AMERICAN WATER WORKS COMPANY, INC.

FORM 10-K
(Annual Report)

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Address	1 WATER STREET CAMDEN, NJ, 08102-1658
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2019

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	**51-0063696**
(State or other jurisdiction of incorporation or organization)	**(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	Trading Symbol	Name of each exchange on which registered
Common stock, par value $0.01 per share	**AWK**	**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 ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an 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 is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

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—$18,615,800,000 as of June 28, 2019 (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 28, 2019, 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 28, 2019, to be controlled by, or under common control with, American Water or any of the persons described 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—180,974,719 shares as of February 13, 2020.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the American Water Works Company, Inc. definitive proxy statement for the 2020 Annual Meeting of Shareholders to be filed with the Securities and Exchange Commission within 120 days after December 31, 2019 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 Form 10-K, or incorporated by reference into this Form 10-K, 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 forward-looking statements can be identified by words with prospective meanings such as "intend," "plan," "estimate," "believe," "anticipate," "expect," "predict," "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 future cash flows; rate and revenue adjustments, including through general rate case filings, filings for infrastructure surcharges and other governmental agency authorizations and filings to address regulatory lag; growth and portfolio optimization strategies, including the timing and outcome of pending or future acquisition activity, the completion of the announced sale of New York American Water Company, Inc. and the amount of proceeds anticipated to be received therefrom; the amount and allocation of projected capital expenditures and related funding requirements; the Company's ability to repay or refinance debt; the ability to execute its current and long-term business, operational and capital expenditures strategies; its 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 legal and similar governmental and regulatory proceedings and related potential fines, penalties and other sanctions; the ability to complete, and the timing and efficacy of, the design, development, implementation and improvement of technology and other strategic initiatives; the ability to capitalize on existing or future utility privatization opportunities; trends in the 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 projected impacts that the Tax Cuts and Jobs Act (the "TCJA") 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' actions concerning rates, capital structure, authorized return on equity, capital investment, system acquisitions and dispositions, taxes, permitting and other decisions;
- changes in customer demand for, and patterns of use of, water, such as may result from conservation efforts;
- 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;
- changes in laws, governmental regulations and policies, including with respect to environmental, health and safety, consumer privacy, water quality and water quality accountability, emerging contaminants, public utility and tax regulations and policies, and impacts resulting from U.S., state and local elections;
- 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, 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 maintain and replace current infrastructure, including its operational and technology systems, 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;
- 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 water provided to its customers;

- the Company's ability to obtain adequate and cost-effective supplies of chemicals, electricity, fuel, water and other raw materials;
- the Company's ability to successfully meet growth projections for the Regulated Businesses and the Market-Based Businesses (each as defined in this Form 10-K), 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 and market-based businesses;
    - entering into contracts and other agreements with, or otherwise obtaining, new customers or partnerships in the Market-Based Businesses; and
    - realizing anticipated benefits and synergies from new acquisitions;
- 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;
- changes in general economic, political, business and financial market conditions;
- access to sufficient capital on satisfactory terms and when and as needed to support operations and capital expenditures;
- fluctuations in interest rates;
- restrictive covenants in or changes to the credit ratings on the Company or any of its subsidiaries, or on any of their current or future indebtedness, that could increase the Company's financing costs or funding requirements or affect the ability to borrow, make payments on debt or pay dividends;
- fluctuations in the value of benefit plan assets and liabilities that could increase the Company's cost and funding requirements;
- changes in federal or state general, income and other tax laws, including any further rules, regulations, interpretations and guidance by the U.S. Department of the Treasury and state or local taxing authorities (collectively, the "Related Interpretations") related to the enactment of the TCJA, the availability of tax credits and tax abatement programs, and the Company's ability to utilize its U.S. federal and state income tax net operating loss ("NOL") carryforwards;
- migration of customers into or out of the Company's service territories;
- 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 insurance programs and coverages for any losses sustained;
- the incurrence of impairment charges related to the Company's goodwill or other assets;
- labor actions, including work stoppages and strikes;
- the Company's ability to retain and attract qualified employees;
- civil disturbances or terrorist threats or acts, or public apprehension about future disturbances 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 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 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 6,800 professionals who provide drinking water, wastewater and other related services to approximately 15 million people in 46 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 market-based businesses that provide complementary services. Individually, these 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 as the “Market-Based Businesses,” which is consistent with how management assesses the results of these businesses.

Throughout this 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 1,700 communities in 16 states in the United States, with over 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 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 $3,094 million for 2019, $2,984 million for 2018 and $2,958 million for 2017, accounting for 86%, 87% and 88%, 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, 2019:

	Operating Revenues (in millions)				Number of Customers (in thousands)			
	Water (a)	Wastewater	Total	% of Total	Water	Wastewater	Total	% of Total
New Jersey	$ 718	$ 42	$ 760	24.6%	651	51	702	20.4%
Pennsylvania	627	62	689	22.3%	666	74	740	21.6%
Missouri	314	11	325	10.5%	470	15	485	14.1%
Illinois	281	24	305	9.9%	286	51	337	9.8%
California	228	4	232	7.5%	177	3	180	5.2%
Indiana	223	1	224	7.2%	314	2	316	9.2%
West Virginia	158	1	159	5.1%	166	1	167	4.9%
Total—Top Seven States (b)	2,549	145	2,694	87.1%	2,730	197	2,927	85.2%
Other states (c)	378	22	400	12.9%	475	32	507	14.8%
Total Regulated Businesses	$ 2,927	$ 167	$ 3,094	100.0%	3,205	229	3,434	100.0%

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

(b) The Company’s “Top Seven States” are determined based upon operating revenues.

(c) Includes the Company’s utilities in the following states: Georgia, Hawaii, Iowa, Kentucky, Maryland, Michigan, New York, Tennessee and Virginia.

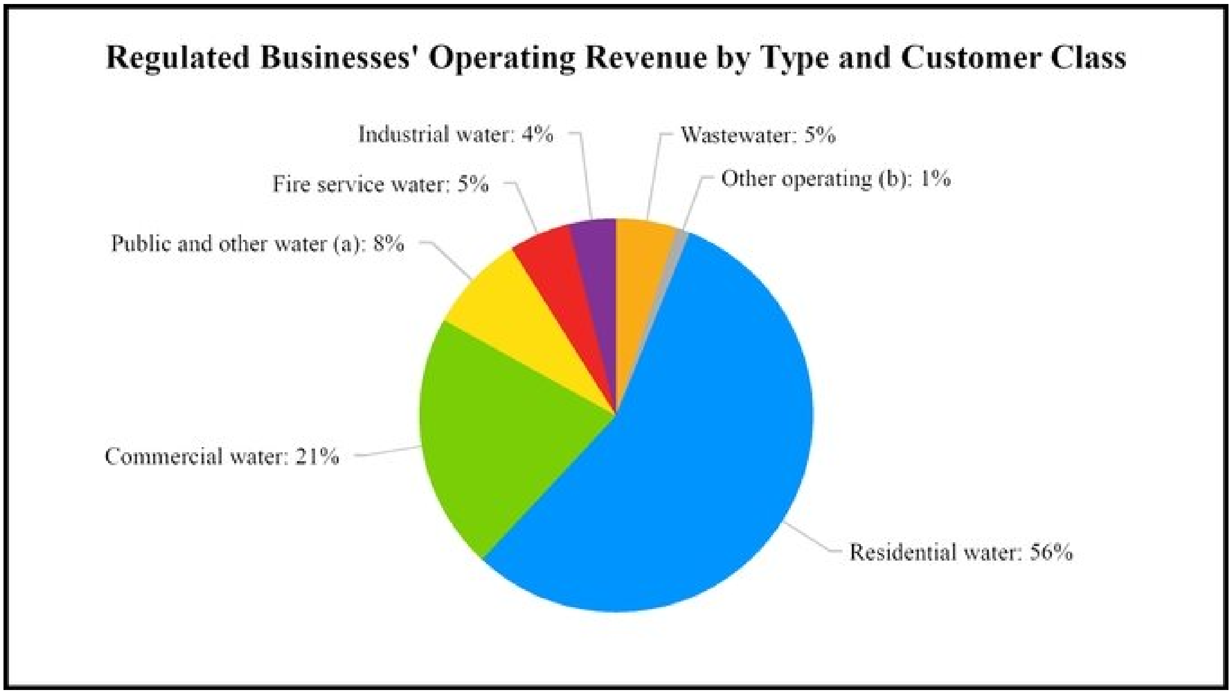
Customers

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, such as 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 $3,094 million by type, including a breakout of the total water services revenues by class of customer, for the year ended December 31, 2019:



(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:

	2019		2018		2017	
(In thousands)	Water	Wastewater	Water	Wastewater	Water	Wastewater
Residential	2,914	215	2,892	188	2,872	182
Commercial	222	13	222	11	221	11
Fire service	49	—	48	—	47	—
Industrial	4	—	4	—	4	—
Public and other (a)	16	1	16	1	16	—
Total	3,205	229	3,182	200	3,160	193

(a) Includes public authorities and other utilities and community water and wastewater systems under bulk contracts. Bulk contracts, which are accounted for as a single customer in the table above, generally result in service to multiple customers.

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

Excluding acquisitions, the Company plans to invest $8.2 billion over the next five years and between $18 billion and $19 billion over the next 10 years, including $1.6 billion in 2020, for capital improvements 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 115-year replacement cycle by 2024, which it anticipates will enable the Company to replace nearly 2,000 miles of mains and collection pipes between 2020 and 2024. In addition, from 2020 to 2024, the Company's capital investment in treatment plants, storage tanks and other key, above-ground facilities is expected to increase, further addressing infrastructure renewal, resiliency, water quality, operational efficiency, technology and innovation, and emerging regulatory compliance needs. Additionally, the Company is investing significantly in resiliency projects to address the impacts of climate and weather variability by hardening its assets. Recently completed projects include the $25 million raised floodwall project at New Jersey's Raritan Millstone Water Treatment Plant which provides protection against a 500 year flood, and the $15 million Bel Air, Maryland Reservoir project which provides 90 million gallons of drought mitigation water storage for the region.

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 to promote 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 and mergers and acquisitions, along with imposing certain penalties or granting certain incentives. Regulatory policies vary from state to state and could potentially 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 its recognition in rates.

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 surcharges	Allows rates to change periodically, outside a general rate case proceeding, to reflect recovery of capital investments made to replace infrastructure necessary to sustain safe, reliable services for the Company's customers. These mechanisms typically involve periodic filings and reviews to ensure transparency.	IA, IL, IN, KY, MO, NJ, NY, PA, TN, VA, WV
Future test year	A test period used for setting rates, which begins with the date new rates are effective. This allows current or projected revenues, expenses and capital investments to be collected on a more timely basis.	CA, HI, IA, IL, IN, KY, NY, PA, TN, VA
Hybrid test year	Allows an update to historical data for "known and measurable" changes that occur subsequent to the historical test year.	MD, MO, NJ, WV
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. 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.	CA, IL, KY, NY, PA, TN, VA
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 case proceeding or deferred until the next general rate case proceeding.	CA, IL, MD, MO, NJ, NY, PA, TN, VA
Revenue stability mechanisms	Separates a utility's cost recovery from the amount of water it sells to recover its fixed costs and ongoing infrastructure investment needs. Such a mechanism adjusts 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.	CA, IL, NY
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 prioritize capital investments and moderate the impact of periodic fluctuations in local costs, while lowering administrative costs for customers. Pennsylvania also permits a blending of water and wastewater revenue requirements.	CA, IA, IL, IN, KY, MD, MO, NJ, NY, PA, VA, WV

The Company pursues enhancement to these regulatory practices to facilitate efficient recovery of its costs and capital investments in order to continue to provide safe, clean, reliable and affordable services to its customers. The ability to seek regulatory treatment as 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.

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 that there are approximately 50,000 community water systems and approximately 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 small and medium water and/or wastewater systems in geographic proximity to areas where the Company operates its Regulated Businesses. The proximity of acquisition opportunities to the Company's regulated footprint allows it to integrate and manage the acquired systems and operations primarily using its existing management, although the Company typically retains the majority, if not all, of the employees, and to achieve operational efficiencies and prioritize capital investment needs. The Company's current customer mix of 93% water and 7% wastewater also presents strategic opportunities for wastewater growth and systems consolidation, allowing it to add wastewater customers where the Company 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, as well as a line of sight to grow the Company's base customers to attain efficiencies after entering the new domestic market.

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

Industry Legislation

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 cybersecurity, 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. In 2019, the New Jersey Senate held three hearings on the WQAA and is expected to introduce legislation in the new 2020 legislative session that would strengthen accountability for obligations under the WQAA.

In 2018, similar legislation was passed in Indiana that set new operational requirements for water and wastewater treatment plants as part of the permitting process for construction, installation, or modification of sources, facilities, equipment or devices. These requirements include capital asset management plans that include annual reviews of infrastructure needs, engineering analysis of useful life, and a rate analysis to support the capital asset management plan. A life cycle cost-benefit analysis must be done comparing owning and operating a plant to other alternatives to supply water or wastewater services. Cybersecurity plans must also be developed. In 2019, additional legislation was passed which set requirements for access to loans or grants such as participation in regional planning events, use of current capital asset management programs, and elimination of the causes of non-revenue water. The finance authority was also required to establish project prioritization that included consideration of project effects on public health and safety, user rates and charges, plans for collaboration, plans to manage non-revenue water and use of best practices.

Also, in 2018, America's Water Infrastructure Act of 2018 was signed into law. The legislation includes policies intended to improve water and wastewater system management and authorization for states to assess consolidation options for systems that do not comply with the federal Safe Drinking Water Act and its rules and regulations. The legislation increases funding to water system funding programs, including the State Revolving Loan Fund program and the Water Infrastructure Finance and Innovation Act of 2014 ("WIFIA").

The Company's regulated subsidiaries in California, Illinois, Indiana, Iowa, Maryland, Missouri, New Jersey and Pennsylvania have access to fair market value legislation 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, providing municipalities with a purchase price that is reflective of the assets' market value, while the utility has increased assurance of recovering the purchase price over the life of the assets, subject to state regulatory commission approval.

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 the state. As a result, consolidated tariffs can make it easier to incorporate new systems into an existing utility and can ensure economies of scale for even the smallest of systems and prioritize capital needs across the state. Overall, this brings cost-effective, higher quality services to a larger number of citizens. Twelve of the Company's regulated jurisdictions currently have some form of consolidated tariff pricing, including California, Illinois, Indiana, Iowa, Kentucky, Maryland, Missouri, New Jersey, New York, Pennsylvania, Virginia and West Virginia.

In 2018, legislation was enacted in the Company's Missouri and California subsidiaries changing the public vote requirement for the sale of water or wastewater systems. In Missouri, the public vote requirement for the sale of a municipal water or wastewater system changed to a simple majority for more than 500 small towns. Historically, only larger communities required a simple majority, while smaller communities needed a two-thirds majority. This legislation increases the options for small towns, should they decide to address their water and sewer challenges through an asset sale. In California, the vote required to allow cities to sell sewer systems changed to a simple majority from a two-thirds majority.

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, are Essential Utilities, Inc. (formerly known as Aqua America, Inc.), Suez North America, 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 and Corix.

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 in the particular CPCN.

As such, the Regulated Businesses are periodically subject to condemnation proceedings in the ordinary course of business. For example, a citizens group in Monterey, California successfully added "Measure J" to the November 2018 election ballot asking voters to decide whether the Monterey Peninsula Water Management District (the "MPWMD") should conduct a feasibility study concerning the potential purchase of the Monterey water service system assets (the "Monterey system assets") of the Company's California subsidiary, and, if feasible, to proceed with a purchase of those assets without an additional public vote. This service territory represents approximately 40,000 customers. In November 2018, Measure J was certified to have passed.

On August 19, 2019, the MPWMD's General Manager issued a report that recommends that the MPWMD board (1) develop criteria to determine which water systems should be considered for acquisition, (2) examine the feasibility of acquiring the Monterey system assets and consider public ownership of smaller systems only if the MPWMD becomes the owner of a larger system, (3) evaluate whether it is in the public interest to acquire the Monterey system assets and sufficiently satisfy the criterion of "feasible" as provided in Measure J, (4) ensure there is significant potential for cost savings before agreeing to commence an acquisition, and (5) develop more fully alternate operating plans before deciding whether to consider a Resolution of Necessity.

On November 6, 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. The MPWMD will hold public hearings regarding the findings contained in this preliminary report. If the MPWMD were to make a final determination that an acquisition of the Monterey system assets is feasible, then the MPWMD would commence a multi-year eminent domain proceeding against the Company's California subsidiary to first establish the MPWMD's right to take the Monterey system assets and, if such right is established, to determine the amount of just compensation to be paid to the California subsidiary for such assets.

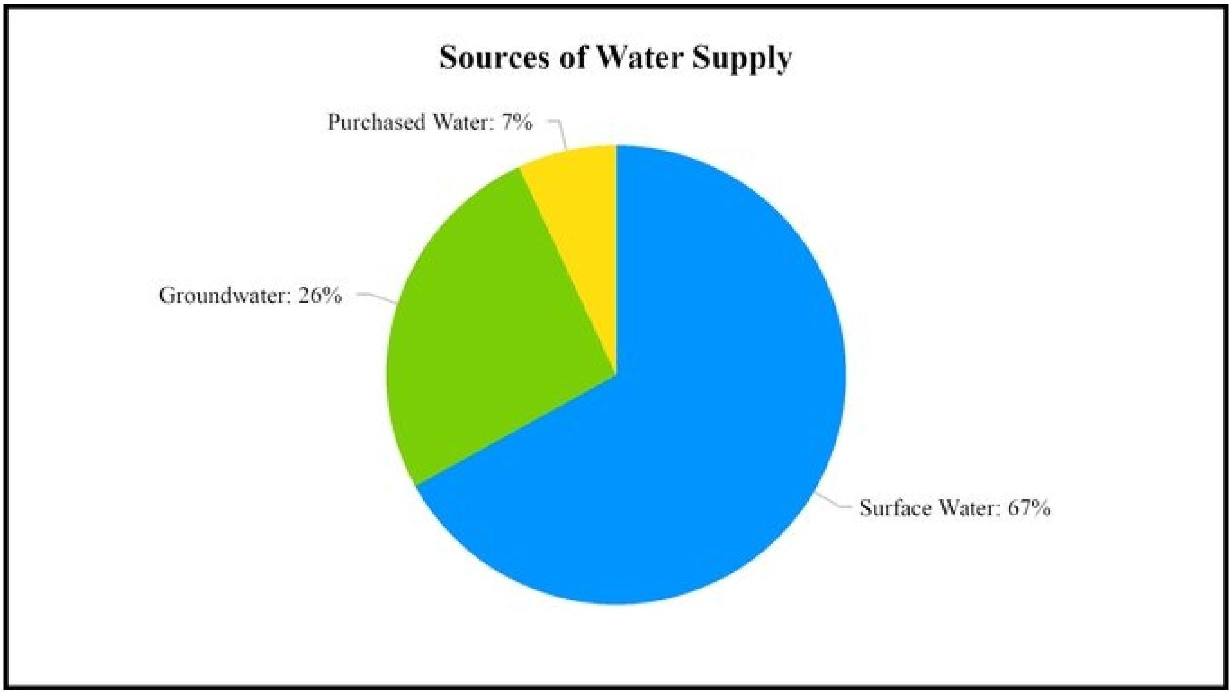
Also, five municipalities in the Chicago, Illinois area (approximately 30,300 customers in total) formed a water agency and filed an eminent domain lawsuit against the Company's Illinois subsidiary in January 2013, seeking to condemn the water pipeline that serves those five municipalities. Before filing its eminent domain lawsuit, the water agency made an offer of $38 million for the pipeline. A jury trial will take place to establish the value of the pipeline. The parties have filed with the court updated valuation reports. Although the date of the valuation trial has not currently been scheduled, it is not likely to commence before the second quarter of 2020.

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, lawsuits have been filed in connection with large-scale natural events such as wildfires. Some 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 generally 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, 2019:



Presented in the table below are the percentages of water supply by source type for the Company's top seven states for 2019:

	Surface Water	Ground Water	Purchased Water
New Jersey	72%	24%	4%
Pennsylvania	91%	7%	2%
Missouri	77%	22%	1%
Illinois	55%	35%	10%
California	—	64%	36%
Indiana	44%	56%	—
West Virginia	100%	—	—

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 it 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. 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. 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. 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, 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.

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 serves to suppress customer water demand and can reduce water operating revenues. Three of the Company's jurisdictions, California, Illinois and New York, have adopted revenue stability mechanisms which permit the Company to collect state PUC-authorized revenue for a given period which 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.

Market-Based Businesses

The Company's Market-Based Businesses provide complementary home services primarily to residential and smaller commercial customers and water and wastewater services to the U.S. government on military installations, as well as municipalities, utilities and industrial customers. These businesses are not subject to regulation by state PUCs and the services provided generally do not require significant capital investment. Operating revenues for the Company's Market-Based Businesses were $539 million for 2019, $476 million for 2018 and $422 million for 2017, accounting for 15%, 14% and 13%, respectively, of the Company's total operating revenues for the same periods.

