Beneficiary Association ("Bargained VEBA") trust. Benefits offered to the plan participants remain unchanged. As a result of these changes, effective December 31, 2022, the Company transferred investment assets from the Bargained VEBA into the existing trust maintained for the benefit of Active Medical Plan participants ("Active VEBA"). The transfer of these Bargained VEBA investment assets into the Active VEBA permits access to approximately \$194 million of assets for purposes of paying active union employee medical benefits. The Company recorded the transfer of assets as a negative contribution and therefore did not record a gain or loss, as permitted by accounting guidance. See Note 18—Fair Value of Financial Information, for additional information on accounting for the assets as investments in debt and equity securities as of December 31, 2022.

The Company engages third-party investment managers for all invested assets. Managers are not permitted to invest outside of the asset class (e.g., fixed income, equity, alternatives) or strategy for which they have been appointed. Investment management agreements and recurring performance and attribution analysis are used as tools to ensure investment managers invest solely within the investment strategy they have been provided. Futures and options may be used to adjust portfolio duration to align with a plan's targeted investment policy.

In order to minimize asset volatility relative to the liabilities, a portion of plan assets is allocated to long duration fixed income investments that are exposed to interest rate risk. Increases in interest rates generally will result in a decline in the value of fixed income assets while reducing the present value of the liabilities. Conversely, rate decreases will increase fixed income assets, partially offsetting the related increase in the liabilities. Within equities, risk is mitigated by constructing a portfolio that is broadly diversified by geography, market capitalization, manager mandate size, investment style and process. For the Bargained VEBA trust, its asset structure is designed to meet the cash flows of the liabilities. This design reduces the plan's exposure to changes in interest rates.

Actual allocations to each asset class vary from target allocations due to periodic investment strategy updates, market value fluctuations, the length of time it takes to fully implement investment allocations, and the timing of benefit payments and contributions. The asset allocation is rebalanced on a quarterly basis, if necessary. The Retiree Welfare Plan is funded by the Bargained VEBA trust, the Non-Bargained Retiree Voluntary Employees' Beneficiary Association ("Non-Bargained VEBA") trust, and the American Water Life Insurance Voluntary Employees' Beneficiary Association ("Life VEBA") Trust.

Presented in the tables below are the fair values and asset allocations of the postretirement benefit plan assets as of December 31, 2022 and 2021, respectively, by asset category:

Asset Category	2023 Target Allocation	Tota	l	ed Prices in Active Markets for ical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Percentage of Plan Assets as of December 31, 2022
Bargained VEBA:				 , , ,	• , ,	• ,	
Cash		\$	3	\$ 3	\$	\$ —	2 %
Equity securities:	— %						
U.S. large cap			_	_	_	_	<u> </u>
International			_	_	_	_	<u> </u>
Fixed income securities:	100 %						
U.S. Treasury securities and government bonds			131	72	59	_	97 %
Long duration bond fund			1	 1			1 %
Total bargained VEBA	100 %	\$	135	\$ 76	\$ 59	\$ —	100 %
Non-bargained VEBA:							
Cash		\$	1	\$ 1	\$ —	\$ —	1 %
Equity securities:	60 %						
U.S. large cap			40	40	_	_	34 %
International			29	29	_	_	25 %
Fixed income securities:	40 %						
Core fixed income bond fund (a)			47	 	47		40 %
Total non-bargained VEBA	100 %	\$	117	\$ 70	\$ 47	\$	100 %
Life VEBA:				 			
Cash		\$	2	\$ 2	\$ —	\$ —	100 %
Equity securities:	<u> </u>						
U.S. large cap			_		_	_	— %
Fixed income securities:	100 %						
Core fixed income bond fund (a)				 			<u> </u>
Total life VEBA	100 %	\$	2	\$ 2	\$	\$	100 %
Total	100 %	\$	254	\$ 148	\$ 106	\$ —	100 %

⁽a) Includes cash for margin requirements.

Asset Category	2022 Target Allocation	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Percentage of Plan Assets as of 12/31/2021
Bargained VEBA:						
Cash		\$ 10	\$ 10	\$ —	\$ —	3 %
Equity securities:	4 %					
U.S. large cap		18	18	_	_	5 %
International		1	1	_	_	— %
Fixed income securities:	96 %					
U.S. Treasury securities and government bonds		363	279	84	_	91 %
Long duration bond fund		5	5			1 %
Total bargained VEBA	100 %	\$ 397	\$ 313	\$ 84	\$ —	100 %
Non-bargained VEBA:						
Cash		\$ 2	\$ 2	\$ —	\$ —	— %
Equity securities:	60 %					
U.S. large cap		54	54	_	_	39 %
International		35	35	_	_	25 %
Fixed income securities:	40 %					
Core fixed income bond fund (a)		49		49		36 %
Total non-bargained VEBA	100 %	\$ 140	\$ 91	\$ 49	\$	100 %
Life VEBA:						
Cash		\$ 1	\$ 1	\$	\$ —	100 %
Equity securities:	70 %					
U.S. large cap		\$	\$ —	\$ —	\$ —	— %
Fixed income securities:	30 %					
Core fixed income bond fund (a)						%
Total life VEBA	100 %	\$ 1	\$ 1	<u>\$</u>	<u> </u>	100 %
Total	100 %	\$ 538	\$ 405	\$ 133	<u> </u>	100 %

⁽a) Includes cash for margin requirements.

Valuation Techniques Used to Determine Fair Value

Cash—Cash and investments with maturities of three months or less when purchased, including certain short-term fixed-income securities, are considered cash and are included in the recurring fair value measurements hierarchy as Level 1.

Equity securities—For equity securities, the trustees obtain prices from pricing services, whose prices are obtained from direct feeds from market exchanges, that the Company is able to independently corroborate. Certain equity securities are valued based on quoted prices in active markets and categorized as Level 1. Other equities, such as international securities held in the pension plan, are invested in commingled funds and/or limited partnerships. These funds are valued to reflect the plan fund's interest in the fund based on the reported year-end net asset value. Since net asset value is not directly observable or not available on a nationally recognized securities exchange for the commingled funds, they are categorized as Level 2. For limited partnerships, the assets as a whole are categorized as Level 3 due to the fact that the partnership provides the pricing and the pricing inputs are less readily observable. In addition, the limited partnership vehicle cannot be readily traded.

Fixed-income securities—The majority of U.S. Treasury securities and government bonds have been categorized as Level 1 because they trade in highly-liquid and transparent markets and their prices can be corroborated. The fair values of corporate bonds, mortgage backed securities, and certain government bonds are based on prices that reflect observable market information, such as actual trade information of similar securities. They are categorized as Level 2 because the valuations are calculated using models which utilize actively traded market data that the Company can corroborate. Exchange-traded options and futures, for which market quotations are readily available, are valued at the last reported sale price or official closing price on the primary market or exchange on which they are traded and are classified as Level 1.

Real estate fund—Real estate fund is categorized as Level 3 as the fund uses significant unobservable inputs for fair value measurement and the vehicle is in the form of a limited partnership.

REITs—REITs are invested in commingled funds. Commingled funds are valued to reflect the plan fund's interest in the fund based on the reported year-end net asset value. Since the net asset value is not directly observable for the commingled funds, they are categorized as Level 2.

Guaranteed annuity contracts—Guaranteed annuity contracts are categorized as Level 3 because the investments are not publicly quoted. Since these market values are determined by the provider, they are not highly observable and have been categorized as Level 3. Exchange-traded future and option positions are reported in accordance with changes in variation margins that are settled daily.

Benefit Obligations, Plan Assets and Funded Status

Presented in the table below is a rollforward of the changes in the benefit obligation and plan assets for the two most recent years, for all plans combined:

	Pension Benefits			Other Benefits				
		2022		2021		2022		2021
Change in benefit obligation:								
Benefit obligation as of January 1,	\$	2,294	\$	2,386	\$	342	\$	382
Service cost		30		36		3		4
Interest cost		64		64		10		10
Plan participants' contributions		_		_		3		2
Plan amendments		_		_		6		_
Actuarial loss (gain)		(582)		(46)		(77)		(26)
Divestiture		(86)		_		(4)		_
Settlements (a)		_		(6)		_		_
Gross benefits paid		(142)		(140)		(28)		(31)
Federal subsidy		_		_		_		1
Benefit obligation as of December 31,	\$	1,578	\$	2,294	\$	255	\$	342
Change in plan assets:								
Fair value of plan assets as of January 1,	\$	1,991	\$	1,990	\$	538	\$	556
Actual return on plan assets		(401)		108		(68)		9
Employer contributions		39		39		12		1
Plan participants' contributions		_		_		3		2
VEBA transfer		_		_		(194)		_
Divestiture		(74)		_		(9)		_
Settlements (a)		_		(6)				_
Benefits paid		(142)		(140)		(28)		(30)
Fair value of plan assets as of December 31,	\$	1,413	\$	1,991	\$	254	\$	538
Funded value as of December 31,	\$	(165)	\$	(303)	\$	(1)	\$	196
Amounts recognized on the balance sheet:		· · ·		, ,		,		
Noncurrent asset	\$	75	\$	_	\$	_	\$	193
Current liability		(5)		(2)		_		_
Noncurrent liability		(235)		(285)		(1)		(1)
(Liabilities) assets related to assets held for sale (b)		_		(16)		<u> </u>		4
Net amount recognized	\$	(165)	\$	(303)	\$	(1)	\$	196

⁽a) The Company paid \$6 million of a lump sum payment distributions from the Company's New York Water Service Corporation Pension Plan for the year ended December 31, 2021.

⁽b) These balances are related to the sale of the Company's New York subsidiary, which was completed on January 1, 2022, and are included in assets held for sale and liabilities related to assets held for sale on the Consolidated Balance Sheets as of December 31, 2021. See Note 5—Acquisitions and Divestitures for additional information.