The Company's primary Market-Based Businesses include the following operating segments:

- Homeowner Services Group ("HOS"), which provides various warranty protection programs and other home services to residential customers;

- 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.

The Company also has five contracts with municipal customers to operate and manage water and wastewater facilities and provide other related services through its Contract Services Group ("CSG").

Previously, the Company provided customized water transfer services for shale natural gas exploration and production companies through its Keystone Clearwater Solutions, LLC ("Keystone") operations. On December 12, 2019, as part of a strategic review undertaken by the Company, the Company sold all of its interest in Keystone to a natural gas and oil industry investment group. See Note 4—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements for additional information.

Homeowner Services Group

The Company's Homeowner Services Group, which includes the operations of Pivotal Home Solutions ("Pivotal") acquired in June 2018, provides warranty protection programs and other home services to residential customers for interior and exterior water and sewer lines, interior gas and electric lines, heating and cooling systems, water heaters and other home appliances, as well as power surge protection and other related services. The Company develops partnerships with municipalities, utilities and other organizations to offer protection programs to customers serviced by, or affiliated with, those municipalities, utilities and organizations. The term of these partnership agreements with the municipalities, utilities and other organizations is typically three to five years, with mutual optional renewals. As of December 31, 2019, HOS had approximately 3 million customer contracts in 43 states.

Military Services Group

The Company's Military Services Group operates on 16 military installations under 50-year contracts with the U.S. government as part of its Utility 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 the Company 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 are funded by the U.S. government as separate modifications or amendments to the contract. The capital program historically has not used the Company's equity or debt borrowings; 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. However, the U.S. Army's implementation of this requirement has limited the need for financing of these projects and the Company has been awarded several projects without any requirement to provide financing.

The contract price for nine of the Company'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 seven contracts with the U.S. government are subject to annual price adjustments under a mechanism similar to price redetermination called "Economic Price Adjustment." All of these 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 subsidiary performing the contract. In either event, pursuant to termination provisions applicable to all of these contracts, the Company would be entitled to recover allowable costs that it may have incurred under the contract, plus the contract profit margin on incurred costs. The Company's backlog of revenue associated with its contracts with the U.S. government is approximately $5.4 billion, with an average remaining contract term of 42 years.

Competition

The Company's Market-Based Businesses face competition from a number of service providers, including HomeServe USA and Cinch Home Services in HOS, and American States Water Company, Suez North America, and Veolia Environnement S.A. in MSG.

Environmental, Health and Safety, Water Quality and Other Regulation

The Company's water and wastewater operations, including the services provided by both its Regulated Businesses and Market-Based Businesses, 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 legislation including the Safe Drinking Water Act, the Reduction of Lead in Drinking Water Act and the Clean Water Act. 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 issued a non-enforceable Health Advisory for the combined level of two perfluorinated compounds (perfluorooctanoic acid, or PFOA, and perfluorooctane sulfonate, or PFOS), the New Jersey Department of Environmental Protection is developing drinking water standards for these two compounds and has adopted a standard for a third compound, perfluorononanoic acid, or PFNA, as well as other perfluoroalkyl and polyfluoroalkyl substances, or PFAS. The Company is also subject to various federal, state, 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 the Company delivers.

The Company maintains an environmental program that includes responsible business practices, compliance with environmental laws and regulations, and effective use of natural resources, which is important given the overall trend that drinking water standards have become increasingly more stringent over time. As newer or stricter standards are introduced, the Company's capital and operating costs could 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. The Company estimates that it will make capital expenditures of approximately $600 million over the next five years 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 wastes. 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. The Company's facilities and operations are also subject to requirements under the U.S. Occupational Safety and Health Act and inspections thereunder. Certain of the Company's subsidiaries are involved in pending legal proceedings relating to environmental matters. See Item 3—Legal Proceedings for additional information.

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 man-made 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 approximately 90 contaminants and 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.

To help formulate the basis for future regulations, the EPA has the authority to require monitoring for additional, unregulated contaminants under the Unregulated Contaminant Monitoring Rule (the "Monitoring Rule"). The Company's facilities have participated in the data gathering effort for the Monitoring Rule in previous rounds, which occurs every five years, and are also a participant in the ongoing fourth round, which is scheduled for completion by the end of 2020. There are millions of other chemical compounds that are not regulated, many of which are lacking a testing methodology, occurrence data, health effects information and/or treatment technology. 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—Emerging Containments" for additional information.

To effect the removal or inactivation of microbial organisms, the EPA has established various rules to improve the disinfection and filtration of drinking water and to reduce consumers' exposure to disinfectants and by-products of the disinfection process. In 2006, the EPA issued the Long-Term 2 Enhanced Surface Water Treatment Rule and the Stage 2 Disinfectants and Disinfection Byproduct Rule and finalized the Ground Water Rule, which is applicable to systems providing water from underground sources. In 2016, the revised Total Coliform Rule implemented a "find and fix" process where exceeding bacterial trigger levels requires an assessment to correct any sanitary defects. The Company is within the EPA's time frame for compliance with these standards, which includes sample collection, data analysis, engineering planning and system implementation. Recent monitoring under the Long-Term 2 Rule has resulted in the need for more than 30 of the Company's surface water systems to provide additional protection against cryptosporidium. In many cases, this will involve installing UV disinfection, and although several plants have already completed assessments and upgrades, an estimated $150 million to $250 million of investment will still be required for the remaining facilities. Further, the EPA is actively considering regulations for a number of contaminants, including strontium, hexavalent chromium, fluoride, nitrosamines, perchlorate, some pharmaceuticals and certain volatile organic compounds. The Company does not anticipate that any such regulations, if enacted, will require implementation in 2020.

The Company conducts over one million water quality tests each year at its laboratory facilities and plant operations, including continuous online instrumentations such as monitoring turbidity levels, disinfectant residuals and adjustments to chemical treatment based on changes in incoming water. The Company participates in the Partnership for Safe Water, the EPA's voluntary program to meet more stringent goals for reducing microbial contaminants. With 69 of the Company's 80 surface water treatment plants receiving the EPA program's prestigious "Director" award, which recognizes utilities that (i) have completed a comprehensive self-assessment report, (ii) created an action plan for continuous improvement, and (iii) produced high-quality drinking water, the Company accounts for approximately one-third of the plants receiving such awards nationwide. In addition, 67 of the Company's surface water treatment plants have received the "Five-Year Phase III" award, 62 plants have received the "Ten-Year Phase III" award, 58 plants have received the "Fifteen-Year Phase III" award, and three plants have received the "Twenty-Year Phase III" award; these awards recognize plants that have met the Director award status for five, 10, 15 and 20 years, respectively. Further, nine of the Company's surface water plants have received the "Presidents" award, which recognizes treatment plants that achieve the Partnership's rigorous individual filter effluent turbidity standards.

Although it is difficult to project the ultimate costs of complying with the above or other pending or future requirements, the Company expects current 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 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. The EPA proposed revisions to the LCR in November 2019 designed to provide more effective protection of public health by reducing exposure to lead and copper in drinking water. The Company continues to review the implications of the LCR and comments on the proposed revisions to the rule were due to the EPA by February 12, 2020. The Company will develop an implementation strategy to comply with the new requirements, if and when adopted, prior to the compliance effective dates in the final rule. Capital expenditures and operating costs associated with compliance with any of these rule revisions cannot be determined until the final rule is promulgated, but costs associated with compliance with federal regulations have been traditionally recognized by PUCs as appropriate for inclusion in establishing rates.

The Company currently estimates that approximately 5% of the service lines within its regulated service territories contain lead on either the Company or customer portion of the service line ("LSLs"). The Company is replacing LSLs as part of 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 service areas by the end of 2030, at an estimated cost ranging from $600 million to $1.2 billion. The Company believes this will be attainable for most service areas where public policy is supportive of this goal. 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 plan 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 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. The Lead Service Line Replacement Collaborative is a diverse group of public health, water utility, environmental, labor, consumer and housing organizations from across the country working together to encourage communities to accelerate the full replacement of LSLs through collaborative efforts at the local level.

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.

Environmental, Social Responsibility and Governance

The Company considers environmental, social responsibility and governance ("ESG") to include: environmental leadership and sustainability; operational excellence; employee engagement, safety and equality; active community engagement, civic and charitable involvement; and transparency and good governance. 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.

This focus is derived from the Company's vision statement, "clean water for life," and its core values: (i) safety; (ii) trust; (iii) environmental leadership; (iv) teamwork; and (v) high performance, which are the principles by which it operates. The Company's vision and values drive its company strategy, which is centered on five central themes:

- Safety—The safety of the Company's employees and its customers is the number one focus for American Water.
- Customers—The Company's customers are at the center of everything it does, helping the Company to shape its strategic priorities. The Company challenges itself so that if its regulated utility customers were to have a choice of providers, the Company would want them to choose American Water.
- People—Maintaining an environment which is open, transparent, diverse and inclusive, and where the Company's people feel valued, included and accountable, is critical to the Company's ability to serve its customers every day.
- Operational Excellence—The Company's operational excellence strategy helps it to find better and more efficient ways to do business, and to provide safe, clean and affordable water services for its customers.
- Growth—The Company believes that when companies grow, they can invest more in creating stable jobs, training, benefits, infrastructure and their communities. The Company's growth benefits all of its stakeholders, including its shareholders.

In 2019, the Company issued its fifth biennial Sustainability Report, covering its sustainability performance for calendar years 2018 and 2017. This report can be accessed on the Company's website, *https://amwater.com,* and was prepared in accordance with the GRI Standards: Core Option, as well as standards from the Sustainability Accounting Standards Board and Edison Electric Institute. The Company's first report was issued in 2011, making American Water the first large water services company to measure its performance against the Global Reporting Index. In addition, the Company's sustainability practices have supported its inclusion in the Euronext Vigeo® U.S. 50 index, FTSE4Good index series, 2018 NAACP Equity Inclusion and Empowerment Index, 2019 Constituent MSCI ESG Leaders Indexes, 2020 Bloomberg Gender-Equality Index, and ranked 16th on the Corporate Knights' 2020 Global 100 Most Sustainable Corporations in the World.

The following highlights the Company's commitment to its ESG policies and practices:

Environmental and Sustainability Practices

- Energy Use
  - The Company lowered its greenhouse gas emissions through December 31, 2018 by approximately 31% since its base year of 2007 with a goal of achieving a 40% reduction by 2025.
  - The Company's headquarters building in Camden, New Jersey attained LEED Platinum certification, and earned all possible points within the sustainable site credit category.
  - Design, construct, operate and maintain the Company's systems for efficiency and best practices.

- Water Supply

    - Constructed a new 90 million gallon reservoir and intake in Bel Air, Maryland in response to water supply demands during times of drought and in order to meet levels required by Maryland regulators. The new reservoir provides a long-term, safe and reliable water supply and economic opportunity in that region.

- Water Policy Leadership

    - Expect to spend between $8.8 billion and $9.4 billion from 2020 to 2024 and between $20 billion and $22 billion from 2020 to 2029 on capital investments to address aging infrastructure, reduce or eliminate leaks, improve cyber and physical security, and increase resiliency of critical assets against the impacts of climate variability. Approximately 8% of the Company's total projected capital investment is dedicated to resiliency.

    - More than $1.5 billion per year is allocated to renewing and improving regulated assets through a long-term perspective.

    - Scientists dedicated to research and partnering with water research foundations, on water quality and technology-water source monitoring.

    - Collaboration and partnerships with federal and state agencies to support effective environmental, health and safety and water quality standards and regulations.

Social Responsibility

- People

    - During 2019, nearly 96,000 hours of safety training were completed by the Company's employees.

    - As a result of the Company's continued focus on safety, the Company has made significant progress towards its zero injuries goal, reducing workplace injuries by 61% over the past five years, and the Company's 2019 safety performance was the best in its recorded history. Through year end 2019, the Company has further reduced its recordable injury rate to 1.13, approximately 62% better than the industry average.

    - During 2019, approximately 86% of the Company's job requisitions had a diverse candidate pool, with approximately 57% of transfers or promotions filled by minority, female, veteran or disabled individuals.

- Customers

    - Achieved a customer satisfaction rating in the top quartile among the Company's industry peer group.

- Communities

    - More than 5,000 hours of Company-sponsored community service performed during 2019 by its employees.

    - Company-sponsored workplace giving campaigns with the United Way and Water For People.

    - Through annual contributions from the American Water Charitable Foundation, the Company focused on supporting its employees in their own charitable endeavors, providing support for disaster relief efforts, and providing funding for initiatives related to clean water, conservation, education and community sustainability.

Governance

- Board and Committees

    - The Board of Directors and each of its committees are led by an independent, non-executive chairperson.

    - The Board of Directors met 12 times in 2019.

    - In July 2019, the Board of Directors added three additional directors, increasing its size from eight to 11 members. The three new directors represent gender, racial and experiential diversity, and all three have extensive regulated utility backgrounds.

- Diversity

    - With the addition of three new directors in 2019, the percentage of women on the Board of Directors increased to 54.5% as of December 31, 2019.

    - The Company's average director tenure was approximately 5.8 years as of December 31, 2019.

- Demonstrated and Representative Expertise

  - The Company's Board of Directors has demonstrated expertise, including experience in utility and finance operations, customer service, cybersecurity, the military, financial services and capital markets, service as a public company CEO and board member, and management of global operations.

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, help ensure compliance, improve 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 PFAS, Legionella, cyanotoxin-forming algal blooms, pathogens 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 collaborate with the EPA and state agencies to help establish effective environmental, health and safety, and water quality standards and regulation. 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, 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 additional business with new and existing customers.

Emerging Contaminants

Emerging contaminants include numerous chemicals such as pharmaceuticals, personal care products, pesticides, herbicides and endocrine disrupting compounds, as well as some 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 quantified. While these contaminants have been present in drinking water for as long as they have been in use, technological advances have only recently made it possible to detect many of them. The ability to detect contaminants, even at trace levels, has raised questions among regulators and government agencies, further affecting the public's perception of drinking water quality.

The Chemicals Abstract Service Registry contains over 159 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 maintains state-of-the-art water quality testing equipment and implements new and emerging technologies to help predict and manage potential water supply contamination issues. Examples of the Company's efforts include:

- using its research findings to communicate information to its customers on the actions they can take to manage Legionella (the Centers for Disease Control statistics indicate that water-associated disease from Legionella is on the rise, with exposure typically associated with customer-owned plumbing systems in large buildings);

- aerial drone testing to detect harmful algal blooms and testing ultrasonic technology to help prevent taste and odor events and to eliminate cyanotoxins before they get to the water treatment plant;

- the implementation of water source assessment tools, including sensors and analytics, to evaluate and track chemical storage and aid in the detection of source water contamination events;

- development of methodology and measurement techniques for emerging contaminants to investigate transport, occurrence and treatment; and

- the implementation of activated carbon, biofiltration and ion exchange for the control of emerging contaminants.

Service Company and Security

American Water Works Service Company, Inc. (the “Service Company”) is a wholly owned subsidiary of the Company that provides support and operational services to the Company’s operating subsidiaries. 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 its Market-Based Businesses organized under American Water Enterprises, LLC, the Company’s wholly owned subsidiary (“AWE”) as requested or may otherwise be necessary. Services provided by the 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. The Service Company also operates two national customer service centers located in Alton, Illinois and Pensacola, Florida, which provide customer relations, field service and operational support to the Company’s Regulated Businesses. Services are provided by the 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 (i) are aimed at assuring the continuity of business processes that are dependent upon automation, (ii) seek to maintain the integrity of the Company’s data, (iii) support regulatory and legislative compliance requirements, and (iv) are aimed at 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.

Employee Matters

As of December 31, 2019, approximately 46% of the Company’s workforce was represented by unions, which include 71 collective bargaining agreements with 14 different unions. Additionally, as of December 31, 2019 the Company had four collective bargaining agreement beyond expiration, affecting approximately 371 employees, all of which are actively working under the terms of the existing agreement, and another collective bargaining agreement in its initial stage of renegotiation, affecting approximately 66 employees. During 2020, 14 of the Company’s collective bargaining agreements will be expiring in accordance with their terms and the Company expects to be able to negotiate these agreements during the course of the year.

Information About Our Executive Officers

Presented in the table below is the name, age, offices held and business experience for each of the Company's executive officers, as of February 18, 2020:

Name	Age	Office and Experience
Susan N. Story	60	**President and Chief Executive Officer.** Ms. Story has served as President and Chief Executive Officer of the Company and a director since May 2014, and has announced her retirement from these positions, effective April 1, 2020. Ms. Story served as Senior Vice President and Chief Financial Officer of the Company from April 2013 until May 2014. Prior to joining American Water, she served as President and Chief Executive Officer of Southern Company Services, a subsidiary of Southern Company, from January 2011 until March 2013 and President and Chief Executive Officer of Gulf Power Company, also a subsidiary of Southern Company, from 2003 until December 2010. Since 2008, Ms. Story has served as a member of the Board of Directors of Raymond James Financial, Inc., a diversified financial services company, and as lead director since 2016. Since January 2017, Ms. Story has also served on the Board of Directors of Dominion Energy, Inc., a producer and transporter of energy.
Brian Chin	46	**Senior Vice President, Strategic Financial Planning.** Mr. Chin joined the Company as its Senior Vice President, Planning and Strategy Integration in June 2017. He has had his current title since February 15, 2019, and he also served as Interim Treasurer from October 26, 2018 until February 15, 2019. Prior to joining the Company, from May 2013 to April 2017, Mr. Chin served as the lead utility analyst for the North America research function at Bank of America Merrill Lynch. From 2001 to 2013, Mr. Chin worked in Electric Utilities Research at Citigroup. Within that period, Mr. Chin was the global head of Electric Utilities Research for Citigroup.
M. Susan Hardwick	57	**Executive Vice President and Chief Financial Officer.** Ms. Hardwick joined American Water on June 3, 2019 as its Executive Vice President—Finance and became its Executive Vice President and Chief Financial Officer on July 1, 2019. Ms. Hardwick previously served as the Executive Vice President and Chief Financial Officer of Vectren Corporation, which was sold to CenterPoint Energy, Inc. 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., leaving there as a senior manager to join Cinergy Corp. Ms. Hardwick is a Certified Public Accountant.
Melanie M. Kennedy	46	**Senior Vice President, Human Resources.** Since March 2017, Ms. Kennedy has served as the Company's Senior Vice President, Human Resources. From August 2014 until March 2017, Ms. Kennedy served as Vice President, Human Resources of the Company, 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.
Walter J. Lynch	57	**Executive Vice President and Chief Operating Officer.** Mr. Lynch has over 20 years of experience in the water and wastewater industry. He has served as the Company's Executive Vice President and Chief Operating Officer since January 2016, as Chief Operating Officer of Regulated Operations from February 2010 to December 2015, and President of Regulated Operations from July 2008 to December 2015. Mr. Lynch joined the Company in 2001. Mr. Lynch is on the Board of Directors of the National Association of Water Companies and serves on its Executive Committee. In addition, Mr. Lynch also serves on the Water Research Foundation Board of Trustees. Effective April 1, 2020, Mr. Lynch will succeed Ms. Story as President and Chief Executive Officer of the Company and a member of the Board of Directors.
James S. Merante	45	**Vice President and Treasurer**. Mr. Merante was appointed as the Company's Vice President and Treasurer on February 15, 2019. Prior to that, Mr. Merante was Vice President, Internal Audit from February 2018 to February 15, 2019, and served as Divisional Chief Financial Officer for the Company's Mid-Atlantic Division from July 2014 until February 2018. Prior to joining American Water, Mr. Merante served as Vice President of Operations for FSM, Inc., a private digital media company, from February 2010 until July 2014. Mr. Merante is licensed as a Certified Public Accountant in Pennsylvania.
Michael A. Sgro	61	**Executive Vice President, General Counsel and Secretary.** Mr. Sgro has 25 years of experience in the water and wastewater industry. He has served as the Company's Executive Vice President, General Counsel and Secretary since January 2016 and its Senior Vice President, General Counsel and Secretary from February 2015 until January 2016. Prior to that, he served as the Company's Interim General Counsel and Secretary from January 2015 until February 2015 and as Vice President, General Counsel and Secretary of American Water's Northeast Division from 2002 to 2015.
Loyd "Aldie" Warnock	60	**Senior Vice President, Chief External Affairs and Corporate Business Development Officer.** Mr. Warnock has served as the Company's Senior Vice President, Chief External Affairs and Corporate Business Development Officer since January 1, 2020 and as the Company's Senior Vice President of External Affairs and Business Development from August 1, 2017 to December 31, 2019. From April 2014 until August 2017, Mr. Warnock served as the Company's Senior Vice President of External Affairs, Communications and Public Policy. Prior to joining the Company, he served as Senior Vice President of External Affairs at Midwest Independent System Operator, Inc., a non-profit, self-governing organization, from March 2011 to April 2014. Prior to that, he served as Vice President of External Affairs for Allegheny Energy, Inc. from December 2005 to February 2011 and Senior Vice President of Governmental and Regulatory Affairs at Mirant Corporation from July 2004 to November 2005. Mr. Warnock serves on the Board of Directors of the National Association of Water Companies and on the Executive Advisory Board of the Mississippi State University College of Business.
Melissa K. Wikle	54	**Vice President and Controller.** Ms. Wikle joined the Company in July 2016 as its Vice President and Controller, and assumed the duties of the Company's principal accounting officer in August 2016. Prior to joining the Company, Ms. Wikle served as Corporate Controller and Chief Accounting Officer of Columbus McKinnon Corporation, a publicly-traded worldwide designer, manufacturer and marketer of material handling products, systems and services, since April 2011. Ms. Wikle is a Certified Public Accountant.