Presented in the table below are the components of accumulated other comprehensive income and regulatory assets that have not been recognized as components of periodic benefit costs as of December 31:

	Pension Benefits			Other Benefits				
		2022		2021		2022		2021
Net actuarial loss	\$	289	\$	381	\$	45	\$	35
Prior service credit		(10)		(14)		(145)		(186)
Net amount recognized	\$	279	\$	367	\$	(100)	\$	(151)
Regulatory assets (liabilities)	\$	251	\$	317	\$	(100)	\$	(151)
Accumulated other comprehensive income		28		50		<u> </u>		<u> </u>
Total	\$	279	\$	367	\$	(100)	\$	(151)

Presented in the tables below are the aggregate projected benefit obligation, accumulated benefit obligation and aggregate fair value of plan assets for pension plans with a projected obligation in excess of plan assets as of December 31, 2022 and 2021:

Projected benefit obligation Fair value of plan assets

Projected Benefit Obligation Exceeds the Fair Value of Plans' Assets						
202	22		2021			
3	872	\$	2,294			
	632		1 991			

Accumulated benefit obligation

Assets						
	2022		2021			
3	793	\$	2,138			
	632		1,991			

Accumulated Benefit Obligation Exceeds the Fair Value of Plans'

Fair value of plan assets

The accumulated postretirement plan assets exceed benefit obligations for all of the Company's other postretirement benefit plans, except for the Northern Illinois Retiree Welfare Plan, of which the accumulated postretirement benefit obligation is inconsequential for all periods presented.

Contributions

The PPA requires that defined benefit plans contribute to 100% of the current liability funding target over seven years. Defined benefit plans with a funding status of less than 80% of the current liability are defined as being "at risk" and additional funding requirements and benefit restrictions may apply. The Company's qualified defined benefit plan is currently funded above the at-risk threshold, and therefore the Company expects that the plans will not be subject to the "at risk" funding requirements of the PPA. The Company is proactively monitoring the plan's funded status and projected contributions under the law to appropriately manage the potential impact on cash requirements.

Minimum funding requirements for the qualified defined benefit pension plan are determined by government regulations and not by accounting pronouncements. The Company plans to contribute amounts at least equal to or greater than the minimum required contributions or the normal cost in 2023 to the qualified pension plans. Contributions may be in the form of cash contributions as well as available prefunding balances.

Presented in the table below is information about the expected cash flows for the pension and postretirement benefit plans:

	Pen	sion Benefits	Other Benefits		
2023 expected employer contributions:		_			
To plan trusts	\$	39	\$	_	
To plan participants		5		_	

Estimated Future Benefit Payments

Presented in the table below are the net benefits expected to be paid from the plan assets or the Company's assets:

	Pension Benefits	Other Benefits				
	Expected Benefit Payments	Expected Benefit Payments	Expected Federal Subsidy Payments			
2023	\$ 117	\$ 24	\$ 1			
2024	115	24	1			
2025	117	25	1			
2026	118	24	1			
2027	119	24	1			
2028-2032	585	108	3			

Because the above amounts are net benefits, plan participants' contributions have been excluded from the expected benefits.

Assumptions

Accounting for pensions and other postretirement benefits requires an extensive use of assumptions about the discount rate, expected return on plan assets, the rate of future compensation increases received by the Company's employees, mortality, turnover and medical costs. Each assumption is reviewed annually. The assumptions are selected to represent the average expected experience over time and may differ in any one year from actual experience due to changes in capital markets and the overall economy. These differences will impact the amount of pension and other postretirement benefit expense that the Company recognizes.

Presented in the table below are the significant assumptions related to the pension and other postretirement benefit plans:

		Pension Benefits			Other Benefits	nefits		
	2022	2021	2020	2022	2021	2020		
Weighted average assumptions used to determine December 31 benefit obligations:								
Discount rate	5.58%	2.94%	2.74%	5.60%	2.90%	2.56%		
Rate of compensation increase	3.51%	3.51%	3.51%	N/A	N/A	N/A		
Medical trend	N/A	N/A	N/A	graded from	graded from	graded from		
				7.00% in 2023	6.00% in 2022	6.25% in 2021		
				to 5.00% in 2031+	to 5.00% in 2026+	to 5.00% in 2026+		
Weighted average assumptions used to determine net periodic cos	st:							
Discount rate	2.94%	2.74%	3.44%	2.90%	2.56%	3.36%		
Expected return on plan assets	6.50%	6.50%	6.50%	3.60%	3.67%	3.68%		
Rate of compensation increase	3.51%	3.51%	2.97%	N/A	N/A	N/A		
Medical trend	N/A	N/A	N/A	graded from	graded from	graded from		
				6.00% in 2022	6.25% in 2021	6.50% in 2020		
				to 5.00% in 2026+	to 5.00% in 2026+	to 5.00% in 2026+		

NOTE ``N/A'' in the table above means assumption is not applicable.

The discount rate assumption was determined for the pension and postretirement benefit plans independently. The Company uses an approach that approximates the process of settlement of obligations tailored to the plans' expected cash flows by matching the plans' cash flows to the coupons and expected maturity values of individually selected bonds. Historically, for each plan, the discount rate was developed at the level equivalent rate that would produce the same present value as that using spot rates aligned with the projected benefit payments.

The expected long-term rate of return on plan assets is based on historical and projected rates of return, prior to administrative and investment management fees, for current and planned asset classes in the plans' investment portfolios. Assumed projected rates of return for each of the plans' projected asset classes were selected after analyzing historical experience and future expectations of the returns and volatility of the various asset classes. Based on the target asset allocation for each asset class, the overall expected rate of return for the portfolio was developed, adjusted for historical and expected experience of active portfolio management results compared to the benchmark returns. The Company's pension expense increases as the expected return on assets decreases. The Company used an expected return on plan assets of 6.50% to estimate its 2022 pension benefit costs, and an expected blended return based on weighted assets of 3.60% to estimate its 2022 other postretirement benefit costs.

For the years ended December 31, 2022 and 2021, the Company's mortality assumption utilized the Pri-2012 base mortality table and the new MP-2021 mortality improvement scale. For the year ended December 31, 2020, the Company's mortality assumption utilized the Pri-2012 base mortality table and the MP-2020 mortality improvement scale.

Components of Net Periodic Benefit Cost

Presented in the table below are the components of net periodic benefit costs for the years ended December 31:

	2022	2021	2020
Components of net periodic pension benefit cost:			
Service cost	\$ 30	\$ 36	\$ 31
Interest cost	64	64	73
Expected return on plan assets	(122)	(126)	(111)
Amortization of prior service (credit) cost	(3)	(3)	(3)
Amortization of actuarial loss	21	27	30
Settlements (a)			1
Net periodic pension benefit cost	\$ (10)	\$ (2)	\$ 21
Other changes in plan assets and benefit obligations recognized in other comprehensive income:			
Current year actuarial (gain) loss	\$ (14)	\$ 1	\$ 12
Amortization of actuarial loss	(3)	(4)	(3)
Total recognized in other comprehensive income	 (17)	(3)	 9
Total recognized in net periodic benefit cost and other comprehensive income	\$ (27)	\$ (5)	\$ 30
Components of net periodic other postretirement benefit (credit) cost:		 	
Service cost	\$ 3	\$ 4	\$ 4
Interest cost	10	10	12
Expected return on plan assets	(19)	(21)	(19)
Amortization of prior service credit	(31)	(32)	(34)
Amortization of actuarial loss		<u> </u>	 2
Net periodic other postretirement benefit (credit) cost	\$ (37)	\$ (39)	\$ (35)

⁽a) Due to the amount of lump sum payment distributions from the Company's New York Water Service Corporation Pension Plan, settlement charges of less than \$1 million were recorded for the year ended December 31, 2021. In accordance with existing regulatory accounting treatment, the Company has maintained the settlement charge in regulatory assets on the Consolidated Balance Sheets. The amount is being amortized in accordance with existing regulatory practice.

Savings Plans for Employees

The Company maintains 401(k) savings plans that allow employees to save for retirement on a tax-deferred basis. Employees can make contributions that are invested at their direction in one or more funds. The Company makes matching contributions based on a percentage of an employee's contribution, subject to certain limitations. Due to the Company's discontinuing new entrants into the defined benefit pension plan, on January 1, 2006, the Company began providing an additional 5.25% of base pay defined contribution benefit for union employees hired on or after January 1, 2001 and non-union employees hired on or after January 1, 2006. The Company's 401(k) savings plan expenses totaled \$13 million, \$14 million and \$12 million for 2022, 2021 and 2020, respectively. Additionally, the Company's 5.25% of base pay defined contribution benefit expenses totaled \$16 million, \$16 million and \$15 million for 2022, 2021 and 2020, respectively. All of the Company's contributions are invested in one or more funds at the direction of the employees.

Note 16: Commitments and Contingencies

Commitments have been made in connection with certain construction programs. The estimated capital expenditures required under legal and binding contractual obligations amounted to \$756 million as of December 31, 2022.

The Company's regulated subsidiaries maintain agreements with other water purveyors for the purchase of water to supplement their water supply. Presented in the table below are the future annual commitments related to minimum quantities of purchased water having non-cancelable contracts:

	 Amount
2023	\$ 68
2024	54
2025	53
2026	52
2027	52
Thereafter	501

The Company enters into agreements for the provision of services to water and wastewater facilities for the U.S. military, municipalities and other customers. See Note 4—Revenue Recognition for additional information regarding the Company's performance obligations.

Contingencies

The Company is routinely involved in legal actions incident to the normal conduct of its business. As of December 31, 2022, the Company has accrued approximately \$5 million of probable loss contingencies and has estimated that the maximum amount of losses associated with reasonably possible loss contingencies that can be reasonably estimated is \$3 million. For certain matters, claims and actions, the Company is unable to estimate possible losses. The Company believes that damages or settlements, if any, recovered by plaintiffs in such matters, claims or actions, other than as described in this Note 16—Commitments and Contingencies, will not have a material adverse effect on the Company.