Each executive officer is elected annually by the Board of Directors and serves until his or her respective successor has been elected and qualified or his or her 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 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 Form 10-K, the following 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 utility operations 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 utility operations also may be subject to fines, penalties and other sanctions for the 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 results of 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 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 to an extent that is sufficient to:

- cover our expenses, including purchased water and costs of chemicals, fuel and other commodities used in our operations;
- enable us to recover our investment; and
- provide us with an opportunity to earn an appropriate rate of return on our investment.

Approval of the PUCs is also required in connection with other aspects of our utilities' operations. Some state PUCs are empowered to impose financial penalties, fines and other sanctions for non-compliance with applicable rules and regulations. Our utilities are also required to have numerous permits, approvals and certificates from the PUCs that regulate their businesses and authorize acquisitions, dispositions, and, in certain cases, affiliated transactions. 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 rates 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, if water usage is less than the level anticipated in establishing rates, or if our investments or expenses prove to be higher than the level estimated in establishing rates.

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 emerging contaminants, 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 regulated water and wastewater operations and the operations of our Market-Based Businesses are subject to extensive federal, state and local laws and regulations. These requirements include, among others, the Clean Water Act, the Safe Drinking Water Act, the LCR and CERCLA. EPA requirements and similar federal and state laws and regulations. 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 supplying water 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, generally 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 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 emerging contaminants, 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 emerging 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, 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 an emerging contaminant in the absence of a regulatory standard. Furthermore, given the rapid pace at which emerging 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 emerging 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 as a result 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 and groundwater aquifers, are held in the public trust and are not owned by private interests. As a result, we typically do not own the 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. Passing-flow requirements set minimum volumes of water that must pass through specified water sources, such as rivers and streams, in order to maintain environmental habitats and meet water allocation rights of downstream users. Allocation rights are imposed to ensure sustainability of major water sources and passing-flow requirements are most often imposed on source waters from smaller rivers, lakes and streams. 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.

For example, in our Monterey County, California operations, we are seeking to augment our sources of water supply, principally to comply with an October 20, 2009 cease and desist order (the "2009 Order"), as amended by an order in July 2016 (the "2016 Order"), of the SWRCB that requires California-American Water Company, our wholly owned subsidiary ("Cal Am"), to significantly decrease its diversions from the Carmel River in accordance with a reduction schedule that terminates on December 31, 2021 (the "2021 Deadline"). We are also required to augment our Monterey County sources of water supply to comply with the requirements of the Endangered Species Act. We cannot predict whether Cal Am will be able to secure alternative sources of water, or if Cal Am will be exposed to liabilities, including fines and penalties, if it is unable to meet the 2021 Deadline under the 2016 Order. Furthermore, Cal Am continues to work constructively with all appropriate agencies to provide necessary information to obtain the required approvals for the Water Supply Project; however, due to the delay in the approval schedule, Cal Am currently does not believe that it will be able to fully comply with the diversion reduction requirements and other remaining requirements under the 2009 Order and the 2016 Order, including the 2021 Deadline. If Cal Am or any of our other subsidiaries are unable to secure an alternative source of water, or if other adverse consequences result from the events described above, our business, financial condition, results of operations and cash flows could be adversely affected. See Item 3—Legal Proceedings—Alternative Water Supply in Lieu of Carmel River Diversions, which includes additional information regarding this matter.

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. Some scientific experts are predicting a worsening of weather volatility in the future associated with climate variability. Many climate variability predictions, if true, 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 of natural events, including to improve the resiliency and reliability of our water production and delivery 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. Although some or all potential expenditures and costs with respect to 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 or experience declining water usage, to the time at which we can seek to address these events in rate case applications; our inability to minimize regulatory lag could adversely affect our business.

There is typically a delay, known as "regulatory lag," between the time one of our regulated subsidiaries makes a capital investment or incurs 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 reduce regulatory lag could have an adverse effect on our financial condition, results of operations, cash flows and liquidity.

We endeavor to reduce regulatory lag by pursuing constructive regulatory policies. For example, three 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, 11 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, ten 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 programs include states 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 surcharge mechanisms enable us to adjust rates in less time after costs have been incurred than would be the case under the general rate case application process.

While these programs have reduced regulatory lag in several of our regulated states, we continue to seek expansion of programs to reduce regulatory lag in those jurisdictions that have not approved such programs. Furthermore, PUCs may fail to adopt new surcharge programs and existing programs may not continue in their current form, or at all. Although we intend to continue our efforts to expand state PUC approval of surcharges to address issues of regulatory lag, our efforts may not be successful, or even if successful they may not completely address our regulatory lag, in which case our business, financial condition, results of operations, cash flows and liquidity may be materially and adversely affected.

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

New legislation, regulations, government policies or court decisions, including, without limitation with respect to federal and state income and other tax laws, can materially affect our operations, results of operations and cash flows. 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 in the individuals who serve as regulators and 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;
- 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 securities, or making it less cost-effective for us to do so;
- negatively impacting the deductibility of expenses under federal or state tax laws, the amount of tax credits or tax abatement benefits that may be available, the amount of taxes owed, the timing of tax effects on rates, or 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;
- 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.

Any of the foregoing consequences could have an adverse effect on our business, financial condition, results of operations, cash flows and liquidity.

In addition, new Federal, state and local laws, changes in existing laws, rules or regulations, or administrative interpretations thereof, could impact us. In December 2017, the TCJA was signed into law, which, among other things, enacted significant and complex changes to the Internal Revenue Code of 1986, as amended (the “Code”), including a reduction in the maximum U.S. federal corporate income tax rate from 35% to 21% as of January 1, 2018, and certain other provisions related specifically to the public utility industry, including the normalization of our deferred income taxes. The enactment of the TCJA required re-measurement of our deferred income taxes, which materially impacted our 2017 results of operations and financial position and had a lesser impact on our 2018 results of operations and financial position. Following enactment of the TCJA, the Company adjusted its customer rates and deferred income taxes to reflect the lower income tax rate as mandated by PUCs in jurisdictions that have addressed the issue. We expect that further impacts to our deferred income taxes will continue to occur through pending or future rate cases or other proceedings in the remaining jurisdictions. At this time, we cannot predict the impacts on us of the regulatory treatment of the TCJA in these remaining proceedings, or of the enactment or adoption of any Related Interpretations, if and when issued. Moreover, we are unable to determine or predict the potential impacts, if any, of any other new or amended laws, rules or regulations, or interpretations thereof, including, without limitation, further amendments to the Code or applicable Treasury regulations, to the extent they may be ultimately enacted, adopted or issued, on us or our businesses, financial condition, results of operations, cash flows and liquidity.

Service disruptions caused by severe weather conditions, climate variability patterns or natural 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 other natural 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, 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 drought conditions 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 assure 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 drought restrictions are repealed and the drought has ended, which could adversely affect our business, financial condition, results of operations and cash flows.

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

Adverse economic conditions or other factors can cause our customers, particularly industrial customers, to curtail operations. A curtailment of operations by an industrial customer would typically result 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 industrial 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, 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 2019, we invested $1.7 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 may increase. We expect to fund capital improvement projects using cash generated from operations, 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, meet our growth targets and expand our rate base to enable us to earn satisfactory future returns on our investments. 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 construction delays, permitting delays, labor shortages or other disruptions, environmental restrictions, or other obstacles. Each of these outcomes could adversely affect our financial condition, results of operations and cash flows.

Aging infrastructure may lead to service disruptions, property damage and increased capital expenditures and O&M 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, the nature of information available on buried and newly acquired assets may be limited, which may 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 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.

Three of our jurisdictions, California, Illinois, and New York, have adopted revenue stability mechanisms that permit us to collect state PUC-authorized revenue for a given period, which is not tied to the volume of water sold during that period. Revenue stability mechanisms are designed to allow utilities to recover the fixed cost of operations while supporting water conservation goals. In those jurisdictions that have not adopted a revenue stability mechanism, operating results could continue to be affected by seasonality.

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

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 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.

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 man-made sources (such as perchlorate, methyl tertiary butyl ether, lead and other materials, chemical spills or other accidents that result in contaminants entering the water source), and possible terrorist attacks. In addition, new categories of these substances 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) continuing limited 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. 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. 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 arising out of an interruption of service or human exposure to hazardous substances in our drinking water and water supplies.

Since we engage 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, and we may not be protected from these claims or negative impacts therefrom 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 in the water or water supplies. 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 may sustain losses that exceed or are excluded from our insurance coverage or for which we are self-insured.

We maintain insurance coverage as part of our overall legal and risk management strategy to minimize potential liabilities arising from our utility operations, as well as the operations of our Market-Based Businesses. 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.

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 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 their water, wastewater and related or ancillary services, the quality of water provided, and the amount, timeliness, accuracy and format of bills that are provided for such services. Adverse publicity and negative consumer sentiment 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 our Market-Based Businesses, 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.

For example, New York American Water Company, Inc. ("NYAW") has been the subject of a New York State Public Service Commission ("NYSPSC") investigation related to the unintentional provision of incorrect data to a taxing authority that resulted in an over-assessment of real property taxes. NYAW self-reported this issue to the NYSPSC promptly after NYAW's senior leadership became aware of it. Neither NYAW nor any of its employees received any financial benefit as a result of this matter, as all customer overpayments were provided to the local taxing authorities. The NYSPSC investigation also related to the failure of a few employees working on NYAW's 2016 general rate case to properly disclose these issues in that rate case. In September 2018, a settlement of these matters was approved by the Supreme Court of the State of New York, Albany County, and NYAW has been working with the New York State Department of Public Service to implement its terms. While the settlement resolves the NYSPSC's investigation involving NYAW and those matters set forth above, there can be no assurance that NYAW will not be subject to additional federal, state or local proceedings regarding these and other related matters, and these proceedings could result in increased oversight and civil, administrative and/or criminal sanctions, which may have a material adverse effect upon our reputation and perception.

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 76 dams, the majority of which are earthen dams, and the failure of any of which 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 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 and storage systems located across the United States. A failure of major pipes or reservoirs could result in injuries, property and other damage for which we may be liable. The failure of major pipes 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, that 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. Further, competition for acquisition opportunities from other regulated utilities, governmental entities, and other buyers may hinder our ability to expand our business.

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 and cause diversion of our management's time and resources. Future acquisitions by us could result in, among other things:

- incurrence or assumption of debt, contingent liabilities and environmental liabilities of or with respect to an acquired business, including liabilities that were unknown at the time of acquisition;
- failure to recover acquisition premiums;
- unanticipated capital expenditures;
- failure to maintain effective internal control over financial reporting;

- the need to successfully integrate the acquired systems' cybersecurity and infrastructure protection measures with those of the Company's;
- recording goodwill and other intangible assets at values that ultimately may be subject to impairment charges;
- fluctuations in quarterly results;
- unanticipated acquisition-related expenses;
- failure to realize anticipated benefits, such as cost savings and revenue enhancements; and
- difficulties in integrating or assimilating personnel, benefits, services and systems.

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 sales and profitability or other perceived synergies, and any difficulties we encounter in the integration process could interfere with our operations, reduce our operating margins and adversely affect our internal control over financial reporting.

We compete with governmental entities, other regulated utilities, and strategic and financial buyers for acquisition opportunities. If consolidation becomes more prevalent in the water and wastewater industries and competition for acquisitions increases, the prices for suitable acquisition candidates may increase and limit our ability to expand through acquisitions.

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 or 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 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. On November 6, 2019, the MPWMD issued a preliminary report finding, among other things, that the acquisition of the Monterey system assets by the MPWMD would be economically feasible. Also, five municipalities in the Chicago, Illinois area formed a water agency that filed an eminent domain lawsuit against our Illinois subsidiary in January 2013, seeking to condemn a water pipeline that serves those five municipalities. This lawsuit remains pending, and a valuation trial is likely to be held in the near future. See Item 1—Business—Regulated Businesses—Condemnation and Eminent Domain, 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 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 rely on operational and technology systems to facilitate the management of our business and customer and supplier relationships, and a disruption of these systems could adversely affect our business.

Our operational and technology systems are an integral part of our business, and any disruption of these systems could significantly limit our ability to manage and operate our business efficiently, which, in turn, could cause our business and competitive position to suffer and adversely affect our results of operations. For example, we depend on these systems to bill customers, process orders, provide customer service, manage certain plant operations and construction projects, manage our financial records, track assets, remotely monitor certain of our plants and facilities and manage human resources, supply chain, inventory and accounts receivable collections.

Although we do not believe that these systems are at a materially greater risk of failure than other similar organizations, our technology systems remain vulnerable to damage or interruption from:

- power loss, computer systems failures, and internet, telecommunications or data network failures;
- operator error or improper operation by, the negligent or improper supervision of, or the intentional acts of, employees and contractors;
- physical and electronic loss of customer or employee data due to security breaches, cyber attacks, hacking, denial of services action, misappropriation of data or other property and similar events;
- computer viruses; and
- severe weather and other events, including without limitation, hurricanes, tornadoes, fires, floods, earthquakes and other disasters.

These events may result in physical and electronic loss of customer, employee or financial data, security breaches, misappropriation of property and other adverse consequences. In addition, a lack of or inadequate levels of redundancy for certain of these systems, including billing systems, could exacerbate the impact of any of these events on us. We may not be successful in developing or acquiring technology that is competitive and responsive to the needs of our business, and we might lack sufficient resources to make the necessary upgrades or replacements of outdated existing technology to enable us to continue to operate at our current level of efficiency. Any or all of these events could have a material adverse impact on our business, results of operations, financial condition and cash flows.

We may be subject to physical and/or cyber attacks.

As operators of critical infrastructure, we may face a heightened risk of physical and/or 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 war or terrorism, and other causes. Unauthorized access to confidential information located or stored on these systems could negatively and materially impact our 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. 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; experience substantial loss of revenues, response costs and other financial loss; suffer a loss of management time, attention and resources from our regular business operations; and be subject to increased regulation, 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 cyber security incident could also cause us to be non-compliant with applicable laws and regulations or contracts that require us to 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 could be targets of cyber attacks. Any theft, loss and/or fraudulent use of customer, employee or proprietary data as a result of a cyber attack could subject us to significant litigation, liability and costs, as well as adversely impact our reputation with customers and regulators, among others.

We have obtained cyber insurance to provide coverage for a portion of the losses and damages that may result from a security breach, but such insurance is subject to a number of exclusions and may not cover the total loss or damage caused by a breach. The market for cybersecurity insurance is relatively new and coverage available for cybersecurity events may 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 cyber incident may not be covered by insurance or recoverable in rates.

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. These efforts support our broader strategic initiatives and are intended to improve our operations and enhance our customer service capabilities. 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.

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 focus on safety, operational excellence, O&M expense efficiency, water quality, asset and capital management and the customer experience includes the development and implementation of new technologies to be used for, among other things: customer service and support; environmental compliance; water metering; water quality and source monitoring; cybersecurity; business development and growth; data analysis; employee development and training; and other initiatives. For example, we have made and plan to continue to make significant investments in developing, deploying and maintaining customer-facing technologies, applications to support field service and customer service operations, water source sensor and evaluation technologies, and data analysis and artificial intelligence technologies. Where appropriate, we also seek to align these new technologies with existing technology infrastructure and systems.

There can be no assurance that we will be successful in designing, developing, deploying, integrating or maintaining these new technologies, and if they do not perform effectively or adequately serve their respective business objectives, their value to us and our business and operations may be negatively and materially impacted. 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. Technologies that do not perform as intended or desired may need to be redesigned, redeveloped or abandoned. 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. Our failure to timely and effectively invest in, develop, deploy and implement improvements to, and properly maintain the operation and integrity of, our new technologies, including related data and other related systems, and/or adequately obtain recovery in rates of the costs and expenses associated with such activities, may adversely affect our ability to achieve intended 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.

All of the intellectual property that has been or is being used or developed in connection with these technologies, we believe we own, or have valid licenses to use. However, competitors, contracting parties or other third parties may bring claims against us to challenge our right to use, license, sub-license, market or monetize, in whole or in part, such intellectual property or derivatives thereof or works made therefrom, and the assertion, defense or protection of our intellectual property rights could be expensive, time-consuming and ultimately unsuccessful. If we are unable to do so, or it is determined that we do not own or have valid licenses or other rights to any of the intellectual property used in our technologies, we may lose valuable rights to what we regard as our intellectual property, the carrying values of the affected technologies may need to be decreased significantly, and we may be required to obtain or purchase licenses at significant cost from third parties to use the intellectual property. In any of these cases, we may be unable to execute our long-term strategy, and our financial condition, results of operations and cash flows may be materially and adversely impacted.

Our business has inherently dangerous workplaces. If we fail to maintain safe work sites, we may experience workforce 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 continual progress to our ultimate desired goal of zero injuries is critical to our reputation. We maintain health and safety standards to protect our employees, customers, contractors, vendors and the public. Although we intend to adhere to such health and safety standards with a goal of achieving zero injuries, it is extremely challenging to eliminate all safety incidents at all times.

At our business sites, including construction and maintenance sites, our employees, contractors and others are often in close proximity to large pieces of equipment, moving vehicles, pressurized water, underground trenches and vaults, chemicals and other regulated materials. On many sites, we are responsible for safety and, accordingly, must implement important safety procedures and practices above what governmental regulations require. If we fail to implement such procedures or if the procedures we implement are ineffective or are not followed by our employees or others, our employees, contractors and others may experience 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 and storage of hazardous chemicals, which, if improperly delivered, handled, stored 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 regulations dealing with occupational health and safety. Although we maintain functional employee groups whose primary purpose is to ensure we implement effective health and, safety work procedures and practices throughout our organization, including construction sites and maintenance sites, the failure to comply with such regulations or procedures could subject us to liability.

Work stoppages and other labor relations matters could adversely affect our results of operations.

As of December 31, 2019, approximately 46% of our workforce was represented by unions, and we had 71 collective bargaining agreements in place with 14 different unions representing our unionized employees. These collective bargaining agreements, including four which are beyond expiration and 14 which will expire during 2020, are subject to periodic renewal and renegotiation. We may not be able to successfully renew or renegotiate these labor contracts on terms that are fair 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 and result in higher labor costs, which could adversely affect our 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.

Our continued success is dependent upon our ability to hire, retain, and utilize qualified personnel.

The success of our business is dependent upon our ability to hire, retain, and utilize qualified personnel, including engineers, licensed operators, water quality and other operating and craft personnel, and management professionals who have the required experience and expertise. From time to time, it may be difficult to attract and retain qualified individuals with the expertise and in the timeframe demanded for our business needs. In certain geographic areas, for example, we may not be able to satisfy the demand for our services because of our inability to successfully hire and retain qualified personnel.

In addition, as key personnel approach retirement age, we need to have appropriate succession plans in place and to successfully implement such plans. If we cannot attract and retain qualified personnel or effectively implement appropriate succession plans, our business, financial condition, results of operations and cash flows may be materially and adversely impacted.

Financial and Market-Related Risks

Our indebtedness could affect our business adversely 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, 2019, our aggregate long-term and short-term debt balance (including preferred stock with mandatory redemption requirements) was $9.5 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.

In order to meet our capital expenditure needs, we may be required to make additional borrowings under our revolving credit facility or issue a combination of new short-term and long-term debt securities and equity. Moreover, additional borrowings may be required to refinance outstanding indebtedness. Debt maturities and sinking fund payments in 2020, 2021 and 2022 will be $28 million, $310 million and $14 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. Moreover, if new debt is added to our current debt levels, the related risks we now face could intensify, limiting our ability to refinance existing debt on favorable terms.

In an attempt to manage our exposure to interest rate risk associated with our issuance of variable and fixed rate debt, 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, swaptions 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 capital or financial markets or other events could affect our ability to meet our liquidity needs at reasonable cost and our ability to meet long-term commitments, which could adversely affect our financial condition and results of operations.

In addition to cash from operations, we rely primarily on our revolving credit facility, commercial paper program, and the capital markets to satisfy our liquidity needs. In this regard, our principal external sources of short-term liquidity are our $2.10 billion commercial paper program and our $2.25 billion revolving credit facility. Our revolving credit facility currently expires in accordance with its terms in March 2024, although under those terms we may request to extend the expiration date for up to one year. We regularly use our commercial paper program under this revolving credit facility as a principal source of short-term borrowing due to the generally more attractive rates we generally can obtain in the commercial paper market. As of December 31, 2019, American Water Capital Corp. ("AWCC"), our wholly owned financing subsidiary, had no outstanding borrowings under the revolving credit facility, and had $786 million of commercial paper outstanding and $76 million in outstanding letters of credit. There can be no assurance that AWCC will be able to continue to access its commercial paper program or its 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.

Under the terms of our revolving credit facility, our consolidated debt cannot exceed 70% of our consolidated capitalization, as determined under the terms of the credit facility. If our equity were to decline or debt were to increase to a level that caused our debt to exceed this limit, lenders under the credit facility would be entitled to refuse any further extension of credit and to declare all of the outstanding debt under the credit facility immediately due and payable. 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.