Dunbar, West Virginia Water Main Break Class Action Litigation

On the evening of June 23, 2015, a 36-inch pre-stressed concrete transmission water main, installed in the early 1970s, failed. The water main is part of the West Relay pumping station located in the City of Dunbar, West Virginia and owned by WVAWC. The failure of the main caused water outages and low pressure for up to approximately 25,000 WVAWC customers. In the early morning hours of June 25, 2015, crews completed a repair, but that same day, the repair developed a leak. On June 26, 2015, a second repair was completed and service was restored that day to approximately 80% of the impacted customers, and to the remaining approximately 20% by the next morning. The second repair showed signs of leaking, but the water main was usable until June 29, 2015, to allow tanks to refill. The system was reconfigured to maintain service to all but approximately 3,000 customers while a final repair was being completed safely on June 30, 2015. Water service was fully restored by July 1, 2015, to all customers affected by this event.

On June 2, 2017, a complaint captioned *Jeffries, et al. v. West Virginia-American Water Company* was filed in West Virginia Circuit Court in Kanawha County on behalf of an alleged class of residents and business owners who lost water service or pressure as a result of the Dunbar main break. The complaint alleges breach of contract by WVAWC for failure to supply water, violation of West Virginia law regarding the sufficiency of WVAWC's facilities and negligence by WVAWC in the design, maintenance and operation of the water system. The *Jeffries* plaintiffs seek unspecified alleged damages on behalf of the class for lost profits, annoyance and inconvenience, and loss of use, as well as punitive damages for willful, reckless and wanton behavior in not addressing the risk of pipe failure and a large outage.

In February 2020, the *Jeffries* plaintiffs filed a motion seeking class certification on the issues of breach of contract and negligence, and to determine the applicability of punitive damages and a multiplier for those damages if imposed. In July 2020, the Circuit Court entered an order granting the *Jeffries* plaintiffs' motion for certification of a class regarding certain liability issues but denying certification of a class to determine a punitive damages multiplier. In August 2020, WVAWC filed a Petition for Writ of Prohibition in the Supreme Court of Appeals of West Virginia seeking to vacate or remand the Circuit Court's order certifying the issues class. In January 2021, the Supreme Court of Appeals remanded the case back to the Circuit Court for further consideration in light of a decision issued in another case relating to the class certification issues raised on appeal. On July 5, 2022, the Circuit Court entered an order again certifying a class to address at trial certain liability issues but not to consider damages. On August 26, 2022, WVAWC filed another Petition for Writ of Prohibition in the Supreme Court of Appeals of West Virginia challenging the West Virginia Circuit Court's July 5, 2022 order. The Writ Petition has been supported by an amicus brief filed by certain water and utility industry trade groups. On February 9, 2023, the Supreme Court of Appeals accepted the Writ Petition by issuing a Rule to Show Cause and scheduling oral argument for April 26, 2023.

The Company and WVAWC believe that WVAWC has valid, meritorious defenses to the claims raised in this class action complaint. WVAWC is vigorously defending itself against these allegations. The Company cannot currently determine the likelihood of a loss, if any, or estimate the amount of any loss or a range of such losses related to this proceeding.

Chattanooga, Tennessee Water Main Break Class Action Litigation

On September 12, 2019, the Company's Tennessee subsidiary ("TAWC"), experienced a leak in a 36-inch water transmission main, which caused service fluctuations or interruptions to TAWC customers and the issuance of a boil water notice. TAWC repaired the main by early morning on September 14, 2019, and restored full water service by the afternoon of September 15, 2019, with the boil water notice lifted for all customers on September 16, 2019.

On September 17, 2019, a complaint captioned *Bruce, et al. v. American Water Works Company, Inc., et al.* was filed in the Circuit Court of Hamilton County, Tennessee against TAWC, the Company and American Water Works Service Company, Inc. ("Service Company" and, together with TAWC and the Company, collectively, the "Tennessee-American Water Defendants"), on behalf of a proposed class of individuals or entities who lost water service or suffered monetary losses as a result of the Chattanooga incident (the "Tennessee Plaintiffs"). The complaint alleged breach of contract and negligence against the Tennessee-American Water Defendants, as well as an equitable remedy of piercing the corporate veil. In the complaint as originally filed, the Tennessee Plaintiffs were seeking an award of unspecified alleged damages for wage losses, business and economic losses, out-of-pocket expenses, loss of use and enjoyment of property and annoyance and inconvenience, as well as punitive damages, attorneys' fees and pre- and post-judgment interest. In September 2020, the court dismissed all of the Tennessee Plaintiffs' claims in their complaint, except for the breach of contract claims against TAWC, which remain pending. In October 2020, TAWC answered the complaint, and the parties have been engaging in discovery. On January 12, 2023, after hearing oral argument, the court issued an oral ruling denying the Tennessee Plaintiffs' motion for class certification. On February 9, 2023, the Tennessee Plaintiffs sought reconsideration of the ruling by the court, and any final ruling is appealable to the Tennessee Court of Appeals, as allowed under Tennessee law.

TAWC and the Company believe that TAWC has meritorious defenses to the claims raised in this class action complaint, and TAWC is vigorously defending itself against these allegations. The Company cannot currently determine the likelihood of a loss, if any, or estimate the amount of any loss or a range of such losses related to this proceeding.

Alternative Water Supply in Lieu of Carmel River Diversions

Compliance with Orders to Reduce Carmel River Diversions—Monterey Peninsula Water Supply Project

Under a 2009 order (the "2009 Order") of the State Water Resources Control Board (the "SWRCB"), the Company's California subsidiary ("Cal Am") is required to decrease significantly its yearly diversions of water from the Carmel River according to a set reduction schedule. In 2016, the SWRCB issued an order (the "2016 Order," and, together with the 2009 Order, the "Orders") approving a deadline of December 31, 2021, for Cal Am's compliance with these prior orders.

Cal Am is currently involved in developing the Monterey Peninsula Water Supply Project (the "Water Supply Project"), which includes the construction of a desalination plant, to be owned by Cal Am, and the construction of wells that would supply water to the desalination plant. In addition, the Water Supply Project also includes Cal Am's purchase of water from a groundwater replenishment project (the "GWR Project") between Monterey One Water and the Monterey Peninsula Water Management District (the "MPWMD"). The Water Supply Project is intended, among other things, to fulfill Cal Am's obligations under the Orders.

Cal Am's ability to move forward on the Water Supply Project is subject to administrative review by the CPUC and other government agencies, obtaining necessary permits, and intervention from other parties. In September 2016, the CPUC unanimously approved a final decision to authorize Cal Am to enter into a water purchase agreement for the GWR Project and to construct a pipeline and pump station facilities and recover up to \$50 million in associated incurred costs plus AFUDC, subject to meeting certain criteria.

In September 2018, the CPUC unanimously approved another final decision finding that the Water Supply Project meets the CPUC's requirements for a certificate of public convenience and necessity and an additional procedural phase was not necessary to consider alternative projects. The CPUC's 2018 decision concludes that the Water Supply Project is the best project to address estimated future water demands in Monterey, and, in addition to the cost recovery approved in its 2016 decision, adopts Cal Am's cost estimates for the Water Supply Project, which amounted to an aggregate of \$279 million plus AFUDC at a rate representative of Cal Am's actual financing costs. The 2018 final decision specifies the procedures for recovery of all of Cal Am's prudently incurred costs associated with the Water Supply Project upon its completion, subject to the frameworks included in the final decision related to cost caps, operation and maintenance costs, financing, ratemaking and contingency matters. The reasonableness of the Water Supply Project costs will be reviewed by the CPUC when Cal Am seeks cost recovery for the Water Supply Project. Cal Am is also required to implement mitigation measures to avoid, minimize or offset significant environmental impacts from the construction and operation of the Water Supply Project and comply with a mitigation monitoring and reporting program, a reimbursement agreement for CPUC costs associated with that program, and reporting requirements on plant operations following placement of the Water Supply Project in service. Cal Am has incurred \$206 million in aggregate costs as of December 31, 2022, related to the Water Supply Project, which includes \$51 million in AFUDC.

In September 2021, Cal Am, Monterey One Water and the MPWMD reached an agreement on Cal Am's purchase of additional water from an expansion to the GWR Project, which is not expected to produce additional water until 2024 at the earliest. The amended and restated water purchase agreement for the GWR Project expansion is subject to review and approval of the CPUC, and in November 2021, Cal Am filed an application with the CPUC that sought review and approval of the amended and restated water purchase agreement. Cal Am also requested rate base treatment of the additional capital investment for certain Cal Am facilities required to maximize the water supply from the expansion to the GWR Project and a related Aquifer Storage and Recovery Project, totaling approximately \$81 million. This requested amount is in addition to, and consistent in regulatory treatment with, the prior \$50 million of cost recovery for facilities associated with the original water purchase agreement, which was approved by the CPUC in its 2016 final decision.

On December 5, 2022, the CPUC issued a final decision that authorizes Cal Am to enter into the amended water purchase agreement, and specifically to increase pumping capacity and reliability of groundwater extraction from the Seaside Groundwater Basin. The final decision sets the cost cap for the proposed facilities at approximately \$62 million. Cal Am may seek recovery of amounts above the cost cap in a subsequent rate filing or general rate case. Additionally, the final decision authorizes AFUDC at Cal Am's actual weighted average cost of debt for most of the facilities.

On December 30, 2022, Cal Am filed with the CPUC an application for rehearing of the CPUC's December 5, 2022 final decision. Cal Am is requesting recovery of its infrastructure costs for the GWR Project expansion that had not been included in the December 2022 final decision. Cal Am believes that the December 2022 final decision is contrary to the CPUC's precedent and that obtaining recovery of these infrastructure costs is a key component of the GWR Project expansion and Cal Am's ability to meet the future water supply needs of its customers in Monterey. This application remains pending.

While Cal Am believes that its expenditures to date have been prudent and necessary to comply with the Orders, as well as the CPUC's 2016 and 2018 final decisions, Cal Am cannot currently predict its ability to recover all of its costs and expenses associated with the Water Supply Project and there can be no assurance that Cal Am will be able to recover all of such costs and expenses in excess of the \$112 million in aggregate construction costs, plus applicable AFUDC, previously approved by the CPUC in its 2016 and December 2022 final decisions.

Coastal Development Permit Application

In 2018, Cal Am submitted a coastal development permit application (the "Marina Application") to the City of Marina (the "City") for those project components of the Water Supply Project located within the City's coastal zone. Members of the City's Planning Commission, as well as City councilpersons, have publicly expressed opposition to the Water Supply Project. In May 2019, the City issued a notice of final local action based upon the denial by the Planning Commission of the Marina Application. Thereafter, Cal Am appealed this decision to the Coastal Commission, as permitted under the City's code and the California Coastal Act. At the same time, Cal Am submitted an application (the "Original Jurisdiction Application") to the Coastal Commission for a coastal development permit for those project components located within the Coastal Commission's original jurisdiction. After Coastal Commission staff issued reports recommending denial of the Original Jurisdiction Application, noting potential impacts on environmentally sensitive habitat areas and wetlands and possible disproportionate impacts to communities of concern, in September 2020, Cal Am withdrew the Original Jurisdiction Application in order to address the staff's environmental justice concerns. The withdrawal of the Original Jurisdiction Application did not impact Cal Am's appeal of the City's denial of the Marina Application, which remains pending before the Coastal Commission. In November 2020, Cal Am refiled the Original Jurisdiction Application.

On October 5, 2022, Cal Am announced a phasing plan for the proposed desalination plant component of the Water Supply Project. The desalination plant and slant wells originally approved by the CPUC would produce up to 6.4 million gallons of desalinated water per day. Under the phased approach, the facilities would initially be constructed to produce up to 4.8 million gallons per day of desalinated water, enough to meet anticipated demand through about 2030, and would limit the number of slant wells initially constructed. As demand increases in the future, desalination facilities would be expanded to meet the additional demand. The phased approach seeks to meet near-term demand by allowing for additional supply as it becomes needed, while also providing an opportunity for regional future public participation and was developed by Cal Am based on feedback received from the community.

On November 18, 2022, the Coastal Commission approved the Marina Application and the Original Jurisdiction Application with respect to the phased development of the proposed desalination plant, subject to compliance with a number of conditions, all of which Cal Am expects to satisfy. On December 29, 2022, the City, Marina Coast Water District ("MCWD"), MCWD's groundwater sustainability agency, and the MPWMD jointly filed a petition for writ of mandate in Monterey County Superior Court against the Coastal Commission, alleging that the Coastal Commission violated the California Coastal Act and the California Environmental Quality Act in issuing a coastal development permit to Cal Am for construction of the MPWSP slant wells. Cal Am is named as a real party in interest. This matter remains pending.

Following the issuance of the coastal development permit, Cal Am continues to work constructively with all appropriate agencies to provide necessary information in connection with obtaining the remaining required permits for the Water Supply Project. However, there can be no assurance that the Water Supply Project in its current configuration will be completed on a timely basis, if ever. For the year ended December 31, 2022, Cal Am has complied with the diversion limitations contained in the 2016 Order. Continued compliance with the diversion limitations in 2023 and future years may be impacted by a number of factors, including without limitation continued drought conditions in California and the exhaustion of water supply reserves, and will require successful development of alternate water supply sources sufficient to meet customer demand. The Orders remain in effect until Cal Am certifies to the SWRCB, and the SWRCB concurs, that Cal Am has obtained a permanent supply of water to substitute for past unauthorized Carmel River diversions. While the Company cannot currently predict the likelihood or result of any adverse outcome associated with these matters, further attempts to comply with the Orders may result in material additional costs and obligations to Cal Am, including fines and penalties against Cal Am in the event of noncompliance with the Orders.

West Virginia Elk River Freedom Industries Chemical Spill

On June 8, 2018, the U.S. District Court for the Southern District of West Virginia granted final approval of a settlement class and global class action settlement (the "Settlement") for all claims and potential claims by all class members (collectively, the "West Virginia Plaintiffs") arising out of the January 2014 Freedom Industries, Inc. chemical spill in West Virginia. The effective date of the Settlement was July 16, 2018. Under the terms and conditions of the Settlement, WVAWC and certain other Company affiliated entities did not admit, any fault or liability for any of the allegations made by the West Virginia Plaintiffs in any of the actions that were resolved.

As of December 31, 2022, \$0.5 million of the aggregate Settlement amount of \$126 million remains reflected in accrued liabilities, and \$0.5 million in an offsetting insurance receivable remains reflected in other current assets on the Consolidated Balance Sheets pending resolution of all asserted actual or potential claims associated with this matter. The amount reflected in accrued liabilities reflects the status of the liability and the offsetting insurance receivable reflected in other current assets, each as of as of December 31, 2022.

Note 17: Earnings per Common Share

Presented in the table below is a reconciliation of the numerator and denominator for the basic and diluted earnings per share ("EPS") calculations for the years ended December 31:

	2022	2021		2020		
Numerator:						
Net income attributable to common shareholders	\$	820	\$	1,263	\$	709
Denominator:						
Weighted average common shares outstanding—Basic		182		182		181
Effect of dilutive common stock equivalents		_		_		1
Weighted average common shares outstanding—Diluted		182		182		182

The effect of dilutive common stock equivalents is related to outstanding stock options, RSUs and PSUs granted under the Company's 2007 Plan and outstanding RSUs and PSUs granted under the Company's 2017 Omnibus Plan, as well as estimated shares to be purchased under the ESPP. Less than one million share-based awards were excluded from the computation of diluted EPS for the years ended December 31, 2022, 2021 and 2020, because their effect would have been anti-dilutive under the treasury stock method.

Note 18: Fair Value of Financial Information

The following methods and assumptions were used by the Company in estimating its fair value disclosures for financial instruments:

Current assets and current liabilities—The carrying amounts reported on the Consolidated Balance Sheets for current assets and current liabilities, including revolving credit debt, due to the short-term maturities and variable interest rates, approximate their fair values.

Seller promissory note from the sale of HOS — The carrying amount reported on the Consolidated Balance Sheets for the seller promissory note from the sale of HOS is \$720 million as of December 31, 2022 and 2021. This amount represents the principal amount owed under the seller note, for which the Company expects to receive full payment. The accounting fair value measurement of the seller note approximated \$686 million and \$720 million as of December 31, 2022 and 2021, respectively. The accounting fair value measurement is an estimate that is reflective of changes in benchmark interest rates. The seller note is classified as Level 3 within the fair value hierarchy.

Preferred stock with mandatory redemption requirements and long-term debt—The fair values of preferred stock with mandatory redemption requirements and long-term debt are categorized within the fair value hierarchy based on the inputs that are used to value each instrument. The fair value of long-term debt classified as Level 1 is calculated using quoted prices in active markets. Level 2 instruments are valued using observable inputs and Level 3 instruments are valued using observable inputs.

Presented in the tables below are the carrying amounts, including fair value adjustments previously recognized in acquisition purchase accounting, and the fair values of the Company's financial instruments:

				As o	f December 31, 2022			
					At Fai	r Value		
	Cai	rrying Amount	 Level 1		Level 2		Level 3	 Total
Preferred stock with mandatory redemption requirements	\$	3	\$ _	\$	_	\$	3	\$ 3
Long-term debt (excluding finance lease obligations)		11,207	8,599		49		1,427	10,075

	 As of December 31, 2021								
		At Fair Value							
	Carrying Amount		Level 1		Level 2		Level 3		Total
Preferred stock with mandatory redemption requirements	\$ 4	\$	_	\$	_	\$	6	\$	6
Long-term debt (excluding finance lease obligations)	10,396		10,121		60		1,637		11,818

Fair Value Measurements

To increase consistency and comparability in fair value measurements, GAAP establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three levels as follows:

Level 1—Quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access as of the reporting date. Financial assets and liabilities utilizing Level 1 inputs include active exchange-traded equity securities, exchange-based derivatives, mutual funds and money market funds.

Level 2—Inputs other than quoted prices included within Level 1 that are directly observable for the asset or liability or indirectly observable through corroboration with observable market data. Financial assets and liabilities utilizing Level 2 inputs include fixed income securities, non-exchange-based derivatives, commingled investment funds not subject to purchase and sale restrictions and fair-value hedges.

Level 3—Unobservable inputs, such as internally-developed pricing models for the asset or liability due to little or no market activity for the asset or liability. Financial assets and liabilities utilizing Level 3 inputs include infrequently-traded non-exchange-based derivatives and commingled investment funds subject to purchase and sale restrictions.

Recurring Fair Value Measurements

Presented in the tables below are assets and liabilities measured and recorded at fair value on a recurring basis and their level within the fair value hierarchy:

	As of December 31, 2022							
	L	evel 1	Le	evel 2	Le	evel 3		Total
Assets:								
Restricted funds	\$	32	\$	_	\$		\$	32
Rabbi trust investments		21		_				21
Deposits		7		_				7
Other investments								
Money market and other		61		_				61
Fixed-Income Securities		147		6				153
Contingent cash payment from the sale of HOS				_		72		72
Mark-to-market derivative asset				1				1
Total assets		268		7		72		347
Liabilities:								
Deferred compensation obligations		24		_				24
Total liabilities		24						24
Total net assets	\$	244	\$	7	\$	72	\$	323

	As of December 31, 2021								
	Lo	Level 1			Level 3			Total	
Assets:									
Restricted funds	\$	21	\$	_	\$		\$	21	
Rabbi trust investments		23						23	
Deposits		27						27	
Other investments		17						17	
Contingent cash payment from the sale of HOS		_		_		72		72	
Total assets		88				72		160	
Liabilities:									
Deferred compensation obligations		27		_				27	
Total liabilities		27		_	_	_		27	
Total net assets	\$	61	\$		\$	72	\$	133	

Restricted funds—The Company's restricted funds primarily represent proceeds received from financings for the construction and capital improvement of facilities and from customers for future services under operation, maintenance and repair projects.