Our ability to comply with this and other covenants contained in the revolving credit facility and our other consolidated indebtedness is subject to various risks and uncertainties, including events beyond our control. For example, events that could cause a reduction in equity include, without limitation, a significant write-down of our goodwill. 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.

Disruptions in the capital markets or changes in our credit ratings could also limit our ability to access capital on terms favorable to us or at all. For example, on April 1, 2019, Moody's Investors Service changed the Company's senior unsecured debt rating to Baa1, from A3, with a stable outlook. While the lending banks that participate in our revolving credit facility have met all of their obligations, 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. These or other occurrences may cause our lenders to not meet their existing commitments, and we may not be able to access the commercial paper or loan or capital markets in the future on terms acceptable to us or at all. Furthermore, our inability to maintain, renew or replace commitments under this facility could materially increase our cost of capital and adversely affect our financial condition, results of operations and liquidity. Longer-term disruptions in the capital and credit markets as a result of economic, legislative, political or other uncertainty, 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 liquidity needed for our business. Any significant disruption in the capital, debt 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 deferring capital expenditures, reducing or suspending dividend payments, and reducing other discretionary expenditures. Finally, there is no assurance that we will be able to access the equity capital markets to obtain financing when necessary or desirable and on terms that are reasonable or acceptable to us.

Any of the foregoing events that impede our access to the capital markets, or the failure of any of our lenders to meet their commitments that result from financial market disruptions, could expose us to increased interest expense, require us to institute cash conservation measures or otherwise adversely and materially affect our business, financial condition, results of operations, cash flows and liquidity.

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 may not be able to fully utilize our U.S. and state net operating loss carryforwards.

As of December 31, 2019, we had U.S. federal and state NOL carryforwards of approximately $673 million and $453 million, respectively, and management believes it is more likely than not that these NOL carryforwards will be recovered in the future. With the enactment of the TCJA, the Company analyzed the impacts of the reduction in the U.S. federal corporate income tax rate from 35% to 21% on the Company's deferred tax assets and liabilities, including its NOL carryforwards, and as a result, remeasured those NOL carryforwards as of the date of enactment of the TCJA based on this tax rate change.

Our federal NOL carryforwards will begin to expire in 2028, and our state NOL carryforwards began to expire in 2019 and will continue to expire through 2038. We expect to fully utilize our federal NOL balance before it expires, and our ability to do so is primarily dependent upon our ability to generate sufficient taxable income. We have, in the past, been unable to utilize certain of our state NOL carryforwards, and the establishment or increase of a valuation allowance in the future would reduce our deferred income tax assets and our net income.

Our actual results may differ from those estimated by management in making its assessment as to our ability to use the NOL carryforwards. Moreover, adoption of Related Interpretations with respect to the TCJA and other changes in income tax laws, the economy and the general business environment could affect the future utilization of our NOL carryforwards. If we are unable to fully utilize our NOL carryforwards to offset taxable income generated in the future, our financial position, results of operations and cash flows could be materially adversely affected.

We have recorded a significant amount of goodwill, and we may never realize the full value of our intangible assets, causing us to record impairments that may negatively affect our results of operations.

Our total assets include $1.5 billion of goodwill at December 31, 2019. The goodwill is primarily associated with the acquisition of American Water by an affiliate of our previous owner in 2003, the acquisition of E'town Corporation by a predecessor to our previous owner in 2001 and our acquisition of Pivotal in 2018. 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, we have taken significant non-cash charges to operating results for goodwill impairments in the past.

We may be required to recognize an impairment of goodwill in the future due to market conditions or other factors related to our performance or the performance of an acquired business. 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. For example, in the third quarter of 2018, prior to our sale of Keystone, we strategically narrowed the scope of that business and, as a result, we recorded a non-cash, pre-tax impairment charge of $57 million. See Note 8—Goodwill and Other Intangible Assets in the Notes to Consolidated Financial Statements for further information.

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 charge. Recognition of impairments of goodwill would result in a charge to income in the period in which the impairment occurred, which may negatively affect our financial condition, results of operations and total capitalization. The effects of any such impairment could be material and could make it more difficult to maintain our credit ratings, secure financing on attractive terms, maintain compliance with debt covenants and meet the expectations of our regulators.

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 the pension and postretirement benefit 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. If interest rates decrease, our liabilities would increase, potentially increasing benefit expense and funding requirements. Further, changes in demographics, 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 market data compels us to reduce the discount rate used in our assumptions, our benefit obligations could be materially increased, which could adversely affect our financial position, results of operations and cash flows.

New accounting standards or changes to existing accounting standards could materially impact how we report our results of operations, cash flow 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. These changes are beyond our control, can be difficult to predict and could materially impact how we report our results of operations, cash flow 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 flow 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. Such compliance permits us to, among other things, disclose and report financial and other information in connection with the recovery of our costs and with the reporting requirements under federal securities, tax and other laws and regulations.

We have 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 and 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 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 or AWCC's ability to access the capital markets.

Additional Risks Related to Our Market-Based Businesses

We (excluding our regulated subsidiaries) provide performance guarantees with respect to certain obligations of our Market-Based Businesses, including financial guarantees or deposits, to our public-sector and public clients, and these clients may seek to enforce the guarantees if our Market-Based Businesses do not satisfy these obligations.

Under the terms of some of our agreements for the provision of services to water and wastewater facilities with municipalities, other governmental entities and other customers, American Water (excluding our regulated subsidiaries) provides guarantees of specified performance obligations of our Market-Based Businesses, including financial guarantees or deposits, primarily related to MSG. In the event our Market-Based Businesses fail to perform these obligations, the entity holding the guarantees may seek to enforce the performance commitments against American Water (excluding our regulated subsidiaries) 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, 2019, we had remaining performance commitments as measured by remaining contract revenue totaling approximately $5.4 billion related to MSG's contracts, and this amount is likely to increase if the number of 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.

Our Market-Based Businesses' operations under MSG 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 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 anticipated 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 barred 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.

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 it leases office space, equipment and furniture from certain of its 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;
- 520 groundwater treatment plants;
- 140 wastewater treatment plants;
- 52,500 miles of transmission, distribution and collection mains and pipes;
- 1,000 groundwater wells;
- 1,500 water and wastewater pumping stations;
- 1,300 treated water storage facilities; and
- 76 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 of its Market-Based Businesses 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

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. 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 a 1995 order of the SWRCB. In July 2016, at the request of Cal Am and several Monterey County government agencies, the SWRCB issued the 2016 Order approving the 2021 Deadline.

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.

The 2016 Order provides that if the CPUC authorizes Cal Am to acquire more than 1,000 acre-feet per year of water from a source other than the Water Supply Project, proponents of the alternative water source could submit revised milestones to the SWRCB for consideration. In May 2018, certain parties to the Water Supply Project proceeding submitted a petition to the SWRCB to add parallel milestones to the 2009 Order for 2019, 2020, and 2021, based on the proposed expansion of the Pure Water Monterey project, another groundwater replenishment project under construction on the Monterey peninsula. Petitioners claim that compliance with the alternate milestones would still provide for cessation of Cal Am's unauthorized diversions from the Carmel River by 2021. A preliminary report on feasibility concluded that the expanded Pure Water Monterey project could provide an additional 2,250 acre-feet of water per year. Cal Am believes that (i) the petition is premature, (ii) the expanded Pure Water Monterey project is not yet a sufficiently certain or reliable water supply and, even if construction is successfully completed, would provide an insufficient quantity of water to allow full compliance with the 2009 Order, and (iii) the imposition of parallel milestones would distract from completion of the Water Supply Project. On December 13, 2019, the SWRCB dismissed the petition without prejudice.

Cal Am continues to work constructively with all appropriate agencies to provide necessary information in connection with obtaining required approvals for the Water Supply Project. However, based on the matters discussed below in "Monterey Peninsula Water Supply Project," there can be no assurance that the Water Supply Project in its current configuration will be completed on a timely basis, if ever. Due to the delay in the approval schedule, Cal Am currently does not believe that it will be able to fully comply with the diversion reduction requirements and other remaining requirements under the 2009 Order and the 2016 Order, including the 2021 Deadline. The CPUC's final decision approving the Water Supply Project permits recovery of all of Cal Am's prudently incurred costs associated therewith, subject to the frameworks set forth in the final decision related to cost caps, O&M costs, financing, ratemaking and contingency matters. Cal Am currently believes that its expenditures to date have been prudent and necessary to comply with the 2009 Order and the 2016 Order. Further attempts to comply with the 2009 Order and the 2016 Order, or the 2021 Deadline, may result in material additional costs or obligations to Cal Am, and failure to comply could lead to fines and penalties against Cal Am.

Regional Desalination Project Litigation

Review of CPUC-Approved Settlement Agreement

The Regional Desalination Project (the "RDP") involved the construction of a desalination facility in the City of Marina, north of Monterey. The RDP was intended to, among other things, eliminate unauthorized diversions from the Carmel River as required under the 2009 Order. In December 2010, the CPUC approved the RDP, which was to be implemented through a Water Purchase Agreement and ancillary agreements (collectively, the "Agreements") among the Marina Coast Water District ("MCWD"), the Monterey County Water Resources Agency ("MCWRA") and Cal Am. In 2011, due to a conflict of interest concerning a former member of MCWRA's Board of Directors, MCWRA stated that the Agreements were void, and, as a result, Cal Am terminated the Agreements. In April 2015, the CPUC approved a settlement agreement among Cal Am, MCWRA and the County of Monterey to resolve these matters among the parties signing the agreement. In March 2016, the Supreme Court of California granted MCWD's petition for review of the CPUC approval, and following the court's disposition of a related issue in another case, MCWD's petition for review of the CPUC-approved settlement agreement was remanded to the CPUC. On September 19, 2019, the CPUC issued a decision affirming its prior decisions with respect to the settlement agreement that resolved matters among the parties thereto associated with the termination of the RDP agreements, after considering the issue remanded by the California Supreme Court.

Cal Am's Action for Damages Following RDP Termination

In October 2012, Cal Am filed a Complaint for Declaratory Relief against MCWRA and MCWD, which was ultimately transferred to the San Francisco County Superior Court, seeking a determination as to whether the Agreements are void as a result of the alleged conflict of interest. In June 2015, the court entered a final judgment agreeing with Cal Am's position that four of the five Agreements are void, and one, the credit line agreement, is not void. In November 2016, the Supreme Court of California denied MCWD's final appeal of this judgment, which allows further proceedings, discussed below, to determine the amount of damages that may be awarded in the proceeding.

In July 2015, Cal Am and MCWRA filed a Complaint in San Francisco County Superior Court against MCWD and RMC Water and Environment ("RMC"), a private engineering consulting firm which has since been acquired by a national engineering, science and operations company, seeking to recover compensatory damages in excess of $10 million associated with the failure of the RDP, as well as punitive and treble damages, statutory penalties and attorneys' fees. Shortly thereafter, complaints seeking similar damages were filed in the same court by MCWD and RMC against Cal Am and MCWRA in excess of $19 million in the aggregate. In December 2015, the court consolidated all of these complaints into a single action. On February 15, 2019, the court granted Cal Am's motion for summary judgment, and as a result, no claims remain pending against Cal Am in this action. On February 25, 2019, the court granted RMC's motion for judgment on the pleadings as to certain of Cal Am's tort claims against it. On June 20, 2019, the court granted MCWD's motion for summary judgment related to Cal Am's tort claims against MCWD, which Cal Am appealed to the California Court of Appeal, and on January 14, 2020, this appeal was denied. On January 17, 2019, a motion filed by MCWD for summary judgment against Cal Am relating to the contract claims in Cal Am's complaint was denied.

Trial in this lawsuit had been scheduled to take place in January 2020. On January 27, 2020, the parties to this lawsuit reached a tentative agreement, which was entered into the court record and would resolve the litigation in part without trial. Under the terms of this tentative agreement, MCWD and RMC would pay Cal Am an aggregate of $5.2 million in settlement of Cal Am's contract claims against MCWD and all claims against RMC relating to the RDP. Under this agreement, Cal Am's and MCWRA's right to appeal the dismissal of their tort claims against MCWD would be expressly reserved. A draft settlement agreement is being reviewed and negotiated by the parties. Once executed, the settlement agreement would be subject to approval of the San Francisco County Superior Court.

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 September 2016, the CPUC unanimously approved a 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 costs, subject to meeting certain criteria. If construction costs exceed $50 million, Cal Am would be allowed to seek additional cost recovery.

In September 2018, the CPUC unanimously adopted a final decision finding that (i) the Water Supply Project, based on Cal Am's request for a 6.4 million gallons per day desalination plant, meets the CPUC's requirements for a CPCN, (ii) the issuance of the final decision should not be delayed, and (iii) an additional procedural phase was not necessary to consider alternative projects. The CPUC's decision directs Cal Am to enter into negotiations regarding expansion of the GWR Project between Monterey One Water and the MPWMD and to indicate whether Cal Am plans to file an application for approval of an agreement to purchase additional water from the GWR Project. The decision notes, however, that the CPUC will only consider such an application if the Water Supply Project is delayed such that Cal Am would not be able to meet the 2021 Deadline. The decision accepts Cal Am's estimates of future water demand in Monterey and concludes that the Water Supply Project is the best project to address those needs, and adopts Cal Am's most recent cost estimates. The decision also allows Cal Am to earn an allowance for funds used during construction, or AFUDC, at a rate representative of its actual financing costs. The final decision adopted frameworks as to cost caps, O&M costs, financing, ratemaking and contingency matters.

In addition, the CPUC final decision imposes numerous reporting and filing requirements to ensure the expenditures for the Water Supply Project are reasonable, including that the financing is the lowest cost and most beneficial for ratepayers, and that construction is progressing in a timely manner and within the authorized cost caps. The reasonableness of Water Supply Project costs will be reviewed in the first general rate case filed by Cal Am after the Water Supply Project becomes operational. 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.

In February 2019, the City of Marina and MCWD filed petitions for writ of review before the Supreme Court of California challenging the sufficiency of the final Environmental Impact Report/Environmental Impact Statement adopted by the CPUC in September 2018, which the court declined to consider on August 28, 2019.

On July 2, 2019, Cal Am notified MPWMD and Monterey One Water (collectively, the "Agencies") that an event of default occurred under the water purchase agreement for the GWR Project because the Agencies failed to deliver to Cal Am by July 1, 2019 advanced treated recycled water produced by the GWR Project. Under the water purchase agreement, upon the occurrence of this event of default, Cal Am had the right to terminate the water purchase agreement immediately. Cal Am has elected not to exercise its right to terminate the water purchase agreement at this time, but in its notification to the Agencies, Cal Am expressly reserved its right to terminate the water purchase agreement until such time as the Agencies commence their required delivery of water from the GWR Project. On July 16, 2019, MPWMD and Monterey One Water responded to Cal Am's event of default notice and estimated that water delivery would begin by mid-October 2019. On December 12, 2019, Cal Am sent a letter to the Agencies requesting a status update with respect to the event of default. On January 2, 2020, Cal Am notified the Agencies that a second event of default occurred under the water purchase agreement because the Agencies failed to achieve the Performance Start Date (the date upon which MPWMD's performance obligations under the water purchase agreement were to commence) by January 1, 2020. Under the water purchase agreement, upon the occurrence of this event of default, Cal Am had the right to terminate the water purchase agreement immediately. Cal Am has elected not to exercise its right to terminate the water purchase agreement at this time, but in its notification to the Agencies, Cal Am expressly reserved its right to terminate the water purchase agreement until such time as the Performance Start Date has occurred. On January 9, 2020, the Agencies responded to Cal Am's December 12, 2019 and January 2, 2020 letters. In the response, the Agencies acknowledged they remain in default under the water purchase agreement but indicated that corrective action is being taken to attain the Performance Start Date in the near future.

On April 17, 2019, Water Ratepayers Association of the Monterey Peninsula (“WRAMP”), a citizens’ advocacy group, filed an amended complaint in Monterey County Superior Court asserting a “qui tam” claim under the California False Claims Act on behalf of itself and the State of California against Cal Am and certain environmental consultants who worked on the CPUC’s environmental analysis of the MPWSP. The State Attorney General declined to proceed with this action after it was originally filed in 2016. On July 10, 2019, defendants filed a joint demurrer challenging the legal sufficiency of the allegations of the amended complaint. At an August 27, 2019 hearing on the demurrer, the court dismissed the petition without leave to amend. On October 17, 2019, WRAMP filed motions seeking clarification and a reconsideration of the court’s ruling. A hearing on these motions was set for December 3, 2019, but on November 26, 2019, WRAMP abandoned its motions and instead filed an appeal of the court’s dismissal. This appeal remains pending.

Coastal Development Permit Application

In June 2018, Cal Am submitted a coastal development permit application to the City of Marina for those project components of the Water Supply Project located within the City of Marina’s coastal zone. Members of the City’s Planning Commission, as well as City councilpersons, have publicly expressed opposition to the Water Supply Project. On March 7, 2019, the City of Marina Planning Commission adopted a resolution denying Cal Am’s coastal development permit application. Cal Am appealed the Marina Planning Commission's decision to the City Council, which set a public hearing on the appeal for April 30, 2019. On April 25, 2019, Cal Am submitted a letter to the City challenging the impartiality of the City and three of its council members with respect to the Water Supply Project. On April 29, 2019, the City informed Cal Am that it intended to proceed with the hearing with the participation of the challenged City Council members. As a result, on April 29, 2019, Cal Am notified the City that it was withdrawing its appeal, as Cal Am believes it could not receive a fair and impartial hearing before the City Council.

On May 10, 2019, the City issued a notice of final local action based upon the Marina Planning Commission’s decision. On May 22, 2019, Cal Am appealed this decision to the California Coastal Commission (the “Coastal Commission”), as permitted under the City’s code and the California Coastal Act. On October 28, 2019, staff of the Coastal Commission issued a report recommending a denial of Cal Am’s application for a coastal development permit with respect to the Water Supply Project, largely based on a memorandum prepared by the general manager of the MPWMD that contradicted findings made by the CPUC in its final decision approving the Water Supply Project. Staffs of the CPUC and the Coastal Commission met to discuss the Coastal Commission’s staff recommendation, at which time the CPUC raised questions about the Coastal Commission staff’s findings on water supply and demand, groundwater impacts and other matters. On November 4, 2019, Coastal Commission staff released an addendum to the staff report, concluding that additional groundwater modeling was needed before staff could find that the Water Supply Project would not prevent depletion of groundwater supplies. At its November 14, 2019 hearing on both the appeal from the City of Marina’s denial and Cal Am’s application for a coastal development permit within the Coastal Commission’s original jurisdiction, Coastal Commission staff advised that no vote would be taken at the meeting and that further investigation was required in light of the CPUC staff’s questions. The hearing was continued to a later date. On January 28, 2020, Coastal Commission staff recommended to Cal Am that it withdraw its application for a coastal development permit within the Coastal Commission’s original jurisdiction and resubmit such application at a later date, as the staff believes that its additional investigation could not be completed in time for a vote on Cal Am’s existing application. The staff indicated that such a withdrawal would not affect Cal Am’s appeal of the City of Marin’s denial, which would remain pending. Cal Am has declined to withdraw its application, and instead, on February 12, 2020, Cal Am and the Coastal Commission entered into a stipulation extending by 90 days, to July 24, 2020, the deadline for the Coastal Commission to vote on Cal Am’s original jurisdiction application.

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 the County of Monterey prior to commencement of construction. On April 24, 2019, the County’s Planning Commission voted to approve the permit. On July 15, 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. On August 21, 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. On October 9, 2019, after a hearing, the court denied, without prejudice, MCWD’s motion for a preliminary injunction, but issued a stay of the County’s approval of the combined development permit, precluding commencement of physical construction of the desalination plant until November 19, 2019, at which time the parties were to advise the court of the Coastal Commission’s decision on Cal Am’s application for a coastal development permit for the slant wells needed to source water for the desalination plant. In the interim, Cal Am is allowed to continue to obtain permits needed for the desalination plant’s construction. On November 19, 2019, the parties informed the court that the Coastal Commission had continued its public hearing on the slant wells and had not yet made a determination about permitting the slant wells. In response, the court continued its stay until March 24, 2020.

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. 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, 2020. On November 27, 2019, Cal Am filed an application with the Coastal Commission for a permit amendment to allow the test slant well to remain in place and be maintained until February 28, 2021. A required lease obtained from the California State Lands Commission, as amended, will expire on December 16, 2022. Effective February 28, 2018, test slant well pumping ceased, except for minimal maintenance pumping activities, in accordance with Cal Am's coastal development permits.

In November 2015, MCWD filed a Petition for Writ of Mandate and Complaint for Declaratory and Injunctive Relief in Santa Cruz County Superior Court against the Coastal Commission and Cal Am challenging the amendment of the coastal development permits and seeking an injunction against further test well pumping. In orders issued in September 2016 and October 2017, the court denied MCWD's challenges. In January 2018, MCWD filed a notice of appeal of the court's judgment. On June 28, 2019, the California Court of Appeal dismissed MCWD's appeal. On July 15, 2019, MCWD filed a petition for rehearing with the Court of Appeal, which was denied on July 19, 2019. This decision is now final.

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. On November 26, 2019, the City of Marina notified CEMEX that, based on this 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. The City has requested a meeting with CEMEX as part of a mandatory dispute resolution process under the annexation agreement prior to filing a lawsuit. 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.

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 groundwater sustainability agency ("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 ("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 of Marina 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 the County's filing on December 18, 2019, and now lists the County as the exclusive GSA for the site.

On December 30, 2019, the City of Marina filed a lawsuit in the Supreme Court of California challenging the County's filing, and SDWR's acceptance of the filing, as the exclusive GSA for the CEMEX site. The City has named the County and its Board of Supervisors, the County GSA, and SDWR and its director as defendants, and the SVBGSA and its Board of Directors as real parties. The City seeks to invalidate the 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 is scheduled to be heard on February 18, 2020.

West Virginia Elk River Freedom Industries Chemical Spill

See Note 16—Commitments and Contingencies—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 WVAWC's West Relay pumping station located in the City of Dunbar. The failure of the main caused water outages and low pressure to 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 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 October 2017, WVAWC filed with the court a motion seeking to dismiss all of the *Jeffries* plaintiffs' counts alleging statutory and common law tort claims. Furthermore, WVAWC asserted that the Public Service Commission of West Virginia, and not the court, has primary jurisdiction over allegations involving violations of the applicable tariff, the public utility code and related rules. In May 2018, the court, at a hearing, denied WVAWC's motion to apply the primary jurisdiction doctrine, and in October 2018, the court issued a written order to that effect. On February 21, 2019, the court issued an order denying WVAWC's motion to dismiss the *Jeffries* plaintiffs' tort claims. On August 21, 2019, the court set a procedural schedule in this case, including a trial date of September 21, 2020. Discovery in this case is ongoing. On February 4, 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. A hearing on class certification is currently scheduled for March 11, 2020.

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 Water Main Break Class Action Litigation

On September 12, 2019, Tennessee-American Water Company, a wholly owned subsidiary of the Company ("TAWC"), experienced a break of 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 break by early morning on September 14, 2019, and restored full water service by the afternoon on 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 the Service Company (collectively, the "Tennessee-American Water Defendants"), on behalf of an alleged class of individuals or entities who lost water service or suffered monetary losses as a result of the Chattanooga main break (the "Tennessee Plaintiffs"). The complaint alleges breach of contract and negligence against the Tennessee-American Water Defendants, as well as an equitable remedy of piercing the corporate veil. The Tennessee Plaintiffs seek 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.

On November 22, 2019, the Tennessee-American Water Defendants filed a motion to dismiss the complaint for failure to state a claim upon which relief may be granted, and, with respect to the Company, for lack of personal jurisdiction. A hearing on this motion is scheduled for February 18, 2020.

The Tennessee-American Water Defendants believe that they have meritorious defenses to the claims raised in this class action complaint, and they are vigorously defending themselves against these allegations.

CSG — East Palo Alto Water System Voluntary Report

In April 2017, AWE, the parent entity of CSG, voluntarily reported to the Division of Drinking Water of the SWRCB potential violations of the California Safe Drinking Water Act (the "CSDWA") in connection with AWE's operation of the City of East Palo Alto's water distribution system. Upon the resignation of the system's general manager in March 2017, AWE discovered that it may have operated the system without a properly certified operator for two years, the triennial LCR sampling was not completed, and the 2015 Consumer Confidence Report improperly reported data for lead and copper samples from the system's upstream water provider. Promptly after discovering these issues, AWE engaged an outside law firm to conduct an internal investigation and reported the results of that investigation to the SWRCB.

On June 15, 2017, the SWRCB issued to AWE a citation that required AWE to, among other things: comply with regulations related to water operator certifications, lead and copper tap sampling requirements and the publishing of a Consumer Confidence Report; provide public notification of the LCR violation; and prepare a corrective action plan to evaluate the causes leading to these incidents and measures to be taken to prevent recurrence of future incidents. The citation did not impose on AWE any monetary penalties, but the SWRCB reserved the right to take additional enforcement action.

In October 2017, the SWRCB advised AWE that it is in compliance with all of the directives and relevant statutory and administrative provisions specified in the SWRCB's June 2017 citation. In February 2018, the SWRCB referred this matter to the San Mateo County, California District Attorney's office for further investigation. AWE continues to cooperate with the SWRCB, the City of East Palo Alto and the San Mateo County District Attorney regarding this matter. Proven violations of the CSDWA may result in civil and criminal penalties.

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 February 13, 2020, there were 180,974,719 shares of common stock outstanding held by approximately 2,546 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 from time to time 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, 2019, the Company repurchased an aggregate of 4,860,000 shares of its common stock under the program, including 350,000 shares repurchased during the first quarter of 2019. There were no repurchases of common stock in the last three quarters of 2019.

ITEM 6. SELECTED FINANCIAL DATA

	For the Years Ended December 31,				
(In millions, except per share data)	**2019**	**2018**	**2017**	**2016**	**2015**
Statement of Operations data:					
Operating revenues	$ 3,610	$ 3,440	$ 3,357	$ 3,302	$ 3,159
Net income attributable to common shareholders	621	567	426	468	476
Net income attributable to common shareholders per basic common share	$ 3.44	$ 3.16	$ 2.39	$ 2.63	$ 2.66
Net income attributable to common shareholders per diluted common share	3.43	3.15	2.38	2.62	2.64
Balance Sheet data:					
Total assets	$ 22,682	$ 21,223	$ 19,482	$ 18,482	$ 17,241
Long-term debt and redeemable preferred stock at redemption value	8,644	7,576	6,498	5,759	5,874
Other data:					
Cash dividends declared per common share	$ 2.00	$ 1.82	$ 1.66	$ 1.50	$ 1.36
Net cash provided by operating activities (a) (b)	1,383	1,386	1,449	1,289	1,195
Net cash used in investing activities (b)	(1,945)	(2,036)	(1,672)	(1,590)	(1,459)
Net cash provided by financing activities (a) (b)	494	726	207	328	290
Capital expenditures included in net cash used in investing activities	(1,654)	(1,586)	(1,434)	(1,311)	(1,160)

(a) The information for the years ended December 31, 2016 and 2015, has been revised to reflect the retrospective application of Accounting Standards Update 2016-09, *Improvements to Employee Share-Based Payment Accounting*, which was adopted by the Company as of January 1, 2017.

(b) The information for the years ended December 31, 2016 and 2015, has been revised to reflect the retrospective application of Accounting Standards Update 2016-18, *Restricted Cash*, which was adopted by the Company as of December 31, 2017.

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 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 1A—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 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 2018 compared to fiscal 2017, 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, 2018, filed with the SEC on February 19, 2019.

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 6,800 professionals who provide drinking water, wastewater and other related services to approximately 15 million people in 46 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 1,700 communities in 16 states in the United States, with over 3.4 million active customers with services provided by its water and wastewater networks. Services provided by the Company's utilities are generally subject to regulation by PUCs. The Company also operates market-based businesses that provide complementary services to residential and smaller commercial customers, the U.S. government on military installations, as well as municipalities, utilities and industrial customers, collectively presented as the "Market-Based Businesses." These Market-Based Businesses are not subject to regulation by state PUCs. See Item 1—Business for additional information.

Financial Results

Presented in the table below are the Company's diluted earnings per share, as determined in accordance with GAAP, and the Company's adjusted diluted earnings per share (a non-GAAP measure):

	For the Years Ended December 31,		
	2019	2018	2017
Diluted earnings per share (GAAP):			
Net income attributable to common shareholders	$ 3.43	$ 3.15	$ 2.38
Adjustments:			
Loss on sale of Keystone operations	0.24	—	—
Income tax impact	(0.05)	—	—
Net adjustment	0.19	—	—
Freedom Industries settlement activities	(0.02)	(0.11)	(0.12)
Income tax impact	0.01	0.03	0.05
Net adjustment	(0.01)	(0.08)	(0.07)
Gain on sale of Contract Services Group contracts	—	(0.08)	—
Income tax impact	—	0.02	—
Net adjustment	—	(0.06)	—
Keystone impairment charge	—	0.31	—
Income tax impact	—	(0.08)	—
Net loss attributable to noncontrolling interest	—	(0.01)	—
Net adjustment	—	0.22	—
Early extinguishment of debt at parent company	—	—	0.03
Income tax impact	—	—	(0.01)
Net adjustment	—	—	0.02
Impact of re-measurement from the TCJA	—	0.07	0.70
Total net adjustments	0.18	0.15	0.65
Adjusted diluted earnings per share (non-GAAP)	$ 3.61	$ 3.30	$ 3.03

For the year ended December 31, 2019, diluted earnings per share (GAAP) were $3.43, an increase of $0.28 per diluted share compared to the prior year, which includes the net adjustments presented in the table above and discussed in greater detail in the "Adjustments to GAAP" section below.

Excluding the net adjustments presented in the table above, adjusted diluted earnings per share (non-GAAP) were $3.61 for the year ended December 31, 2019, an increase of $0.31 per diluted share compared to the prior year.

These results were driven by continued growth in the Regulated Businesses from infrastructure investment, acquisitions and organic growth, and growth in the Market-Based Businesses, primarily from HOS's 2018 acquisition of Pivotal and from MSG's addition of two new military contracts in 2018 (Wright-Patterson Air Force Base and Fort Leonard Wood).

Adjustments to GAAP

Adjusted diluted earnings per share represents a non-GAAP financial measure and, as shown in the table above, is calculated as GAAP diluted earnings per share, excluding the impact of one or more of the following events: (i) a loss on the sale in the fourth quarter of 2019 of the Keystone operations; (ii) previously reported settlement activities related to the Freedom Industries chemical spill in West Virginia; (iii) a gain recognized in the third quarter of 2018 on the sale of the majority of CSG's O&M contracts; (iv) a goodwill and intangible impairment charge in the third quarter of 2018 related to the Keystone operations; (v) an early extinguishment of debt charge at parent company in the third quarter of 2017; and (vi) non-cash re-measurement charges recorded in the fourth quarters of 2017 and 2018 resulting from the impact of the change in the federal corporate income tax rate on the Company's deferred income taxes from the enactment of the TCJA.

The Company believes that this non-GAAP measure provides investors with useful information by excluding certain matters that may not be indicative of its ongoing operating results, and that providing this non-GAAP measure will allow investors to better understand the businesses' operating performance and facilitate a meaningful year-to-year comparison of the Company's results of operations. Although management uses this non-GAAP financial measure internally to evaluate its results of operations, the Company does not intend results reflected by this non-GAAP measure to represent results as defined by GAAP, and the reader should not consider them as indicators of performance. This non-GAAP financial measure is derived from the Company's consolidated financial information but is not presented in the financial statements prepared in accordance with GAAP. This measure should be considered in addition to, and not as a substitute for, measures of financial performance prepared in accordance with GAAP. In addition, this non-GAAP financial measure as defined and used above, may not be comparable to similarly titled non-GAAP measures used by other companies, and, accordingly, may have significant limitations on its use.

Growth—through capital investment in infrastructure and regulated acquisitions, as well as strategic growth opportunities in the Market-Based Businesses

The Company expects to continue 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, clean, reliable and affordable water and wastewater services to its customers, and (ii) regulated acquisitions to expand the Company's services to new customers. The Company also expects to continue to grow the Market-Based Businesses, which leverages its core water and wastewater competencies. In 2019, the Company invested $1.9 billion, primarily in the Regulated Businesses, as discussed below:

Regulated Businesses Growth and Optimization

- $1.7 billion capital investment in the Regulated Businesses, the majority for infrastructure improvements and replacements.
- $235 million to fund acquisitions in the Regulated Businesses, which added approximately 53,100 water and wastewater customers.
- The Company has entered into agreements for pending acquisitions in the Regulated Businesses to add approximately 44,200 customers.

On November 20, 2019, the Company and its New York subsidiary entered into a Stock Purchase Agreement with Liberty Utilities Co. ("Liberty"), pursuant to which Liberty will purchase all of the capital stock of the New York subsidiary (the "Stock Purchase") for an aggregate purchase price of approximately $608 million in cash, subject to adjustment as provided in that agreement. The New York subsidiary includes all of the water and wastewater assets of the Company's New York regulated utility operations, with approximately 125,000 customer connections in the State of New York. Algonquin Power & Utilities Corp., Liberty's parent company, executed and delivered an absolute and unconditional guaranty of the performance of all of Liberty's obligations under the stock purchase agreement.

The Stock Purchase is subject to various conditions, including obtaining regulatory approval, the expiration or termination of the applicable waiting period under the U.S. Hart-Scott-Rodino antitrust law and other customary closing conditions. The stock purchase agreement may be terminated by either party if the Stock Purchase is not completed by June 30, 2021, subject to extension for up to six months if all of the conditions to closing have been met, other than obtaining regulatory approvals. Liberty may also terminate the stock purchase agreement if any governmental authority initiates a condemnation or eminent domain proceeding against a majority of the consolidated properties of the New York subsidiary, taken as a whole. The Company currently estimates that the Stock Purchase is to be completed by early 2021. Accordingly, 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, 2019. See Note 4—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements for additional information.

Market-Based Businesses Growth and Optimization

During January 2020, HOS was selected by the San Francisco Public Utilities Commission (“SFPUC”) to offer optional water line and sewer line protection services to homeowners across the City and County of San Francisco. This arrangement provides over 100,000 eligible San Francisco homeowners, served by the SFPUC, the opportunity to purchase optional protection plans from the Company for the water line that runs from a residential property to the connection with the water meter and the sewer line that runs from the residential property to the sewer main.

MSG was awarded contracts for ownership, operation and maintenance of the water and wastewater systems at Joint Base San Antonio in Texas, effective September 26, 2019, and the United States Military Academy at West Point, New York, effective September 30, 2019. Highlights of these contract awards are detailed below:

- Joint Base San Antonio is comprised of Randolph Air Force Base, Fort Sam Houston, Camp Bullis and Lackland Air Force Base. The installation spans 46,539 acres, across 11 geographically separated parcels of land. The contract award includes estimated revenues of approximately $448 million over a 50-year period, subject to an annual economic price adjustment.

- The United States Military Academy is located at West Point, New York, the oldest continuously operated Army post in the United States. The institution’s campus, central post and training areas expand across nearly 16,000 acres, and is home to a student body of approximately 4,400 cadets. The total contract award includes estimated revenues of approximately $519 million over a 50-year period, subject to an annual economic price adjustment.

On December 12, 2019, as part of a strategic review undertaken by the Company, the Company sold all of its interest in its Keystone operations to a natural gas and oil industry investment group, for total cash consideration of $31 million, subject to adjustment based on post-closing working capital. As a result of the sale, the Company recorded a pre-tax loss on sale of $44 million, or $35 million after-tax, during the fourth quarter of 2019, as discussed above. See Note 4—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements for additional information.

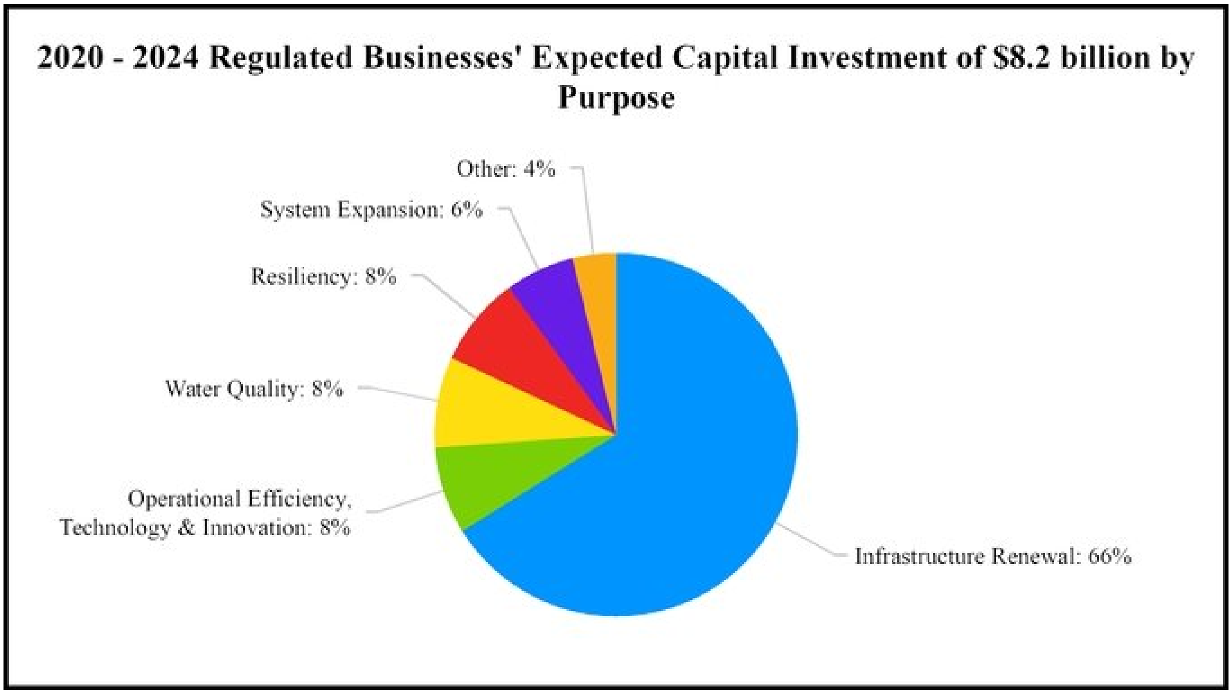
Future Growth

Looking forward, the Company expects to invest between $8.8 billion to $9.4 billion from 2020 to 2024, and between $20 billion to $22 billion from 2020 to 2029, including a range of $1.7 billion to $1.9 billion in 2020. The Company’s expected future investments include:

- capital investment for infrastructure improvements in the Regulated Businesses of $8.2 billion over the next five years, and between $18.2 billion and $19.2 billion over the next 10 years, including $1.6 billion expected in 2020; and

- growth from acquisitions in the Regulated Businesses to expand the Company’s water and wastewater customer base of between $600 million to $1.2 billion over the next five years, and between $2 billion to $3 billion over the next 10 years, including a range of $100 million to $300 million expected in 2020.

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:



Operational Excellence

The Company continues to strive for industry-leading operational efficiency, driven largely by technology. The Company’s technology investments are aimed at enhancing its customer experience and operational efficiency.

- In 2019:
  - the Regulated Businesses achieved an adjusted O&M efficiency ratio (a non-GAAP measure) of 34.5% for the year ended December 31, 2019, compared to 35.6% and 35.3% for the years ended December 31, 2018 and 2017, respectively. The improvement in the Company’s adjusted O&M efficiency ratio in 2019, when compared to 2018, was due to an increase in operating revenues as well as continued focus on operating costs of the Regulated Businesses;
  - the Company worked to decrease costs and deploy capital efficiently, including using trenchless technologies for pipeline rehabilitation and leveraging its buying power and strategic sourcing to drive cost savings;
  - the Company continued its commitment to water quality and the environment by leveraging new technologies; the Company now has advanced water quality sensors at all of its major drinking water intake sites and is automating its environmental reporting and compliance systems; and
  - the Company implemented other technology tools that will enhance communication, collaboration and mobility, enable further business insights and process automation, and increase self-service capabilities, to help its employees work safely and efficiently, and enhance the customer experience.
- Looking forward, the Company will focus on technology and efficiency to:
  - be the leader in optimizing technology across the water and wastewater industry, with a focus on specific, innovative projects that will set it apart from other utilities; aiding the Company in serving its customers with greater ease, making the Company’s employees safer and helping the Company operate more efficiently; and
  - further improve the Company’s adjusted O&M efficiency ratio.

The Company's adjusted O&M efficiency ratio is defined as its operation and maintenance expenses from the Regulated Businesses, divided by the pro forma operating revenues from the Regulated Businesses, where both operation and maintenance expenses and pro forma operating revenues were adjusted to eliminate purchased water expense. Also excluded from operation and maintenance expenses are the allocable portion of non-operation and maintenance support services costs, mainly depreciation and general taxes, which are reflected in the Regulated Businesses segment as operation and maintenance expenses, but for consolidated financial reporting purposes, are categorized within other line items in the accompanying Consolidated Statements of Operations.

In addition to the adjustments discussed above, for period-to-period comparability purposes, the estimated impact of the TCJA on operating revenues for the Regulated Businesses has been presented on a pro forma basis for all periods prior to January 1, 2018, as if the lower federal corporate income tax rate was in effect for these periods. The Company also made the following adjustments to the O&M efficiency ratio: (i) excluded from operation and maintenance expenses is the impact of certain Freedom Industries chemical spill settlement activities recognized in 2017, 2018 and 2019 (see Note 16—Commitments and Contingencies in the Notes to Consolidated Financial Statements for additional information); and (ii) excluded from operation and maintenance expenses is the impact of the Company's January 1, 2018 adoption of Accounting Standards Update 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Post-Retirement Benefit Cost* ("ASU 2017-07"), for 2017, 2018 and 2019. The items discussed above were excluded from the 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 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 is intended to enhance an investor's overall understanding of the Company's operating performance. The Company's adjusted O&M efficiency ratio is not an accounting measure that is based on GAAP, may not be comparable to other companies' operating measures and should not be used in place of the GAAP information provided elsewhere in this Form 10-K.