Rabbi trust investments—The Company's rabbi trust investments consist of equity and index funds from which supplemental executive retirement plan benefits and deferred compensation obligations can be paid. The Company includes these assets in other long-term assets on the Consolidated Balance Sheets.

Deposits—Deposits include escrow funds and certain other deposits held in trust. The Company includes cash deposits in other current assets on the Consolidated Balance Sheets.

Deferred compensation obligations—The Company's deferred compensation plans allow participants to defer certain cash compensation into notional investment accounts. The Company includes such plans in other long-term liabilities on the Consolidated Balance Sheets. The value of the Company's deferred compensation obligations is based on the market value of the participants' notional investment accounts. The notional investments are comprised primarily of mutual funds, which are based on observable market prices.

Mark-to-market derivative assets and liabilities—The Company employs derivative financial instruments in the form of treasury lock agreements, classified as cash flow hedges, in order to fix the interest cost on existing or forecasted debt. The Company uses a calculation of future cash inflows and estimated future outflows, which are discounted, to determine the current fair value. Additional inputs to the present value calculation include the contract terms, counterparty credit risk, interest rates and market volatility.

Other investments— As a result of the Retiree Welfare Plan changes discussed in Note 15—Employee Benefits, effective December 31, 2022, the Company transferred investment assets from the Bargained VEBA into the existing trust maintained for the benefit of the Active VEBA. The transfer of these Bargained VEBA investment assets into the Active VEBA permits access to approximately \$194 million of assets for purposes of paying active union employee medical benefits.

The investments in the Active VEBA primarily consist of money market funds and available-for-sale fixed income securities. The money market and other investments have original maturities of three months or less when purchased. The fair value measurement of the money market and other investments is based on observable market prices and therefore included in the recurring fair value measurements hierarchy as Level 1. The available-for-sale fixed income securities are primarily investments in U.S. Treasury securities and government bonds. The majority of U.S. Treasury securities and government bonds have been categorized as Level 1 because they trade in highly-liquid and transparent markets. Certain U.S. Treasury securities are based on prices that reflect observable market information, such as actual trade information of similar securities, and are therefore categorized as Level 2, because the valuations are calculated using models which utilize actively traded market data that the Company can corroborate. The Company includes other investments of \$67 million and \$147 million in Other current assets and Other long-term assets, respectively, on the Consolidated Balance Sheet as of December 31, 2022. Other investments as of December 31, 2021, are included in other current assets on the Consolidated Balance Sheet.

The fair value of the Company's available-for-sale fixed income securities, summarized by contractual maturities, as of December 31, 2022, is as follows:

	A	mount
Other investments - Available-for-sale fixed-income securities		
Less than one year	\$	61
1 year - 5 years		79
5 years - 10 years		3
Greater than 10 years		10
Total	\$	153

Contingent cash payment from the sale of HOS—The Company's contingent cash payment derivative included as part of the consideration from the sale of HOS is included in other current assets on the Consolidated Balance Sheets. The fair value of the contingent cash payment is \$72 million, which is reflective of changes in the benchmark interest rate and estimated using the probability of the outcome of receipt of the \$75 million, a Level 3 input.

Note 19: Leases

The Company has operating and finance leases involving real property, including facilities, utility assets, vehicles, and equipment. Certain operating leases have renewal options ranging from one to 60 years. The exercise of lease renewal options is at the Company's sole discretion. Renewal options that the Company was reasonably certain to exercise are included in the Company's ROU assets. Certain operating leases contain the option to purchase the leased property. The operating leases for real property, vehicles and equipment will expire over the next 37 years, six years, and four years, respectively.

The Company participates in a number of arrangements with various public entities ("Partners") in West Virginia. Under these arrangements, the Company transferred a portion of its utility plant to the Partners in exchange for an equal principal amount of Industrial Development Bonds ("IDBs") issued by the Partners under the Industrial Development and Commercial Development Bond Act. The Company leased back the utility plant under agreements for a period of 30 to 40 years. The Company has recorded these agreements as finance leases in property, plant and equipment, as ownership of the assets will revert back to the Company at the end of the lease term. The carrying value of the finance lease assets was \$145 million and \$146 million as of December 31, 2022 and 2021, respectively. The Company determined that the finance lease obligations and the investments in IDBs meet the conditions for offsetting, and as such, are reported net on the Consolidated Balance Sheets and excluded from the finance lease disclosure presented below.

The Company also enters into O&M agreements with the Partners. The Company pays an annual fee for use of the Partners' assets in performing under the O&M agreements. The O&M agreements are recorded as operating leases, and future annual use fees of \$4 million in 2023 through 2027, and \$45 million thereafter, are included in operating lease ROU assets and operating lease liabilities on the Consolidated Balance Sheets.

Rental expenses under operating and finance leases were \$12 million, \$13 million and \$14 million for the years ended December 31, 2022, 2021 and 2020, respectively.

For the year ended December 31, 2022, cash paid for amounts in lease liabilities, which includes operating and financing cash flows from operating and finance leases, was \$12 million. For the year ended December 31, 2022, ROU assets obtained in exchange for new operating lease liabilities was \$5 million.

As of December 31, 2022, the weighted-average remaining lease term of the finance lease and operating leases were three years and 18 years, respectively, and the weighted-average discount rate of the finance lease and operating leases were 12% and 4%, respectively.

The future maturities of lease liabilities at December 31, 2022, are \$9 million in 2023, \$10 million in 2024, \$8 million in 2025, \$7 million in 2026, \$6 million in 2027 and \$76 million thereafter. At December 31, 2022, imputed interest was \$39 million.

Note 20: Segment Information

The Company's operating segments are comprised of its businesses which generate revenue, incur expense and have separate financial information which is regularly used by management to make operating decisions, assess performance and allocate resources. The Company operates its businesses primarily through one reportable segment, the Regulated Businesses segment. The Regulated Businesses segment is the largest component of the Company's business and includes subsidiaries that provide water and wastewater services to customers in 14 states.

The Company also operates other market-based businesses, primarily MSG, which provide water and wastewater services to the U.S. government on military installations, as well as municipalities. These market-based businesses do not meet the criteria of a reportable segment in accordance with GAAP, and are collectively presented throughout this Annual Report on Form 10-K within "Other," which is consistent with how management assesses the results of these businesses. The Company's former HOS business, which was sold in the fourth quarter of 2021, was included in "Market-Based Businesses" in the Company's Form 10-K for the year ended December 31, 2021. As a result of the sale of HOS, the categories which were previously shown as "Market-Based Businesses" and "Other" have been combined and are shown as Other. Segment results for the years ended December 31, 2021 and 2020, have been adjusted retrospectively to reflect this change.

The accounting policies of the segments are the same as those described in Note 2—Significant Accounting Policies. The Regulated Businesses segment includes intercompany costs that are allocated by Service Company and intercompany interest that is charged by AWCC, both of which are eliminated to reconcile to the Consolidated Statements of Operations. Intersegment revenues include the sale of water from a regulated subsidiary to market-based subsidiaries, leased office space, and furniture and equipment provided by the market-based subsidiaries to regulated subsidiaries. Other also includes corporate costs that are not allocated to the Company's Regulated Businesses, interest income related to the seller promissory note and income from the revenue share agreement from the sale of HOS, eliminations of inter-segment transactions and fair value adjustments related to acquisitions that have not been allocated to the Regulated Businesses segment. The adjustments related to the acquisitions are reported in Other as they are excluded from segment performance measures evaluated by management.

Presented in the tables below is summarized segment information as of and for the years ended December 31:

	2022						
		egulated Isinesses	Other		Consolidated		
Operating revenues	\$	3,505	\$ 287	\$	3,792		
Depreciation and amortization		633	16		649		
Total operating expenses, net		2,242	277		2,519		
Interest expense		(314)	(119)	(433)		
Interest income		2	50		52		
Gain or (loss) on sale of businesses		_	19		19		
Income before income taxes		1,042	(34)	1,008		
Provision for income taxes		188	_		188		
Net income attributable to common shareholders		854	(34)	820		
Total assets		25,038	2,749		27,787		
Cash paid for capital expenditures		2,284	13		2,297		

	 		2021		-	
	Regulated Businesses		Other		Consolidated	
Operating revenues	\$ 3,384	\$	546	\$	3,930	
Depreciation and amortization	601		35		636	
Total operating expenses, net	2,227		507		2,734	
Interest expense	(290)		(113)		(403)	
Interest income	1		3		4	
Gain or (loss) on sale of businesses	(1)		748		747	
Income before income taxes	962		678		1,640	
Provision for income taxes	172		205		377	
Net income attributable to common shareholders	789		474		1,263	
Total assets	23,365		2,710		26,075	
Cash paid for capital expenditures	1,747		17		1,764	
			2020			
	 Regulated Businesses		Other		Consolidated	
Operating revenues	\$ 3,255	\$	522	\$	3,777	
Depreciation and amortization	562		42		604	
Total operating expenses, net	2,102		427		2,529	
Interest expense	(293)		(104)		(397)	
Interest income	2		_		2	
Income before income taxes	932		(8)		924	
Provision for income taxes	217		(2)		215	
Net income attributable to common shareholders	715		(6)		709	

2021

2,409

18

24,766 1,822

Note 21: Unaudited Quarterly Data

Cash paid for capital expenditures

Total assets

Presented in the tables below are supplemental, unaudited, consolidated, quarterly financial data for each of the four quarters in the years ended December 31, 2022 and 2021, respectively. The operating results for any quarter are not indicative of results that may be expected for a full year or any future periods.