Presented in the table below is the calculation of the Company's adjusted 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)	**2019**	**2018**	**2017**
Total operation and maintenance expenses (a)	$ 1,544	$ 1,479	$ 1,369
Less:			
Operation and maintenance expenses—Market-Based Businesses	393	362	337
Operation and maintenance expenses—Other (a)	(31)	(42)	(44)
Total operation and maintenance expenses—Regulated Businesses (a)	1,182	1,159	1,076
Less:			
Regulated purchased water expenses	135	133	128
Allocation of non-operation and maintenance expenses	31	31	29
Impact of Freedom Industries settlement activities (b)	(4)	(20)	(22)
Adjusted operation and maintenance expenses—Regulated Businesses (i)	$ 1,020	$ 1,015	$ 941
Total operating revenues	$ 3,610	$ 3,440	$ 3,357
Less:			
Pro forma adjustment for impact of the TCJA (c)	—	—	166
Total pro forma operating revenues	3,610	3,440	3,191
Less:			
Operating revenues—Market-Based Businesses	539	476	422
Operating revenues—Other	(23)	(20)	(23)
Total operating revenues—Regulated Businesses	3,094	2,984	2,792
Less:			
Regulated purchased water revenues (d)	135	133	128
Adjusted operating revenues—Regulated Businesses (ii)	$ 2,959	$ 2,851	$ 2,664
Adjusted O&M efficiency ratio—Regulated Businesses (i) / (ii)	34.5%	35.6%	35.3%

(a) Includes the impact of the Company's adoption of ASU 2017-07, *Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Post-Retirement Benefit,* on January 1, 2018.

(b) Includes the impact of settlements in 2017 and 2018 with two of the Company's general liability insurance carriers, and a reduction in the first quarter of 2019 of a liability, each related to the Freedom Industries chemical spill.

(c) Includes the estimated impact of the TCJA on operating revenues for the Regulated Businesses for all periods presented prior to January 1, 2018, as if the lower federal corporate income tax rate was in effect for these periods.

(d) 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, assuming a constant water sales volume, resulting from general rate case authorizations that became effective during 2017 through 2019:

(In millions)	2019	2018	2017
General rate cases by state:			
Indiana (a)	$ 4	$ —	$ —
Kentucky (effective June 28, 2019)	13	—	—
California (b)	4	10	5
New York (c)	4	5	4
West Virginia (effective February 25, 2019)	19	—	—
Maryland (effective February 5, 2019)	1	—	—
New Jersey (d)	—	40	—
Missouri (effective May 28, 2018)	—	33	—
Pennsylvania (effective January 1, 2018)	—	62	—
Virginia (e)	—	—	5
Iowa (effective March 27, 2017)	—	—	4
Illinois (effective January 1, 2017)	—	—	25
Total general rate case authorizations	$ 45	$ 150	$ 43

(a) The Company's Indiana subsidiary received an order approving a joint settlement agreement with all major parties with respect to its general rate case filing, authorizing annualized incremental revenues of $4 million in the first rate year, effective July 1, 2019, and $13 million in the second rate year, effective approximately May 1, 2020.

(b) The Company's California subsidiary received approval for the second rate year (2019) step increase associated with its most recent general rate case authorization, effective May 11, 2019. On December 13, 2018, a settlement in this subsidiary's general rate case filing was approved, authorizing rates effective January 1, 2018. In 2017, step rates were effective January 13 through February 2.

(c) The Company's New York subsidiary implemented its third step increase associated with its most recent general rate case authorization, effective April 1, 2019.

(d) The effective date was June 15, 2018. As part of the resolution of the general rate case, the Company's New Jersey subsidiary's customers received refunds for the amount of provisional rates implemented as of June 15, 2018 and collected, to the extent that such rates exceeded the final rate increase plus interest.

(e) The effective date was May 24, 2017, authorizing the implementation of interim rates as of April 1, 2016.

Pending General Rate Case Filings

There is no assurance that all or any portion of the following requests will be granted.

On December 16, 2019, the Company's New Jersey subsidiary filed a general rate case requesting $88 million annualized incremental revenues.

On November 12, 2019, the Company's California subsidiary filed for the third year (2020) step increase requesting $5 million associated with its most recent general case authorization. Step rates became effective on January 1, 2020, subject to refund. As of February 14, 2020, five of the seven districts' step increases were approved representing $4 million of the $5 million request.

On July 1, 2019, the Company's California subsidiary filed a general rate case requesting $26 million annualized incremental revenues for 2021, and increases of $10 million and $11 million in the escalation year of 2022 and the attrition year of 2023, respectively. On January 22, 2020, the Company's California subsidiary submitted a request to delay by one year its cost of capital filing and maintain its current authorized cost of capital through 2021. If the extension is not granted, the subsidiary may file the cost of capital application by May 1, 2020 to adjust its authorized cost of capital beginning January 1, 2021.

In 2018, the Company's Virginia subsidiary filed a general rate case requesting $5 million in annualized incremental revenues. On May 1, 2019, interim rates under bond and subject to refund were implemented and will remain in effect until a final decision is received in this general rate case.

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, resulting from infrastructure surcharge authorizations that became effective during 2017 through 2019:

(In millions)	2019	2018	2017
Infrastructure surcharges by state:			
Missouri (a)	$ 14	$ 6	$ 6
Pennsylvania (b)	11	—	1
Tennessee (effective September 1, 2019, April 10, 2018 and March 14, 2017)	1	1	2
New York (effective August 1, 2019)	2	—	—
New Jersey (c)	15	—	14
Illinois (effective January 1, 2019 and January 1, 2018)	8	3	—
West Virginia (effective January 1, 2019, January 1, 2018 and January 1, 2017)	2	3	2
Indiana (effective March 14, 2018 and March 22, 2017)	—	7	8
Virginia (effective March 1, 2018)	—	1	—
Total infrastructure surcharge authorizations	$ 53	$ 21	$ 33

(a) In 2019, $5 million was effective December 21 and $9 million was effective June 24. In 2018, the effective date was December 15. In 2017, the effective date was December 15.

(b) In 2019, $6 million was effective October 1, $3 million was effective July 1 and $2 million was effective April 1. In 2017, the effective date was January 1.

(c) In 2019, the effective date was July 1. In 2017, $4 million was effective December 10 and $10 million was effective June 1.

Presented in the table below are annualized incremental revenues, assuming a constant water sales volume, resulting from infrastructure surcharge authorizations that became effective after January 1, 2020:

(In millions)	Amount
Infrastructure surcharge filings by state:	
Pennsylvania (effective January 1, 2020)	$ 10
New Jersey (effective January 1, 2020)	10
Illinois (effective January 1, 2020)	7
West Virginia (effective January 1, 2020)	3
Total infrastructure surcharge filings	$ 30

Pending Infrastructure Surcharge Filings

On November 15, 2019, the Company’s Tennessee subsidiary filed for an infrastructure surcharge requesting $2 million in additional annualized revenues. There is no assurance that all or any portion of this request will be granted.

Tax Matters

Tax Cuts and Jobs Act

On December 22, 2017, the TCJA was signed into law, which, among other things, enacted significant and complex changes to the Code, including a reduction in the federal corporate income tax rate from 35% to 21% as of January 1, 2018, and certain other provisions related specifically to the public utility industry, including continuation of interest expense deductibility, the exclusion from utilizing bonus depreciation and the normalization of deferred income taxes. In 2018, the Company’s 14 regulatory jurisdictions began to seek to address the impacts of the TCJA. The Company has adjusted customer rates to reflect the lower income tax rate in 11 states. In one of those 11 states, a portion of the tax savings is being used to reduce certain regulatory assets. In one additional state, the Company is using the tax savings to offset additional capital investment and to reduce a regulatory asset. Proceedings in the other two regulatory jurisdictions remain pending.

The enactment of the TCJA required a re-measurement of the Company's deferred income taxes that materially impacted its 2017 results of operations and financial position. The portion of this re-measurement related to the Regulated Businesses was substantially offset by a regulatory liability, as the Company believes it is probable that the excess accumulated deferred income taxes ("EADIT") created by the TCJA will be used to benefit its regulated customers in future rates. Six of the Company's regulated subsidiaries are amortizing EADIT and crediting customers, including one which is using the EADIT to offset future infrastructure investments. The Company expects the timing of the amortization of EADIT credits by the eight remaining regulated subsidiaries to be addressed in pending or future rate cases or other proceedings.

On March 23, 2018, the Consolidated Appropriations Act of 2018 (the "CAA") was signed into law. The CAA corrects and clarifies some aspects of the TCJA related to bonus depreciation eligibility. Specifically, property that was either acquired, or as to which construction began prior to September 27, 2017, is eligible for bonus depreciation. The Company had a federal NOL carryover balance as of December 31, 2019 that is not expected to be fully utilized until 2020, which is when the Company expects that it will become a cash taxpayer for federal income tax purposes.

Legislative Updates

In Illinois, the Governor signed a 10-year extension of the Water Systems Viability Act, Illinois' fair market value legislation, in 2018, which became effective in 2019. In addition to extending the act, the updated law removes the previous restriction on the size of water or wastewater systems that can be acquired and allows all municipalities to take advantage of the benefits of the program.

During 2019, the Company's regulatory jurisdictions enacted the following legislation that has been approved and is effective as of December 31, 2019:

- Indiana Senate Enrolled Act 472 allows non-municipal utilities to benefit from full appraisal recovery of their assets in a sale.
- Indiana House Enrolled Act 1406 established the first state appropriation for water infrastructure investment at $20 million per year.
- Indiana Senate Enrolled Act 4 extends leveling legislation to require biannual water loss audits and establishes the state revolving fund administrator as the central coordinator for water issues in the state.
- In Pennsylvania, House Bill 751, now Act 53 of 2019, allows water and wastewater utilities responsible for funding the income taxes on taxable contributions and advances to record the income taxes paid in accumulated deferred income taxes for accounting and ratemaking purposes.
- In West Virginia, House Bill 117 allows qualified low income customers to apply for a 20% discount on their wastewater bill.

Consolidated Results of Operations

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

	For the Years Ended December 31,		
	2019	2018	2017
(Dollars in millions)			
Operating revenues	$ 3,610	$ 3,440	$ 3,357
Operating expenses:			
Operation and maintenance	1,544	1,479	1,369
Depreciation and amortization	582	545	492
General taxes	280	277	259
Loss (gain) on asset dispositions and purchases	34	(20)	(16)
Impairment charge	—	57	—
Total operating expenses, net	2,440	2,338	2,104
Operating income	1,170	1,102	1,253
Other income (expense):			
Interest, net	(382)	(350)	(342)
Non-operating benefit costs, net	16	20	(9)
Loss on early extinguishment of debt	(4)	(4)	(7)
Other, net	33	19	17
Total other income (expense)	(337)	(315)	(341)
Income before income taxes	833	787	912
Provision for income taxes	212	222	486
Consolidated net income	621	565	426
Net loss attributable to noncontrolling interest	—	(2)	—
Net income attributable to common shareholders	$ 621	$ 567	$ 426

The main factors contributing to the $54 million increase in net income attributable to common shareholders for the year ended December 31, 2019 are described in "Segment Results of Operations" below.

Segment Results of Operations

The Company's operating segments are comprised of the revenue-generating components of its business for which separate financial information is internally produced and 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. The Company also operates market-based businesses that, individually, do not meet the criteria of a reportable segment in accordance with GAAP, and are collectively presented as the Market-Based Businesses, which is consistent with how management assesses the results of these businesses.

Regulated Businesses Segment

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

(Dollars in millions)	For the Years Ended December 31, 2019	2018	2017
Operating revenues	$ 3,094	$ 2,984	$ 2,958
Operation and maintenance	1,182	1,159	1,076
Depreciation and amortization	529	500	462
General taxes	262	261	244
(Gain) on asset dispositions and purchases	(10)	(7)	(16)
Other income (expenses)	(262)	(247)	(266)
Income before income taxes	869	826	925
Provision for income taxes	215	224	367
Net income attributable to common shareholders	654	602	559

Operating Revenues

Presented in the tables below is information regarding the main components of the Regulated Businesses' operating revenues, with explanations for the material variances provided in the ensuing discussions:

(Dollars in millions)	For the Years Ended December 31, 2019	2018	2017
Water services:			
Residential	$ 1,735	$ 1,663	$ 1,644
Commercial	639	616	601
Fire service	142	137	139
Industrial	138	136	137
Public and other	230	216	244
Total water services	2,884	2,768	2,765
Wastewater services	167	161	142
Other (a)	43	55	51
Total operating revenues	$ 3,094	$ 2,984	$ 2,958

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

(Gallons in millions)	For the Years Ended December 31, 2019	2018	2017
Billed water services volumes:			
Residential	167,470	172,827	174,420
Commercial	81,268	82,572	82,147
Industrial	37,242	38,432	39,404
Fire service, public and other	50,501	50,651	51,341
Total billed water services volumes	336,481	344,482	347,312

In 2019, operating revenues increased $110 million primarily due to a:

- $132 million increase from authorized rate increases, including infrastructure surcharges, principally to fund infrastructure investment in various states; a

- $20 million increase from water and wastewater acquisitions, as well as organic growth in existing systems; partially offset by a
- $24 million decrease from lower water services demand, including $10 million primarily driven by unusually wet weather conditions experienced in the Northeast and Midwest during the second quarter of 2019 and ongoing customer usage reductions from conservation, partially offset by balancing accounts, primarily in the Company's California subsidiary; and a
- $17 million decrease from the impacts of the TCJA, including the Company's Missouri subsidiary's 2018 general rate case decision which authorized the adjustment of customer rates, effective May 28, 2018, to reflect the income tax savings resulting from the TCJA.

Operation and Maintenance

Presented in the table below is information regarding the main components of the Regulated Businesses' operating and maintenance expense, with explanations for material variances provided in the ensuing discussions:

	For the Years Ended December 31,		
	2019	2018	2017
(Dollars in millions)			
Production costs	$ 317	$ 313	$ 298
Employee-related costs	462	451	431
Operating supplies and services	237	227	209
Maintenance materials and supplies	74	81	70
Customer billing and accounting	55	60	51
Other	37	27	17
Total	$ 1,182	$ 1,159	$ 1,076

Production Costs

	For the Years Ended December 31,		
	2019	2018	2017
(Dollars in millions)			
Purchased water	$ 135	$ 133	$ 128
Fuel and power	90	91	89
Chemicals	54	52	47
Waste disposal	38	37	34
Total	$ 317	$ 313	$ 298

Employee-Related Costs

	For the Years Ended December 31,		
	2019	2018	2017
(Dollars in millions)			
Salaries and wages	$ 363	$ 349	$ 334
Pensions	12	19	14
Group insurance	60	57	57
Other benefits	27	26	26
Total	$ 462	$ 451	$ 431

In 2019, employee-related costs increased $11 million primarily due to a $17 million increase in salaries and wages and group insurance from higher headcount and related compensation expense supporting growth in the businesses, as well as the union-represented employees' first full year participation in the Company's cash-based annual performance plan during 2019; partially offset by a $7 million decrease in pension expense primarily due to lower service costs.

Operating Supplies and Services

In 2019, operating supplies and services increased $10 million primarily due to higher costs for technology services, including higher software licensing costs and technical support, and expenses related to various projects in the Company's California subsidiary, as well as an increase in other operating expenses.

Maintenance Materials and Supplies

In 2019, maintenance materials and supplies decreased $7 million primarily due to higher volume of main breaks and paving costs, driven by the colder weather experienced during the first quarter of 2018.

Customer Billing and Accounting

In 2019, customer billing and accounting decreased $5 million from a decrease in customer uncollectible expense.

Other (Operation and Maintenance)

In 2019, other (operation and maintenance) increased $10 million primarily due to a $20 million benefit recorded in the second quarter of 2018, resulting from an insurance settlement related to the Freedom Industries chemical spill in West Virginia, offset in part by (i) a $4 million reduction to the liability related to the Freedom Industries chemical spill, recorded in the first quarter of 2019, and (ii) an increase in operating revenues and O&M expense during 2018 resulting from the authorization for the Company's West Virginia subsidiary to use a portion of the income tax savings resulting from the TCJA for accelerated recovery of certain regulatory assets.

Depreciation and Amortization

In 2019, depreciation and amortization increased $29 million primarily due to additional utility plant placed in service from investments.

Other Income (Expenses)

In 2019, other income (expenses) decreased $15 million primarily due to an increase in interest expense from the issuance of incremental long-term debt in the second quarter of 2019 and the third quarter of 2018 to support growth of the business, partially offset by interest savings from early debt redemptions and tax-exempt bond refinancings during 2019.

Provision for Income Taxes

For the year ended December 31, 2019, the Company's provision for income taxes decreased primarily due to a lower effective income tax rate.

Market-Based Businesses

Presented in the table below is information for the Market-Based Businesses, with explanations for material variances provided in the ensuing discussions:

	For the Years Ended December 31,		
	2019	**2018**	**2017**
(Dollars in millions)			
Operating revenues	$ 539	$ 476	$ 422
Operation and maintenance	393	362	337
Depreciation and amortization	37	29	18
Loss (gain) on asset dispositions and purchases	44	(13)	—
Impairment charge	—	57	—
Income before income taxes	66	41	66
Provision for income taxes	20	11	28
Net loss attributable to noncontrolling interest	—	(2)	—
Net income attributable to common shareholders	46	32	38

Operating Revenues

In 2019, operating revenues increased $63 million primarily due to a:

- $74 million increase in HOS from contract growth and from the acquisition of Pivotal, which occurred in the second quarter of 2018; and a
- $20 million increase in MSG from the addition of two new contracts in 2018 (Wright-Patterson Air Force Base and Fort Leonard Wood); partially offset by a
- $18 million decrease in CSG from the sale of the majority of its O&M contracts in the third quarter of 2018; and a
- $15 million decrease at Keystone from the exit of the construction business in the third quarter of 2018.

Operation and Maintenance

Presented in the table below is information regarding the main components of the Market-Based Businesses' operating and maintenance expense, with explanations for the material variances provided in the ensuing discussions:

	For the Years Ended December 31,		
	2019	2018	2017
(Dollars in millions)			
Production costs	$ 29	$ 32	$ 37
Employee-related costs	109	104	97
Operating supplies and services	128	142	121
Maintenance materials and supplies	109	69	67
Other	18	15	15
Total	$ 393	$ 362	$ 337

In 2019, operation and maintenance expense increased $31 million primarily due to a:

- $40 million increase in maintenance materials and supplies primarily due to contract growth and increased claims expense in HOS; and a
- $5 million increase in employee-related costs primarily in HOS and MSG due to growth in the business, partially offset by lower costs resulting from the sale of the majority of CSG's O&M contracts and the exit of the construction business at Keystone, both occurring during the third quarter of 2018; partially offset by a
- $14 million decrease in operating supplies and services primarily due to the exit of the construction business in the third quarter of 2018 at Keystone, higher advertising and marketing expense in HOS in 2018, and lower expenses due to the sale of the majority of CSG's O&M contracts during the third quarter of 2018, as discussed above.

Depreciation and Amortization

In 2019, depreciation and amortization increased $8 million primarily due to the acquisition of Pivotal in the second quarter of 2018.

Loss (Gain) on Asset Dispositions and Purchases

During the fourth quarter of 2019, the Company recognized a pre-tax loss on sale of $44 million, or $35 million after-tax, relating to the sale of its Keystone operations. See Note 4—Acquisitions and Divestitures in the Notes to Consolidated Financial Statements for additional information. Additionally, during the third quarter of 2018, the Company recognized a pre-tax gain of $14 million on the sale of the majority of CSG's O&M contracts.

Impairment Charge

During the third quarter of 2018, a goodwill and intangible asset impairment charge of $57 million was recorded for Keystone, the result of operational and financial challenges encountered in the construction business, and the Company's determination to narrow the scope of the Keystone operations to focus on its core operations of providing water transfer services. See Note 8—Goodwill and Other Intangible Assets in the Notes to Consolidated Financial Statements for additional information.

Provision for Income Taxes

In 2019, provision for income taxes increased $9 million primarily due to an increase in pre-tax income.

Liquidity and Capital Resources

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. When necessary, the Company also obtains funds from external sources, primarily in the debt markets and through short-term commercial paper borrowings. The Company may also access the equity capital markets to support its capital funding requirements, as needed. The Company's access to external financing on reasonable terms depends on its credit ratings and current business conditions, including that of the utility and water utility industry in general, as well as conditions in the debt or equity capital markets, and 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 business, market, financial and other conditions deteriorate to the extent that the Company is no longer able to access the capital markets on reasonable terms, AWCC has access to an unsecured revolving credit facility that expires in March 2024 with aggregate bank commitments of $2.25 billion. The facility is used principally to fulfill its short-term liquidity needs by supporting AWCC's $2.10 billion commercial paper program and to provide a sublimit of up to $150 million for letters of credit. Subject to satisfying certain conditions, the credit agreement permits AWCC to increase the maximum commitment under the facility by up to $500 million.