22,357

1,804

		2022						
	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Operating revenues	\$	842	\$	937	\$	1,082	\$	931
Operating income		246		327		439		261
Net income attributable to common shareholders		158		218		297		147
Basic earnings per share: (a)								
Net income attributable to common shareholders	\$	0.87	\$	1.20	\$	1.63	\$	0.81
Diluted earnings per share:								
Net income attributable to common shareholders		0.87		1.20		1.63		0.81
(a) Amounts may not sum due to rounding.								

	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Operating revenues	\$	888	\$	999	\$	1,092	\$	951
Operating income		229		330		417		220
Net income attributable to common shareholders		133		207		278		645
Basic earnings per share: (a)								
Net income attributable to common shareholders	\$	0.73	\$	1.14	\$	1.53	\$	3.55
Diluted earnings per share:								
Net income attributable to common shareholders		0.73		1.14		1.53		3.55
(a) Amounts may not sum due to rounding.								
		133						

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

The Company, under the supervision and with the participation of its management, including its Chief Executive Officer and its Chief Financial Officer, conducted an evaluation of the effectiveness of the design and operation of the Company's disclosure controls and procedures as such term is defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act as of the end of the period covered by this report.

Based on that evaluation, the Company's Chief Executive Officer and its Chief Financial Officer have concluded that, as of December 31, 2022, the Company's disclosure controls and procedures were effective at a reasonable level of assurance. The Company's disclosure controls and procedures are designed to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to management, including the Chief Executive Officer and the Chief Financial Officer, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objective.

Management's Report on Internal Control over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) of the Exchange Act. The Company's internal control over financial reporting is a process designed by or under the supervision of the Company's Chief Executive Officer and its Chief Financial Officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. The Company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect its transactions and dispositions of its assets, (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of the financial statements in accordance with GAAP, and that the Company's receipts and expenditures are being made only in accordance with authorizations of its management and its directors, and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of its assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Company's management, including the Company's Chief Executive Officer and its Chief Financial Officer, assessed the effectiveness of its internal control over financial reporting, as of December 31, 2022, using the criteria described in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Based on the Company's evaluation under the framework in *Internal Control—Integrated Framework (2013)*, its management concluded that its internal control over financial reporting was effective as of December 31, 2022.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2022 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report appearing in Item 8—Financial Statements and Supplementary Data of this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

The Company concluded that there have been no changes in internal control over financial reporting that occurred during its last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

On February 15, 2023, Karl F. Kurz, the Company's Board Chair, was notified by George MacKenzie that Mr. MacKenzie does not wish to be considered as a candidate for re-election at the Company's 2023 Annual Meeting of Shareholders. Mr. MacKenzie's notification was not due to any known disagreement on any matter relating to the Company's operations, policies or practices. Mr. MacKenzie has been a director of the Company since 2003 and served as Chairman of the Board from 2006 until 2018. He currently serves as a member of the Audit, Finance and Risk Committee and the Nominating/Corporate Governance Committee. The Company wishes to thank Mr. MacKenzie for his many years of service to the Board of Directors.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item and not set forth below or in Item 1—Business—Executive Officers of this Annual Report on Form 10-K, is incorporated by reference from the Company's Proxy Statement for the 2023 Annual Meeting of Shareholders, to be filed with the SEC within 120 days following the end of the fiscal year covered by this report, under the captions entitled "Board of Directors and Corporate Governance" and "Proposal 1—Election of Directors."

The Company has adopted a Code of Ethics, which applies to directors, officers and employees. The full text of the Code of Ethics is publicly available on the Company's website at https://amwater.com. The Company intends to post on its website any amendments to the Code of Ethics and any waivers of such provisions granted to certain principal officers.

ITEM 11. EXECUTIVE COMPENSATION

Information required by this item is incorporated by reference in the Company's Proxy Statement for the 2023 Annual Meeting of Shareholders, under the captions entitled "Proposal 1 —Election of Directors—Director Compensation Table," "Compensation Discussion and Analysis," "Executive Compensation" (excluding the subsection "Pay Versus Performance"), "Compensation Committee Interlocks and Insider Participation" and "Compensation Committee Report" (with the latter report being furnished, and not filed, in this Annual Report on Form 10-K).

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information required by this item setting forth the security ownership of certain beneficial owners and management is incorporated by reference in the Company's Proxy Statement for the 2023 Annual Meeting of Shareholders, under the captions entitled "Certain Beneficial Ownership Matters—Security Ownership of Management," "Certain Beneficial Ownership Matters—Security Ownership of Certain Beneficial Owners" and "Equity Compensation Plan Information."

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information required by this item is incorporated by reference in the Company's Proxy Statement for the 2023 Annual Meeting of Shareholders, under the caption entitled "Board of Directors and Corporate Governance—Board Review of Related Person Transactions" and "Proposal 1—Election of Directors—Director Independence."

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information required by this item is incorporated by reference in the Company's Proxy Statement for the 2023 Annual Meeting of Shareholders, under the caption entitled "Proposal 4—Ratification of Appointment of Independent Registered Public Accounting Firm—Fees Paid to Independent Registered Public Accounting Firm—Pre-Approval of Services Provided by Independent Registered Public Accounting Firm."

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- (a) The following documents have been filed as a part of this Annual Report on Form 10-K:
 - 1. The financial statements listed in the "Index to Consolidated Financial Statements" contained in Item 8—Financial Statements and Supplementary Data of this Form 10-K are hereby incorporated by reference in response to this Item 15(a).
 - 2. Financial statement schedules have been omitted since they are either not required or are not applicable as the information is otherwise included in the financial statements or notes thereto.
 - 3. Exhibits. The list of documents contained in "Exhibit Index" is provided in response to this Item 15(a). The warranties, representations and covenants contained in any of the agreements included or incorporated by reference herein or which appear as exhibits hereto should not be relied upon by buyers, sellers or holders of the Company's or its subsidiaries' securities and are not intended as warranties, representations or covenants to any individual or entity except as specifically set forth in such agreement.

The responses to Items 15(b) and (c) of Form 10-K are included above in response to Item 15(a).

ITEM 16. FORM 10-K SUMMARY

None.

EXHIBIT INDEX

Exhibit Number	Exhibit Description
2.1.1#	Stock Purchase Agreement, dated November 20, 2019, by and among American Water Works Company, Inc., New York American Water Company, Inc. and Liberty Utilities Co. (incorporated by reference to Exhibit 2.1 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed November 20, 2019).
2.1.2	Letter Agreement, dated June 29, 2021, by and among American Water Works Company, Inc., Liberty Utilities (Eastern Water Holdings) Corp. and New York American Water Company, Inc., with respect to the Stock Purchase Agreement, dated November 20, 2019, by and among American Water Works Company, Inc., New York American Water Company, Inc. and Liberty Utilities Co. (incorporated by reference to Exhibit 2.1 to American Water Works Company, Inc.) Scurrent Report on Form 8-K, File No. 001-34028, filed June 29, 2021).
2.2#	Membership Interest Purchase Agreement, dated as of October 28, 2021, by and among American Water Enterprises, LLC, American (USA), LLC, American Water Resources, LLC, Pivotal Home Solutions, LLC, American Water Resources Holdings, LLC, American Water Works Company, Inc. and Lakehouse Buyer Inc. (incorporated by reference to Exhibit 2.1 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed October 29, 2021).
3.1	Restated Certificate of Incorporation of American Water Works Company, Inc. (incorporated by reference to Exhibit 3.1 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed November 6, 2008).
3.2	Amended and Restated Bylaws of American Water Works Company, Inc. (incorporated by reference to Exhibit 3.1 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed December 8, 2022).
4.1	Indenture, dated as of October 22, 2007, between American Water Capital Corp. and Computershare Trust Company, N.A., as successor to Wells Fargo Bank, National Association (incorporated by reference to Exhibit 4.4 to American Water Capital Corp.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4, File No. 333-148284, and American Water Works Company, Inc.'s Registration Statement on Form S-4
4.2	Indenture, dated as of December 4, 2009, between American Water Capital Corp. and Computershare Trust Company, N.A., as successor to Wells Fargo Bank, National Association (incorporated by reference to Exhibit 4.1 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed December 3, 2010).
4.3	Officers' Certificate, dated December 17, 2012, establishing the 4.300% Senior Notes due 2042 (incorporated by reference to Exhibit 4.1 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed December 17, 2012).
4.4	Officers' Certificate, dated November 20, 2013, establishing the 3.850% Senior Notes due 2024 (incorporated by reference to Exhibit 4.1 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed November 20, 2013).
4.5	Officers' Certificate, dated August 14, 2014, establishing the 3.400% Senior Notes due 2025 (incorporated by reference to Exhibit 4.1 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed August 14, 2014).
4.6	Officers' Certificate, dated August 14, 2014, providing for a further issuance of the 4.300% Senior Notes due 2042 (incorporated by reference to Exhibit 4.3 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed August 14, 2014).
4.7	Officers' Certificate, dated August 13, 2015, establishing the 4.300% Senior Notes due 2045 (incorporated by reference to Exhibit 4.1 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed August 13, 2015).
4.8	Officers' Certificate, dated August 13, 2015, providing for a further issuance of the 3.400% Senior Notes due 2025 (incorporated by reference to Exhibit 4.3 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed August 13, 2015).
4.9	Officers' Certificate, dated November 17, 2016, establishing the 3.000% Senior Notes due 2026 (incorporated by reference to Exhibit 4.1 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed November 17, 2016).
4.10	Officers' Certificate, dated November 17, 2016, establishing the 4.000% Senior Notes due 2046 (incorporated by reference to Exhibit 4.2 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed November 17, 2016).
4.11	Officers' Certificate, dated August 10, 2017, establishing the 2.950% Senior Notes due 2027 (incorporated by reference to Exhibit 4.1 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed August 10, 2017).

Exhibit Number	Exhibit Description
4.12	Officers' Certificate, dated August 10, 2017, establishing the 3.750% Senior Notes due 2047 (incorporated by reference to Exhibit 4.2 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed August 10, 2017).
4.13	Officer's Certificate, dated August 9, 2018, establishing the 3.750% Senior Notes due 2028 (incorporated by reference to Exhibit 4.1 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed August 9, 2018).
4.14	Officer's Certificate, dated August 9, 2018, establishing the 4,200% Senior Notes due 2048 (incorporated by reference to Exhibit 4.2 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed August 9, 2018).
4.15	Officers' Certificate, dated May 13, 2019, establishing the 3.450% Senior Notes due 2029 (incorporated by reference to Exhibit 4.1 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed on May 13, 2019).
4.16	Officers' Certificate, dated May 13, 2019, establishing 4.150% Senior Notes due 2049 (incorporated by reference to Exhibit 4.2 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed on May 13, 2019).
4.17	Officers' Certificate of American Water Capital Corp., dated April 14, 2020, establishing the terms and authorizing the issuance of the 2.800% Senior Notes due 2030 (incorporated by reference to Exhibit 4.1 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed April 14, 2020).
4.18	Officers' Certificate of American Water Capital Corp., dated April 14, 2020, establishing the terms and authorizing the issuance of the 3.450% Senior Notes due 2050 (incorporated by reference to Exhibit 4.2 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed April 14, 2020).
4.19	Officers' Certificate of American Water Capital Corp., dated May 14, 2021, establishing the terms and authorizing the issuance of the 2.300% Senior Notes due 2031 (incorporated by reference to Exhibit 4.1 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed on May 14, 2021).
4.20	Officers' Certificate of American Water Capital Corp., dated May 14, 2021, establishing the terms and authorizing the issuance of the 3.250% Senior Notes due 2051 (incorporated by reference to Exhibit 4.2 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed on May 14, 2021).
4.21	Officers' Certificate of American Water Capital Corp., dated May 5, 2022, establishing the terms and authorizing the issuance of the 4.450% Senior Notes due 2032 (incorporated by reference to Exhibit 4.1 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed on May 5, 2022).
4.22	Description of American Water Works Company, Inc.'s Equity Securities (filed herewith).
4.23	Note Purchase Agreement, dated May 15, 2008, between American Water Capital Corp. and the purchasers party thereto (incorporated by reference to Exhibit 10.1 to American Water Works Company, Inc.'s Current Report on Form 8-K. File No. 001-34028, filed May 19, 2008) with respect to the 6.55% Series H Senior Notes due May 15, 2023.
10.1#	Third Amended and Restated Credit Agreement, dated as of October 26, 2022, by and among American Water Works Company, Inc., American Water Capital Corp., each of the Lenders party thereto, Wells Fargo Bank, National Association, as administrative agent, JPMorgan Chase Bank, N.A., as syndication agent, and Mizuho Bank, Ltd., PNC Bank, National Association, and U.S. Bank National Association, as co-documentation agents (incorporated by reference to Exhibit 10.1 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q. File No. 001-34028, filed on October 31, 2022).
10.2	Support Agreement, dated June 22, 2000, together with First Amendment to Support Agreement, dated July 26, 2000, by and between American Water Works Company, Inc. and American Water Capital Corp. (incorporated by reference to Exhibit 10.3 to American Water Capital Corp.'s Registration Statement on Form S-1, File No. 333-145757-01, and American Water Works Company, Inc.'s Registration Statement on Form S-1, File No. 333-145757, filed October 11, 2007).
10.3*	Offer Letter for Employment, dated as of February 2, 2022, between American Water Works Company, Inc. and M. Susan Hardwick (incorporated by reference to Exhibit 10.3 to American Water Works Company, Inc.'s Annual Report on Form 10-K, File No. 001-34028, filed February 16, 2022).
10.4*	Offer Letter for Employment, dated February 16, 2021, between American Water Works Company, Inc. and Cheryl Norton (incorporated by reference to Exhibit 10.13 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 3, 2021).
10.5*	Offer Letter for Employment, dated January 21, 2022, between American Water Works Company, Inc. and James H. Gallegos (incorporated by reference to Exhibit 10.11 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed April 27, 2022).
10.6*	Offer Letter for Employment, dated April 27, 2022, between American Water Works Company, Inc. and John C. Griffith (incorporated by reference to Exhibit 10.1 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed July 27, 2022).
10.7*	Amended and Restated American Water Works Company, Inc. Deferred Compensation Plan, dated as of January 1, 2001 (incorporated by reference to Exhibit 10.9 to American Water Capital Corp.'s Registration Statement on Form S-1, File No. 333-145757, filed October 11, 2007).
10.8*	Nonqualified Deferred Compensation Plan for Non-Employee Directors of American Water Works Company, Inc., as amended and restated, effective as of January 1, 2009 (incorporated by reference to Exhibit 10.38 to American Water Works Company, Inc.'s Registration Statement on Form S-1, File No. 333-155245, filed November 18, 2008).
10.8.1*	Nonqualified Savings and Deferred Compensation Plan for Employees of American Water Works Company, Inc. and Its Designated Subsidiaries, as amended and restated, effective as of June 1, 2018 (incorporated by reference to Exhibit 10.9.3 to American Water Works Company, Inc.'s Annual Report on Form 10-K, File No. 001-34028, filed February 19, 2019).
10.8.2*	Amendment No. 2019-1 to the Nonqualified Savings and Deferred Compensation Plan for Employees of American Water Works Company, Inc. and its Designated Subsidiaries, as amended and restated, effective as of November 1, 2019 (incorporated by reference to Exhibit 4.1.2 to American Water Works Company, Inc.'s Registration Statement on Form S-8, File No. 333-235598, filed December 19. 2019).
10.9*	Amended and Restated American Water Works Company, Inc. Executive Retirement Plan, dated as of March 1, 2007 (incorporated by reference to Exhibit 10.8 to American Water Capital Corp.'s Registration Statement on Form S-1, File No. 333-145757-01, and American Water Works Company, Inc.'s Registration Statement on Form S-1, File No. 333-145757, filed October 11, 2007).
10.10.1*	American Water Works Company, Inc. Annual Incentive Plan (incorporated by reference to Appendix C to American Water Works Company, Inc.'s Definitive Proxy Statement, File No. 001-34028, filed March 27, 2015).
10.10.2*	Amendment 2016-1 to American Water Works Company, Inc. Annual Incentive Plan (now known as the Annual Performance Plan), effective January 1, 2016 (incorporated by reference to Exhibit 10.14.2 to American Water Works Company, Inc.'s Annual Report on Form 10-K, File No. 001-34028, filed February 25, 2016).

Exhibit Number	Exhibit Description
10.11*	Second Amended and Restated American Water Works Company, Inc. and its Designated Subsidiaries 2017 Nonqualified Employee Stock Purchase Plan, adopted on July 27, 2018, effective as of February 5,
10.12.1*	2019 (incorporated by reference to Exhibit 10.2 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed October 31, 2018). American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan, as amended (incorporated by reference to Appendix B to American Water Works Company, Inc.'s Definitive Proxy Statement, File No. 001-34028, filed March 27, 2015).
10.12.2*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2016 Restricted Stock Unit Grant (incorporated by reference to Exhibit 10.2.1 to American Water Works Company, Inc.'s Ouarterly Report on Form 10-0, File No. 001-34028, filed May 4, 2016).
10.12.3*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2017 Restricted Stock Unit Grant (incorporated by reference to Exhibit 10.1.1 to American Water Works Company, Inc.'s Ouarterly Report on Form 10-O. File No. 001-34028, filed May 3, 2017).
10.12.4*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2016 Performance Stock Unit Grant Form A-1 (incorporated by reference to Exhibit 10.3.1 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 4, 2016).
10.12.5*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2016 Performance Stock Unit Grant Form B-1 (incorporated by reference to Exhibit 10.3.3 to American Water Works Company, Inc.'s Quarterly Report on Form 10-0, File No. 001-34028, filed May 4, 2016).
10.12.6*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2017 Performance Stock Unit Grant Form A-1 (incorporated by reference to Exhibit 10.2.1 to American Water Works Company, Inc.'s Ouarterly Report on Form 10-0. File No. 001-34028, filed May 3, 2017).
10.12.7*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2017 Performance Stock Unit Grant Form B-1 (incorporated by reference to Exhibit 10.2.3 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 3, 2017).
10.12.8*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2013 Stock Unit Grant Form for Non-Employee Directors (incorporated by reference to Exhibit 10.1 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed August 7, 2013).
10.12.9*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2014 Stock Unit Grant Form for Non-Employee Directors (incorporated by reference to Exhibit 10.5 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed August 6, 2014).
10.12.10*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2016 Stock Unit Grant Form for Non-Employee Directors (incorporated by reference to Exhibit 10.1 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed August 3, 2016).
10.13.1*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan (incorporated by reference to Exhibit 10.1 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed August 2, 2017).
10.13.2*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2018 Restricted Stock Unit Grant (incorporated by reference to Exhibit 10.3 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 2, 2018).
10.13.3*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Restricted Stock Unit Grant (incorporated by reference to Exhibit 10.1 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 1, 2019).
10.13.4*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2020 Restricted Stock Unit Grant (incorporated by reference to Exhibit 10.3 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 6, 2020).
10.13.5*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2021 Restricted Stock Unit Grant (incorporated by reference to Exhibit 10.1 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 3, 2021).
10.13.6*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2021 Restricted Stock Unit Grant (for Chief Executive Officer and Chief Operating Officer) (incorporated by reference to Exhibit 10.2 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 3, 2021).
10.13.7*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2021 Restricted Stock Unit Grant (for M. Susan Hardwick) (incorporated by reference to Exhibit 10.3 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 3, 2021).
10.13.8*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2022 Restricted Stock Unit Grant (incorporated by reference to Exhibit 10.1 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed April 27, 2022).
10.13.9*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2022 Restricted Stock Unit Grant (for CEO, CFO and COO) (incorporated by reference to Exhibit 10.2 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed April 27, 2022).
10.13.10*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2017 Performance Stock Unit Grant Form A-1 (incorporated by reference to Exhibit 10.5 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed May 12, 2017).
10.13.11*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2017 Performance Stock Unit Grant Form B-1 (incorporated by reference to Exhibit 10.7 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed May 12, 2017).
10.13.12*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2018 Performance Stock Unit Grant Form A-1 (incorporated by reference to Exhibit 10.7 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 2, 2018).
10.13.13*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2018 Performance Stock Unit Grant Form B-1 (incorporated by reference to Exhibit 10.8 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 2, 2018).
10.13.14*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Performance Stock Unit Grant Form A-1 (incorporated by reference to Exhibit 10.6 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 1, 2019).
10.13.15*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Performance Stock Unit Grant Form B-1 (corrected) (incorporated by reference to Exhibit 10.14.33 to American Water Works Company, Inc.'s Quarterly Report on Form 10-K, File No. 001-34028, filed February 18, 2020).
10.13.16*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2020 Performance Stock Unit Grant Form A-1 (incorporated by reference to Exhibit 10.8 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 6, 2020).
10.13.17*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2020 Performance Stock Unit Grant Form A-2 (incorporated by reference to Exhibit 10.9 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 6, 2020).
10.13.18*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2020 Performance Stock Unit Grant Form B-1 (incorporated by reference to Exhibit 10.13 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 6, 2020).