In order to meet short-term liquidity needs, AWCC issues commercial paper that is supported by its revolving credit facility. As of December 31, 2019, AWCC had no outstanding borrowings and $76 million of outstanding letters of credit under its revolving credit facility, with $2.25 billion available to fulfill its short-term liquidity needs, to issue letters of credit, and to provide support for $786 million in outstanding commercial paper. 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 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. See "Credit Facilities and Short-Term Debt" below for additional information.

In addition, the Regulated Businesses receive advances and contributions from customers, home builders and real estate developers to fund construction necessary to extend service to new areas. Advances for construction are refundable for limited periods, which vary according to state regulations, as new customers begin to receive service or other contractual obligations are fulfilled. Amounts which are no longer refundable are reclassified to contributions in aid of construction.

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) the Company estimates, during 2020, to begin 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. 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.

With the enactment of the TCJA and the reduction of the U.S. federal corporate income tax rate from 35% to 21%, the Company anticipates a decrease in future revenue authorizations associated with the Regulated Businesses, initially leading to lower cash flows. The Company expects this cash flow impact to decline over time, as the Regulated Businesses' rate base grows, the result of lower deferred income tax liabilities, which offset rate base. The lower deferred income tax liabilities are mainly due to (i) a lower U.S. federal corporate income tax rate, (ii) the normalization (refunding to customers) of the re-measured deferred income tax liabilities over the remaining life of the associated assets, and (iii) the loss of future bonus depreciation deductions on capital projects that began after September 27, 2017.

One component of WIFIA is a federal credit program administered by the EPA for eligible water and wastewater infrastructure projects. The WIFIA program accelerates investment in the U.S.'s water infrastructure by providing long-term, low-cost supplemental loans for regionally and nationally significant projects. The Company is currently pursuing WIFIA financing of approximately $80 million for a project in the Company's Missouri subsidiary.

Cash Flows Provided by Operating Activities

Cash flows provided by 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 provided by operating activities will be affected by, among other things: 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.

The enactment of the TCJA is accretive to the Company's consolidated earnings over time through (i) growth in rate base for the same level of expected capital expenditures due to the impact of the lower U.S. federal corporate income tax rate and the re-measurement of its deferred income tax assets and liabilities, (ii) increased earnings in the Market-Based Businesses due to the lower U.S. federal corporate income tax rate, all partially offset by (iii) the lower tax shield on interest expense at parent company, as well as increased debt levels from lower cash flows from operations as the Company passes the lower tax rate benefits to its regulated customers. The Company believes that it will likely begin paying federal income taxes during 2020, when the Company expects its federal NOL carryforwards balance will be fully used, although this timing could be impacted by any significant changes in its future results of operations and the outcome of regulatory proceedings regarding the TCJA.

Cash flows provided by operating activities have been a reliable, steady source of funding, sufficient to meet operating requirements and fund the majority of the Company's capital investments. The Company expects to seek access to debt and equity capital markets to meet the balance of its capital investment, if any, and fund its dividend payments, as needed. Operating cash flows can be negatively affected by changes in the Company's rate regulated environments, changes in the Market-Based Businesses, 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 periodic 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. The Company addresses cash timing differences through the aforementioned liquidity funding mechanisms.

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

	For the Years Ended December 31,		
(In millions)	**2019**	**2018**	**2017**
Net income	$ 621	$ 565	$ 426
Add (less):			
Depreciation and amortization	582	545	492
Deferred income taxes and amortization of investment tax credits	208	195	462
Non-cash impairment charge	—	57	—
Other non-cash activities (a)	38	56	16
Changes in working capital (b)	(1)	30	123
Settlement of cash flow hedges	(30)	—	—
Pension and postretirement healthcare contributions	(31)	(22)	(48)
Impact of Freedom Industries settlement activities	(4)	(40)	(22)
Net cash flows provided by operating activities	$ 1,383	$ 1,386	$ 1,449

(a) Includes provision for losses on accounts receivable, loss (gain) on asset dispositions and purchases, 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, accounts payable and accrued liabilities, and other current assets and liabilities, net, less the settlement of cash flow hedges.

In 2019, cash flows provided by operating activities decreased $3 million, primarily due to the settlement of cash flow hedges and increased interest costs in connection with the Company’s $1.10 billion debt offering that closed on May 13, 2019 and an increase in pension contributions. Partially offsetting these decreases was an increase in net income. The main factors contributing to the increase in net income are described in “Consolidated Results of Operations” and “Segment Results of Operations” above.

The Company expects to make pension contributions to the plan trusts of $38 million in 2020. In addition, the Company estimates that contributions will amount to $33 million, $34 million, $34 million and $32 million in 2021, 2022, 2023 and 2024, respectively. Actual amounts contributed could change materially from these estimates as a result of changes in assumptions and actual investment returns, among other factors.

Cash Flows Used in Investing Activities

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

	For the Years Ended December 31,		
(In millions)	**2019**	**2018**	**2017**
Capital expenditures	$ (1,654)	$ (1,586)	$ (1,434)
Acquisitions, net of cash acquired	(235)	(398)	(177)
Proceeds from sale of assets	48	35	15
Removal costs from property, plant and equipment retirements, net	(104)	(87)	(76)
Net cash flows used in investing activities	$ (1,945)	$ (2,036)	$ (1,672)

In 2019, cash flows used in investing activities decreased $91 million primarily due to the acquisition of Pivotal for $365 million on June 4, 2018, partially offset by an increase in capital expenditures, principally from incremental investments associated with the replacement and renewal of the Company’s transmission and distribution infrastructure in the Regulated Businesses, as discussed below. The Company also had an increase of proceeds from sale of assets due to the sale of Keystone for $31 million, in the fourth quarter of 2019.

The Company’s infrastructure investment plan consists of both infrastructure renewal programs, where the Company replaces infrastructure, 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 historical capital expenditures related to the upgrading of its infrastructure and systems:

	For the Years Ended December 31,		
(In millions)	**2019**	**2018**	**2017**
Transmission and distribution	$ 661	$ 572	$ 551
Treatment and pumping	190	231	171
Services, meter and fire hydrants	346	303	281
General structure and equipment	234	371	281
Sources of supply	83	26	54
Wastewater	140	83	96
Total capital expenditures	$ 1,654	$ 1,586	$ 1,434

In 2019, the Company’s capital expenditures increased $68 million primarily due to investment in transmission and distribution infrastructure.

The Company also grows its business primarily through acquisitions of water and wastewater systems, as well as other water-related services. These acquisitions are complementary to the Company’s existing business and support continued geographical diversification and growth of its operations. Generally, acquisitions are funded initially with short-term debt, and later refinanced with the proceeds from long-term debt, once reflected in rate base.

The following is a summary of the acquisitions and dispositions affecting the Company's cash flows from investing activities during 2019:

- Paid $235 million for 21 water and wastewater systems, representing in the aggregate approximately 53,100 customers.
- Received $48 million for the sale of assets, including $31 million from the sale of the Keystone operations.

As previously noted, the Company expects to invest between $8.8 billion to $9.4 billion from 2020 to 2024, with $8.2 billion of this range for infrastructure improvements in the Regulated Businesses, and between $20 billion to $22 billion from 2020 to 2029. In 2020, the Company expects to invest between a range of $1.7 billion to $1.9 billion in 2020, with $1.6 billion for infrastructure improvements in the Regulated Businesses. Also in 2020, the Company expects to invest between $100 million to $300 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 provided by financing activities:

	For the Years Ended December 31,		
(In millions)	2019	2018	2017
Proceeds from long-term debt	$ 1,530	$ 1,358	$ 1,395
Repayments of long-term debt	(495)	(526)	(896)
Net short-term borrowings	(178)	60	55
Proceeds from issuance of common stock	—	183	—
Dividends paid	(353)	(319)	(289)
Anti-dilutive stock repurchases	(36)	(45)	(54)
Other financing activities, net (a)	26	15	(4)
Net cash flows provided by financing activities	$ 494	$ 726	$ 207

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

In 2019, cash flows provided by financing activities decreased $232 million, primarily due to the issuance of common stock in 2018, the proceeds of which were used to finance a portion of the 2018 acquisition of Pivotal, as well as an increase in cash used for dividend payments in 2019. AWCC issued $1.10 billion of long-term debt as part of its May 13, 2019 debt offering, of which $51 million of the net proceeds was used to repay long-term debt obligations at maturity. Net proceeds from the debt offering were also used to repay pre-existing short-term borrowings, which resulted in a net cash outflow for 2019 of $178 million.

The Company's financing activities, primarily focused on funding regulated infrastructure expenditures, regulated and market-based acquisitions and payment of dividends. These activities included the issuance of long-term and short-term debt, primarily through AWCC and in 2018, included an equity issuance for approximately 50% of the Pivotal acquisition. In addition, new infrastructure may be funded with customer advances and contributions in aid of construction, net of refunds, which amounted to $26 million, $21 million and $28 million for the years ended December 31, 2019, 2018 and 2017, respectively. 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, 2019, AWCC has made long-term fixed rate loans and commercial paper loans to the Regulated Businesses amounting to $4.8 billion and $675 million, respectively. Additionally, as of December 31, 2019, AWCC has made long-term fixed rate loans and commercial paper loans to parent company amounting $2.4 billion and $111 million, respectively. As of December 31, 2019, parent company has made long-term fixed rate loans to the Market-Based Businesses amounting to $183 million related to the acquisition of Pivotal on June 4, 2018.

On May 13, 2019, AWCC completed a $1.10 billion senior unsecured debt offering which included the sale of $550 million aggregate principal amount of its 3.45% Senior Notes due 2029 and $550 million aggregate principal amount of its 4.15% Senior Notes due 2049. At the closing of the offering, AWCC received, after deduction of underwriting discounts and before deduction of offering expenses, net proceeds of approximately $1.09 billion. AWCC used the net proceeds to: (i) lend funds to parent company and its regulated subsidiaries; (ii) repay $25 million principal amount of AWCC's 7.21% Series I Senior Notes at maturity on May 19, 2019; (iii) repay $26 million aggregate principal amount of subsidiary debt at maturity during the second quarter of 2019; and (iv) repay AWCC's commercial paper obligations, and for general corporate purposes.

On May 6, 2019, the Company terminated five forward starting swap agreements with an aggregate notional amount of $510 million, realizing a net loss of $30 million, to be amortized through interest, net over 10 and 30 year periods, in accordance with the terms of the new debt issued on May 13, 2019. No ineffectiveness was recognized on hedging instruments for the years ended December 31, 2019 and 2018.

During 2019, AWCC and certain of the Company's subsidiaries also issued tax-exempt bonds at various dates with a total principal amount of $417 million and a weighted average interest rate of 2.5%. The bonds are scheduled to mature in 2039 and contain optional or mandatory redemption dates in 2029. The proceeds from these bonds were used to repay $417 million of tax-exempt bonds with a weighted average interest rate of 5.8% and original maturities in 2039.

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 swaps. The Company 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. The Company minimizes the counterparty credit risk on these transactions by only dealing with leading, credit-worthy financial institutions, having long-term credit ratings of "A" or better.

In May 2018, 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 May 2021. During 2019, 2018 and 2017, $1.10 billion, $1.33 billion, and $1.35 billion, respectively, of debt securities were issued pursuant to this and the Company's predecessor registration statement. Additionally, during 2018 under this registration statement, the Company issued 2.32 million shares of its common stock for aggregate net proceeds of $183 million.

Presented in the table below are the issuances of long-term debt in 2019:

Company	Type	Rate	Maturity	Amount (in millions)	
AWCC (a)	Senior notes—fixed rate	3.45%-4.15%	2029-2049	$	1,100
AWCC (a) (b)	Private activity bonds and government funded debt—fixed rate	2.45%	2039		100
Other American Water subsidiaries	Private activity bonds and government funded debt—fixed rate	0.00%-5.00%	2021-2048		330
Total issuances				$	1,530

(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 guarantee by parent company of AWCC's payment obligations under such indebtedness.

(b) This indebtedness has a mandatory redemption provision callable in 2029.

Presented in the table below are the retirements and redemptions of long-term debt in 2019 through sinking fund provisions, optional redemption or payment at maturity:

Company	Type	Rate	Maturity	Amount (in millions)
AWCC	Private activity bonds and government funded debt—fixed rate	1.79%-6.25%	2021-2031	$ 101
AWCC	Senior notes—fixed rate	7.21%	2019	25
Other American Water subsidiaries	Private activity bonds and government funded debt—fixed rate	0.00%-6.20%	2019-2048	333
Other American Water subsidiaries	Mortgage bonds—fixed rate	5.48%-9.13%	2019-2021	28
Other American Water subsidiaries	Mandatorily redeemable preferred stock	8.49%-9.18%	2031-2036	2
Other American Water subsidiaries	Term loan	5.76%-5.81%	2021	6
Total retirements and redemptions				$ 495

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

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 from time to time 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, at its discretion, elect to enter into repurchase transactions or to amend or cancel the program or the stock repurchase parameters, all to manage dilution from the issuance of shares as described above. As of December 31, 2019, the Company has repurchased an aggregate of 4,860,000 shares of common stock under this program.

Credit Facilities and Short-Term Debt

AWCC has an unsecured revolving credit facility of $2.25 billion that expires in March 2024. In April 2019, AWCC and its lenders agreed to extend the termination date of the credit agreement with respect to AWCC's revolving credit facility pursuant to its terms from March 2023 to March 2024. 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 to which one such extension request remains.

Interest rates on advances under the facility are based on a credit spread to the LIBOR rate (or applicable market replacement rate) or base rate in accordance with Moody Investors Service's and Standard & Poor's Financial Services' 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 is considered "debt" for purposes of a support agreement between parent company and AWCC, which serves as a functional equivalent of a guarantee by parent company of AWCC's payment obligations under the credit facility.

In March 2018, AWCC increased the maximum aggregate outstanding amount under its commercial paper program from $1.60 billion to $2.10 billion.

Presented in the table below is the aggregate credit facility commitments, letter of credit sublimit under the revolving credit facility and commercial paper limit, as well as the available capacity for each as of December 31, 2019 and 2018:

(In millions)	Credit Facility Commitment	Available Credit Facility Capacity	Letter of Credit Sublimit	Available Letter of Credit Capacity	Commercial Paper Limit	Available Commercial Paper Capacity
December 31, 2019	$ 2,250	$ 2,174	$ 150	$ 74	$ 2,100	$ 1,314
December 31, 2018	2,262	2,177	150	69	2,100	1,146

The weighted average interest rate on AWCC short-term borrowings for the years ended December 31, 2019 and 2018 was approximately 2.54% and 2.28%, 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:

	2019	2018	2017
Total common shareholders' equity	39.2%	40.4%	41.0%
Long-term debt and redeemable preferred stock at redemption value	55.6%	52.4%	49.6%
Short-term debt and current portion of long-term debt	5.2%	7.2%	9.4%
Total	100%	100%	100%

The changes in the capital structure between periods were mainly attributable to an increase in long-term debt.

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, 2019, the Company's ratio was 0.61 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 18, 2020 as issued by the following rating agencies:

Securities	Moody's Investors Service	Standard & Poor's Ratings Service
Rating Outlook	Stable	Stable
Senior unsecured debt	Baa1	A
Commercial paper	P-2	A-1

On June 7, 2019, Standard & Poor's Ratings Service affirmed the Company's long-term 'A' and short-term 'A-1' credit ratings, with a stable outlook.

On April 1, 2019, Moody's Investors Service changed the Company's senior unsecured debt rating to Baa1, from A3, with a stable outlook. The Company's commercial paper rating remained unchanged.

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, energy, 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 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.

Contractual Obligations and Commitments

The Company enters into contractual obligations with third parties in the ordinary course of business. Presented in the table below is information related to its contractual obligations as of December 31, 2019:

(In millions)	Total	1 year or less	2-3 years	4-5 years	More than 5 years
Long-term debt obligations (a)	$ 8,692	$ 28	$ 324	$ 632	$ 7,708
Interest on long-term debt (b)	6,064	375	726	685	4,278
Operating lease obligations (c)	152	14	24	14	100
Purchase water obligations (d)	912	65	130	112	605
Other purchase obligations (e)	915	915	—	—	—
Pension plan obligations (f)	171	38	67	66	—
Other obligations (g)	1,055	465	245	69	276
Total	$ 17,961	$ 1,900	$ 1,516	$ 1,578	$ 12,967

NOTE The above table reflects only financial obligations and commitments. Therefore, performance obligations associated with the Company's Market-Based Businesses are not included in the above amounts. Also, uncertain tax positions of $110 million are not reflected in this table as the Company cannot predict when open tax years will close with completed examinations. See Note 14—Income Taxes in the Notes to Consolidated Financial Statements.

(a) Represents sinking fund obligations, debt maturities, finance lease obligations and preferred stocks with mandatory redemption requirements.

(b) Represents expected interest payments on outstanding long-term debt and interest on preferred stock with mandatory redemption requirements. Amounts reported may differ from actual due to future financing of debt.

(c) Represents future minimum payments under non-cancelable operating leases, primarily for the lease of motor vehicles, buildings, land and other equipment including water facilities and systems constructed by partners under public-private partnerships. For discussion of the Company's public-private partnerships, see Note 19—Leases in the Notes to Consolidated Financial Statements.

(d) Represents future payments under water purchase agreements for minimum quantities of water.

(e) Represents the open purchase orders as of December 31, 2019 for goods and services purchased in the ordinary course of business.

(f) Represents contributions expected to be made to the Company's pension plans for the years 2020 through 2024.

(g) Includes an estimate of advances for construction to be refunded, capital expenditures estimated to be required under legal and binding contractual obligations, contracts entered into for energy purchases, a liability associated with a conservation agreement, and service agreements.

Performance Obligations

The Company has entered into agreements for the provision of services to water and wastewater facilities for the U.S. military, municipalities and other customers. These obligations are not included in the table above. For discussion of the Company's performance obligations see Note 3—Revenue Recognition in the Notes to Consolidated Financial Statements for additional information.

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 polices 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, 2019, 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.

On December 22, 2017, the TCJA was signed into law, which, among other things, enacted significant and complex changes to the Code, including a reduction in the maximum U.S. federal corporate income tax rate from 35% to 21% as of January 1, 2018. The TCJA created significant excess deferred income taxes that the Company and its regulatory jurisdictions believe should be refunded to customers. As such, the Company recorded these amounts as regulatory liabilities.

As of December 31, 2019 and 2018, the Company's regulatory asset balance was $1.1 billion and $1.2 billion, respectively, and its regulatory liability balance was $1.8 billion and $1.9 billion, respectively. See Note 7—Regulatory Assets and Liabilities in the Notes to Consolidated Financial Statements for further information regarding the Company's significant regulatory assets and liabilities.

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, 2019 and 2018 was $142 million and $144 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 Homeowner Services Group is generated through various protection programs in which the Company provides fixed fee services to domestic homeowners and smaller commercial customers for interior and external 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 have a one-year term and each service is a separate performance obligation, satisfied over time, as the customers simultaneously receive and consume the benefits provided from the service. Customers are 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 these services. Advances from customers are deferred until the performance obligation is 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 and industrial customers, and prior to the sale of Keystone, the Company had shorter-term contracts that provided customized water transfer services for shale natural gas companies and 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 for the Market-Based Businesses as of December 31, 2019 and 2018 was $30 million and $42 million, respectively.

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 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. Thus, at the date of enactment of the TCJA, the Company’s deferred taxes were re-measured based upon the new tax rate. For the Company’s regulated entities, the change in deferred taxes are recorded as either an offset to a regulatory asset or 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, 2019 and 2018 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. See 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 retained the Society of Actuaries RP-2014 mortality base table, which provides rates of mortality in 2006, but adopted the new MP-2018 mortality improvement scale to gradually adjust future mortality rates downward due to increased longevity in each year after 2006.

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 discount rate for determining pension benefit obligations was 3.44%, 4.38% and 3.75% at December 31, 2019, 2018 and 2017, respectively. The discount rate for determining other postretirement benefit obligations was 3.36%, 4.32% and 3.73% at December 31, 2019, 2018 and 2017, 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 long-term EROA assumption used in calculating pension cost was 6.20% for 2019, 5.95% for 2018, and 6.49% for 2017. The weighted average EROA assumption used in calculating other postretirement benefit costs was 3.56% for 2019, 4.77% for 2018 and 5.09% for 2017.

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

Asset Category	2020 Target Allocation	Percentage of Plan Assets as of December 31, 2019	2018
Equity securities	43%	45%	42%
Fixed income	50%	48%	52%
Real Estate	5%	7%	5%
Real estate investment trusts (“REITs”)	2%	—%	1%
Total	100%	100%	100%

Postretirement Medical Bargaining Plan Changes

On July 31, 2018, a new, five-year national benefits agreement was ratified, covering approximately 3,200 of the Company’s union-represented employees. Most of the benefits under this new agreement became effective on January 1, 2019, and include, among other things, union-represented employees’ participation in the Company’s cash-based annual performance plan, additional medical plan options and changes to certain retiree medical benefits, which required the Company to remeasure its other postretirement benefit plan obligation during the third quarter of 2018.

For those eligible union retirees and dependents over age 65, the current supplemental retiree medical plan will be replaced with a Health Reimbursement Arrangement (“HRA”) similar to the cap currently in place for non-union retirees. The Company is providing a subsidy allowing the post-65 retirees to purchase a Medicare supplemental plan on a private exchange network. The pre-65 coverage plan was also amended to provide a cap on future employer costs designed to limit the employer costs to 2018 levels. For pre-65 union members retiring early in 2019-2021 a supplemental benefit will be provided to alleviate the effect of the cap.