Exhibit Number	Exhibit Description
10.13.19*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2020 Performance Stock Unit Grant Form B-2 (incorporated by reference to Exhibit 10.14 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 6, 2020).
10.13.20*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2021 Performance Stock Unit Grant Form A-1 (incorporated by reference to Exhibit 10.5 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 3, 2021).
10.13.21*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2021 Performance Stock Unit Grant Form A-2 (for CEO and COO) (incorporated by reference to Exhibit 10.6 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 3, 2021).
10.13.22*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2021 Performance Stock Unit Grant Form A-3 (for M. Susan Hardwick) (incorporated by reference to Exhibit 10.7 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 3, 2021).
10.13.23*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2021 Performance Stock Unit Grant Form B-1 (as amended) (filed herewith).
10.13.24*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2021 Performance Stock Unit Grant Form B-2 (as amended, for CEO and COO) (filed herewith).
10.13.25*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2021 Performance Stock Unit Grant Form B-3 (as amended, for M. Susan Hardwick) (filed herewith).
10.13.26*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2022 Performance Stock Unit Grant Form A (incorporated by reference to Exhibit 10.4 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed April 27, 2022).
10.13.27*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2022 Performance Stock Unit Grant Form A (for CEO, CFO and COO) (incorporated by reference to Exhibit 10.5 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed April 27, 2022).
10.13.28*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2022 Performance Stock Unit Grant Form B (incorporated by reference to Exhibit 10.7 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed April 27, 2022).
10.13.29*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2022 Performance Stock Unit Grant Form B (for CEO, CFO and COO) (incorporated by reference to Exhibit 10.8 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed April 27, 2022).
10.13.30*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2017 Non-Employee Director Stock Unit Grant (incorporated by reference to Exhibit 10.9 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed May 12, 2017).
10.13.31*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2022 Stock Unit Grant Form for Non-Employee Directors (incorporated by reference to Exhibit 10.2 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed July 27, 2022).
10.13.32*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2022 Stock Unit Grant Form for Non-Employee Directors elected on December 7, 2022 (filed herewith).
10.14*	American Water Works Company, Inc. Executive Severance Policy, as amended and restated as of July 27, 2021 (incorporated by reference to Exhibit 10.2 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed August 2, 2021).
10.15*	American Water Works Company, Inc. Change of Control Severance Policy, dated as of July 27, 2021 (incorporated by reference to Exhibit 10.3 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed August 2, 2021).
10.16#*	American Water Works Company, Inc. Pension Plan for Employees, as amended and restated effective December 31, 2022 (filed herewith).
10.17#	Secured Seller Note Agreement, dated December 9, 2021, by and among Lakehouse Bidco Inc., Lakehouse Buyer Inc., American Water Resources, LLC, Pivotal Home Solutions, LLC, American Water Resources Holdings, LLC, American Water Resources of Texas, LLC and American Water Enterprises, LLC (incorporated by reference to Exhibit 10.1 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed December 9, 2021).
10.18	Revenue Share Agreement, dated December 9, 2021, by and among American Water Works Company, Inc., American Water Resources, LLC, Pivotal Home Solutions, LLC and American Water Resources Holdings, LLC (incorporated by reference to Exhibit 10.2 to American Water Works Company, Inc. s Current Report on Form 8-K, File No. 001-34028, filed December 9, 2021).
21.1	Subsidiaries of American Water Works Company, Inc. (filed herewith).
22.1	Guaranteed Securities (filed herewith).
23.1	Consent of PricewaterhouseCoopers LLP (filed herewith).
31.1	Certification of M. Susan Hardwick, President and Chief Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act (filed herewith).
31.2	Certification of John C. Griffith, Executive Vice President and Chief Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act (filed herewith).
32.1	Certification of M. Susan Hardwick, President and Chief Executive Officer, pursuant to Section 906 of the Sarbanes-Oxley Act (furnished herewith).
32.2	Certification of John C. Griffith, Executive Vice President and Chief Financial Officer, pursuant to Section 906 of the Sarbanes-Oxley Act (furnished herewith).
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL with applicable taxonomy extension information contained in Exhibits 101)

- # Certain schedules and exhibits to this agreement have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Company will furnish the omitted schedules and exhibits to the SEC upon request.
- * Denotes a management contract or compensatory plan or arrangement.

Instruments defining the rights of holders of certain issues of long-term debt of the Company and certain of its consolidated subsidiaries have not been filed as exhibits to this report because the authorized principal amount of any one of such issues does not exceed 10% of the Company's consolidated total assets. The Company agrees to furnish a copy of each such instrument to the SEC upon request.

The Stock Purchase Agreement filed as Exhibit 2.1.1, the Membership Interest Purchase Agreement filed as Exhibit 2.2, and the Secured Seller Note Agreement filed as Exhibit 10.17 to this Annual Report on Form 10-K have been included to provide investors and security holders with information regarding the terms of the respective agreements. The filing of these agreements is not intended to provide any other factual information about the parties thereto, or any of their respective subsidiaries or affiliates. The representations, warranties and covenants contained in the respective agreements (i) were made by the parties thereto only for purposes of that respective agreement and as of specific dates; (ii) were made solely for the benefit of the parties to the respective agreement; (iii) may be subject to limitations agreed upon by the contracting parties, including being qualified by confidential disclosures exchanged between the parties in connection with the execution of the respective agreement (such disclosures include information that has been included in public disclosures, as well as additional non-public information); (iv) may have been made for the purposes of allocating contractual risk between the parties to the respective agreements instead of establishing these matters as facts; and (v) may be subject to standards of materiality applicable to the contracting parties to the respective agreements that differ from those applicable to investors.

Investors should not rely on the representations, warranties and covenants or any descriptions thereof as characterizations of the actual state of facts or condition of the parties to the respective agreements thereto, or any of their respective subsidiaries or affiliates. Additionally, the representations, warranties, covenants, conditions and other terms of the respective agreements may be subject to subsequent waiver or modification. Moreover, information concerning the subject matter of the representations, warranties and covenants may change after the date of the respective agreement, which subsequent information may or may not be fully reflected in the Company's public disclosures. The respective agreements should not be read alone, but should instead be read in conjunction with the other information regarding the Company that is or will be contained in, or incorporated by reference into, the reports and other documents that are filed by the Company with the SEC.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on the 15th day of February, 2023.

AMERICAN WATER WORKS COMPANY, INC.

BY: /s/ M. SUSAN HARDWICK

M. Susan Hardwick

President and Chief Executive Officer

(Director)

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed on the 15th day of February, 2023, by the following persons in the capacities indicated.

/s/ M. SUSAN HARDWICK M. Susan Hardwick President and Chief Executive Officer (Principal Executive Officer and Director)	/s/ JEFFREY N. EDWARDS Jeffrey N. Edwards (Director)
/s/ JOHN C. GRIFFITH	/s/ MARTHA CLARK GOSS
John C. Griffith Executive Vice President and Chief Financial Officer (Principal Financial Officer)	Martha Clark Goss (Director)
/s/ MELISSA K. WIKLE	/s/ KIMBERLY J. HARRIS
Melissa K. Wikle Chief Accounting Officer (Principal Accounting Officer)	Kimberly J. Harris (Director)
/s/ LAURIE P. HAVANEC	/s/ PATRICIA L. KAMPLING
Laurie P. Havanec (Director)	Patricia L. Kampling (Director)
/s/ JULIA L. JOHNSON	/s/ KARL F. KURZ
Julia L. Johnson (Director) /s/ GEORGE MACKENZIE	Karl F. Kurz (Board Chair) /s/ MICHAEL L. MARBERRY
George MacKenzie (Director) /s/ JAMES G. STAVRIDIS	Michael L. Marberry (Director)
James G. Stavridis	