On August 31, 2018, the Postretirement Medical Benefit Plan was remeasured to reflect this plan change. The plan change resulted in a $175 million reduction in future benefits payable to plan participants, and, in combination with other experience reflected as of the remeasurement date, resulted in a $227 million reduction to the net accumulated postretirement benefit obligation. The plan amendment will be amortized over 10.2 years, the average future working lifetime to full eligibility age for all plan participants.

After the remeasurement, the Retirement and Benefit Plans Investment Committee (the “Investment Committee”), which is responsible for overseeing the investment of the Company’s pension and other postretirement benefit plans’ assets, determined that the funded status of the Postretirement Medical Bargaining Plan was in excess of that needed to pay current and future benefits.

Given the change in funded status in 2018, the Investment Committee commissioned an asset-liability study for the Postretirement Medical Bargaining Plan. This study concluded that it was prudent to decrease the investment risk in the plan due to its current funded status. The study also recommended reducing its exposure to changes in interest rates by matching the assets of the plan to the projected cash flows for future benefit payments of the liability. The Investment Committee approved the recommendations. Plan assets in excess of those securities designed to match the long-term liabilities are invested in shorter duration fixed income securities and equities.

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

Asset Category	2020 Target Allocation (a)	Percentage of Plan Assets as of December 31, 2019	2018
Equity securities	17%	17%	17%
Fixed income	83%	83%	83%
Total	100%	100%	100%

(a) Includes the American Water Postretirement Medical Benefits Bargaining Plan, the New York Water Service Corporation Postretirement Medical Benefits Bargaining Plan, the American Water Postretirement Medical Benefits Non-Bargaining Plan, and the American Water Life Insurance Trust.

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 2.97% for 2019, 3.00% for 2018 and 3.02% for 2017.

In selecting health care cost trend rates, the Company considers past performance and forecasts of increases in health care costs. As of January 1, 2018, the Company's health care cost trend rate assumption used to calculate the periodic cost was 6.75% in 2019 gradually declining to 5.00% in 2026 and thereafter. As of December 31, 2019, the Company is projecting that medical inflation will be 6.50% in 2020 gradually declining to 5.00% in 2026 and thereafter.

The Company will use a discount rate and EROA of 3.44% and 6.50%, respectively, for estimating its 2020 pension costs. Additionally, the Company will use a discount rate and expected blended return based on weighted assets of 3.36% and 3.68%, respectively, for estimating its 2020 other postretirement benefit costs. A decrease in the discount rate or the EROA would increase the Company's pension expense. The Company's 2019 and 2018 pension and postretirement benefit costs were $17 million and $21 million, respectively. The Company expects to make pension and postretirement benefit contributions to the plan trusts of $38 million in 2020, and $33 million, $34 million, $34 million and $32 million in 2021, 2022, 2023 and 2024, respectively. Actual amounts contributed could change significantly from these estimates. 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.

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.

New 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, swaptions and U.S. Treasury lock agreements to manage and mitigate interest rate risk exposure. As of December 31, 2019, a hypothetical increase of interest rates by 1% associated with the Company's short-term borrowings would result in a $7 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 other water-related services provided by the Regulated Businesses and Market-Based Businesses. The Company's Regulated Businesses serve residential, commercial, industrial and other customers, while the Market-Based Businesses engage in business activities with developers, 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

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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, 2019 and 2018, 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, 2019, 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, 2019, 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, 2019 and 2018**,** and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 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, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019.

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 7 to the consolidated financial statements, the Company's consolidated regulatory assets and liabilities balances were $1,128 million and $1,806 million, respectively, as of December 31, 2019. 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, management 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 jurisdictions, 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 there was significant judgment by management related to the accounting for regulatory assets and liabilities, including assessing 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 as a result of 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 jurisdictions, 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, recent rate orders on specific or similar incurred cost to other regulated entities in the same jurisdictions, 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 18, 2020

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)

	December 31, 2019	December 31, 2018
ASSETS		
Property, plant and equipment	$ 23,941	$ 23,204
Accumulated depreciation	(5,709)	(5,795)
Property, plant and equipment, net	18,232	17,409
Current assets:		
Cash and cash equivalents	60	130
Restricted funds	31	28
Accounts receivable, net	294	301
Unbilled revenues	172	186
Materials and supplies	44	41
Assets held for sale	566	—
Other	118	95
Total current assets	1,285	781
Regulatory and other long-term assets:		
Regulatory assets	1,128	1,156
Operating lease right-of-use assets	103	—
Goodwill	1,501	1,575
Postretirement benefit asset	159	155
Intangible assets	67	84
Other	207	63
Total regulatory and other long-term assets	3,165	3,033
Total assets	$ 22,682	$ 21,223

The accompanying notes are an integral part of these Consolidated Financial Statements.

American Water Works Company, Inc. and Subsidiary Companies
Consolidated Balance Sheets
(In millions, except share and per share data)

	December 31, 2019	December 31, 2018
CAPITALIZATION AND LIABILITIES		
Capitalization:		
Common stock ($0.01 par value, 500,000,000 shares authorized, 185,903,727 and 185,367,158 shares issued, respectively)	$ 2	$ 2
Paid-in-capital	6,700	6,657
Accumulated deficit	(207)	(464)
Accumulated other comprehensive loss	(36)	(34)
Treasury stock, at cost (5,090,855 and 4,683,156 shares, respectively)	(338)	(297)
Total common shareholders' equity	6,121	5,864
Long-term debt	8,639	7,569
Redeemable preferred stock at redemption value	5	7
Total long-term debt	8,644	7,576
Total capitalization	14,765	13,440
Current liabilities:		
Short-term debt	786	964
Current portion of long-term debt	28	71
Accounts payable	203	175
Accrued liabilities	596	556
Accrued taxes	46	45
Accrued interest	84	87
Liabilities related to assets held for sale	128	—
Other	174	196
Total current liabilities	2,045	2,094
Regulatory and other long-term liabilities:		
Advances for construction	240	252
Deferred income taxes and investment tax credits	1,893	1,740
Regulatory liabilities	1,806	1,907
Operating lease liabilities	89	—
Accrued pension expense	411	390
Other	78	78
Total regulatory and other long-term liabilities	4,517	4,367
Contributions in aid of construction	1,355	1,322
Commitments and contingencies (See Note 16)		
Total capitalization and liabilities	$ 22,682	$ 21,223

The accompanying notes are an integral part of these Consolidated Financial Statements.

American Water Works Company, Inc. and Subsidiary Companies
Consolidated Statements of Operations
(In millions, except per share data)

	For the Years Ended December 31,		
	2019	2018	2017
Operating revenues	$ 3,610	$ 3,440	$ 3,357
Operating expenses:			
Operation and maintenance	1,544	1,479	1,369
Depreciation and amortization	582	545	492
General taxes	280	277	259
Loss (gain) on asset dispositions and purchases	34	(20)	(16)
Impairment charge	—	57	—
Total operating expenses, net	2,440	2,338	2,104
Operating income	1,170	1,102	1,253
Other income (expense):			
Interest, net	(382)	(350)	(342)
Non-operating benefit costs, net	16	20	(9)
Loss on early extinguishment of debt	(4)	(4)	(7)
Other, net	33	19	17
Total other income (expense)	(337)	(315)	(341)
Income before income taxes	833	787	912
Provision for income taxes	212	222	486
Consolidated net income	621	565	426
Net loss attributable to noncontrolling interest	—	(2)	—
Net income attributable to common shareholders	$ 621	$ 567	$ 426
Basic earnings per share: (a)			
Net income attributable to common shareholders	$ 3.44	$ 3.16	$ 2.39
Diluted earnings per share: (a)			
Net income attributable to common shareholders	$ 3.43	$ 3.15	$ 2.38
Weighted average common shares outstanding:			
Basic	181	180	178
Diluted	181	180	179

(a) Amounts may not calculate due to rounding.

The accompanying notes are an integral part of these Consolidated Financial Statements.

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

	For the Years Ended December 31,		
	2019	2018	2017
Net income attributable to common shareholders	$ 621	$ 567	$ 426
Other comprehensive income (loss), net of tax:			
Change in employee benefit plan funded status, net of tax of $3, $20 and $2 in 2019, 2018 and 2017, respectively	8	60	7
Defined benefit pension plans:			
Amortization of actuarial loss, net of tax of $1, $3 and $5 in 2019, 2018 and 2017, respectively	4	7	7
Pension reclassification from accumulated other comprehensive loss of tax effects resulting from the Tax Cuts and Jobs Act	—	(22)	—
Foreign currency translation adjustment	(1)	—	(1)
Unrealized loss on cash flow hedges, net of tax of $(5), $0 and $(4) in 2019, 2018 and 2017, respectively	(13)	(2)	(6)
Cash flow hedges reclassification from accumulated other comprehensive loss of tax effects resulting from the Tax Cuts and Jobs Act	—	2	—
Net other comprehensive (loss) income	(2)	45	7
Comprehensive income attributable to common shareholders	$ 619	$ 612	$ 433

The accompanying notes are an integral part of these Consolidated Financial Statements.

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

	For the Years Ended December 31,		
	2019	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES			
Net income	$ 621	$ 565	$ 426
Adjustments to reconcile to net cash flows provided by operating activities:			
Depreciation and amortization	582	545	492
Deferred income taxes and amortization of investment tax credits	208	195	462
Provision for losses on accounts receivable	28	33	29
Loss (gain) on asset dispositions and purchases	34	(20)	(16)
Impairment charge	—	57	—
Pension and non-pension postretirement benefits	17	23	57
Other non-cash, net	(41)	20	(54)
Changes in assets and liabilities:			
Receivables and unbilled revenues	(25)	(17)	21
Pension and non-pension postretirement benefit contributions	(31)	(22)	(48)
Accounts payable and accrued liabilities	66	25	38
Other assets and liabilities, net	(72)	22	64
Impact of Freedom Industries settlement activities	(4)	(40)	(22)
Net cash provided by operating activities	1,383	1,386	1,449
CASH FLOWS FROM INVESTING ACTIVITIES			
Capital expenditures	(1,654)	(1,586)	(1,434)
Acquisitions, net of cash acquired	(235)	(398)	(177)
Proceeds from sale of assets	48	35	15
Removal costs from property, plant and equipment retirements, net	(104)	(87)	(76)
Net cash used in investing activities	(1,945)	(2,036)	(1,672)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from long-term debt	1,530	1,358	1,395
Repayments of long-term debt	(495)	(526)	(896)
Net short-term borrowings with maturities less than three months	(178)	60	55
Issuance of common stock	—	183	—
Proceeds from issuances of employee stock plans and direct stock purchase plan, net of taxes paid of $11, $8 and $11 in 2019, 2018 and 2017, respectively	15	16	15
Advances and contributions for construction, net of refunds of $30, $22 and $22 in 2019, 2018 and 2017, respectively	26	21	28
Debt issuance costs and make-whole premium on early debt redemption	(15)	(22)	(47)
Dividends paid	(353)	(319)	(289)
Anti-dilutive share repurchases	(36)	(45)	(54)
Net cash provided by financing activities	494	726	207
Net (decrease) increase in cash and cash equivalents and restricted funds	(68)	76	(16)
Cash and cash equivalents and restricted funds at beginning of period	159	83	99
Cash and cash equivalents and restricted funds at end of period	$ 91	$ 159	$ 83
Cash paid during the year for:			
Interest, net of capitalized amount	$ 383	$ 332	$ 338
Income taxes, net of refunds of $4, $0 and $0 in 2019, 2018 and 2017, respectively	$ 12	$ 38	$ 30
Non-cash investing activity:			
Capital expenditures acquired on account but unpaid as of year end	$ 235	$ 181	$ 204
Acquisition financed by treasury stock	$ —	$ —	$ 33

The accompanying notes are an integral part of these Consolidated Financial Statements.

American Water Works Company, Inc. and Subsidiary Companies
Consolidated Statements of Changes in Shareholders' Equity
(In millions, except per share data)

	Common Stock					Treasury Stock		
	Shares	Par Value	Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Shares	At Cost	Total Shareholders' Equity
Balance as of December 31, 2016	181.8	$ 2	$ 6,388	$ (873)	$ (86)	(3.7)	$ (213)	$ 5,218
Cumulative effect of change in accounting principle	—	—	—	21	—	—	—	21
Net income attributable to common shareholders	—	—	—	426	—	—	—	426
Direct stock reinvestment and purchase plan	0.1	—	8	—	—	—	—	8
Employee stock purchase plan	0.1	—	7	—	—	—	—	7
Stock-based compensation activity	0.5	—	22	—	—	(0.1)	(7)	15
Acquisitions via treasury stock	—	—	7	—	—	0.4	27	34
Repurchases of common stock	—	—	—	—	—	(0.7)	(54)	(54)
Net other comprehensive income	—	—	—	—	7	—	—	7
Dividends ($1.66 declared per common share)	—	—	—	(297)	—	—	—	(297)
Balance as of December 31, 2017	182.5	$ 2	$ 6,432	$ (723)	$ (79)	(4.1)	$ (247)	$ 5,385
Cumulative effect of change in accounting principle	—	—	—	20	—	—	—	20
Net income attributable to common shareholders	—	—	—	567	—	—	—	567
Direct stock reinvestment and purchase plan	0.1	—	8	—	—	—	—	8
Employee stock purchase plan	0.1	—	8	—	—	—	—	8
Stock-based compensation activity	0.4	—	26	(1)	—	(0.1)	(5)	20
Issuance of common stock	2.3	—	183	—	—	—	—	183
Repurchases of common stock	—	—	—	—	—	(0.5)	(45)	(45)
Net other comprehensive income	—	—	—	—	45	—	—	45
Dividends ($1.82 declared per common share)	—	—	—	(327)	—	—	—	(327)
Balance as of December 31, 2018	185.4	$ 2	$ 6,657	$ (464)	$ (34)	(4.7)	$ (297)	$ 5,864
Cumulative effect of change in accounting principle	—	—	—	(2)	—	—	—	(2)
Net income attributable to common shareholders	—	—	—	621	—	—	—	621
Direct stock reinvestment and purchase plan	—	—	7	—	—	—	—	7
Employee stock purchase plan	0.1	—	10	—	—	—	—	10
Stock-based compensation activity	0.4	—	26	—	—	(0.1)	(5)	21
Repurchases of common stock	—	—	—	—	—	(0.3)	(36)	(36)
Net other comprehensive income	—	—	—	—	(2)	—	—	(2)
Dividends ($2.00 declared per common share)	—	—	—	(362)	—	—	—	(362)
Balance as of December 31, 2019	185.9	$ 2	$ 6,700	$ (207)	$ (36)	(5.1)	$ (338)	$ 6,121

The accompanying notes are an integral part of these Consolidated Financial Statements.

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 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 16 states in the United States, collectively referred to as the “Regulated Businesses.” The Company also operates market-based businesses that provide complementary water and wastewater services within non-reportable operating segments, collectively referred to as the “Market-Based Businesses.” The Company’s primary Market-Based Businesses include the Homeowner Services Group, which provides various warranty protection programs and other home services to residential customers; and the Military Services Group, which enters into long-term contracts with the U.S. government to provide water and wastewater services on various military installations.

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 7—Regulatory Assets and Liabilities 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 Market-Based Businesses 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 $345 million and $336 million as of December 31, 2019 and 2018, 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.

Presented in the table below is a reconciliation of the cash and cash equivalents and restricted funds amounts as presented on the Consolidated Balance Sheets to the sum of such amounts presented on the Consolidated Statements of Cash Flows for the years ended December 31:

	2019	2018
Cash and cash equivalents	$ 60	$ 130
Restricted funds	31	28
Restricted funds included in other long-term assets	—	1
Cash and cash equivalents and restricted funds as presented on the Consolidated Statements of Cash Flows	$ 91	$ 159

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 and previous loss history. The Company generally writes off accounts when they become uncollectible or reserves accounts that exceed a certain number of days outstanding. See Note 6—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.

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 (i) the acquisition of American Water by an affiliate of the Company's previous owner in 2003, (ii) the acquisition of E'town Corporation by a predecessor to the Company's previous owner in 2001, and (iii) the acquisition of Pivotal Home Solutions ("Pivotal") in 2018; 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 Market-Based Businesses is comprised of the Homeowner Services Group and Military Services Group reporting units.

The Company's annual impairment testing is performed as of November 30 of each year, in conjunction with the completion of the Company's annual business plan. 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 test 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 and growth rates.

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.

Intangible Assets

Intangible assets consist primarily of finite-lived customer relationships associated with the acquisition of Pivotal. Finite-lived intangible assets are initially measured at their estimated fair values, and are amortized over their estimated useful lives based on the pattern in which the economic benefits of the intangible assets are consumed or otherwise used. See Note 8—Goodwill and Other Intangible Assets for additional information.

Impairment of Long-Lived Assets

Long-lived assets include property, plant and equipment, goodwill, intangible assets 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. When such indicators arise, the Company estimates the fair value of the long-lived asset from future cash flows expected to result from its use and, if applicable, the eventual disposition of the asset, comparing the estimated fair value to the carrying value of the asset. An impairment loss will be recognized in the amount equal to the excess of the long-lived asset's carrying value compared to its estimated 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 holds other long-term investments in privately held companies and joint ventures accounted for using the equity method, and are classified as other long-term assets on the Consolidated Balance Sheets. The estimated fair value of the long-term investments is dependent on the financial performance and solvency of the entities in which the Company invests, as well as volatility inherent in the external markets. If such long-term investments are considered impaired, an impairment loss will be recognized in the amount equal to the excess of the investment's carrying value compared to its estimated fair value.

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, 2019 and 2018 on the Consolidated Balance Sheets are estimated refunds of $25 million and $23 million, respectively. Those 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 $29 million, $28 million and $27 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Revenue Recognition

On January 1, 2018, the Company adopted Accounting Standards Codification Topic 606, *Revenue From Contracts With Customers,* and all related amendments (collectively, "ASC 606"), using the modified retrospective approach, applied to contracts which were not completed as of January 1, 2018. Under this approach, periods prior to the adoption date have not been restated and continue to be reported under the accounting standards in effect for those periods.

Under 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 context of 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.

Market-Based Businesses Revenue

Through various warranty protection programs and other home services, the Company provides 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. Most of the contracts have a one-year term and each service is a separate performance obligation, satisfied over time, as the customers simultaneously receive and consume the benefits provided from the service. Customers are 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 these services. Advances from customers are deferred until the performance obligation is 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 and industrial customers, and prior to the sale of Keystone Clearwater Solutions, LLC ("Keystone"), the Company had shorter-term contracts that provided customized water transfer services for shale natural gas companies and 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 3—Revenue Recognition for additional information.

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:

	2019	2018	2017
Allowance for other funds used during construction	$ 28	$ 24	$ 19
Allowance for borrowed funds used during construction	13	13	8

Environmental Costs

The Company's water and wastewater operations and the operations of its Market-Based Businesses are subject to U.S. federal, state, local and foreign requirements relating to environmental protection, and as such, the Company periodically becomes subject to environmental claims in the normal course of business. Environmental expenditures that relate to current operations or provide a future benefit are expensed or capitalized as appropriate. Remediation costs that relate to an existing condition caused by past operations are accrued, on an undiscounted basis, when it is probable that these costs will be incurred and can be reasonably estimated. A conservation agreement entered into by a subsidiary of the Company with the National Oceanic and Atmospheric Administration in 2010 and amended in 2017 required the subsidiary to, among other provisions, implement certain measures to protect the steelhead trout and its habitat in the Carmel River watershed in the State of California. The subsidiary agreed to pay $1 million annually commencing in 2010 with the final payment being made in 2021. Remediation costs accrued amounted to $2 million and $4 million as of December 31, 2019 and 2018, respectively.

Derivative Financial Instruments

The Company uses derivative financial instruments 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 may designate the derivative as a hedge of the fair value of a recognized asset or liability (fair-value hedge) or 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).

Changes in the fair value of a fair-value hedge, along with the gain or loss on the underlying hedged item, are recorded in current-period earnings. 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.

New Accounting Standards

Presented in the table below are new accounting standards that were adopted by the Company in 2019:

Standard	Description	Date of Adoption	Application	Effect on the Consolidated Financial Statements
Accounting for Leases	Updated the accounting and disclosure guidance for leasing arrangements. Under this guidance, a lessee is required to recognize the following for all leases, excluding short-term leases, at the commencement date: (i) a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and (ii) a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. A package of optional transition practical expedients allows an entity not to reassess under the new guidance: (i) whether any expired or existing contracts as of the adoption date are or contain leases; (ii) lease classification; and (iii) initial direct costs. Additional, optional transition practical expedients are available which allow an entity not to evaluate expired or existing land easements as of the adoption date if the easements were not previously accounted for as leases; and to apply the new lease standard at the adoption date and recognize a cumulative-effect adjustment in the opening balance of retained earnings in the period of adoption.	January 1, 2019	Modified retrospective	See Note 19—Leases.
Targeted Improvements to Accounting for Hedging Activities	Updated the accounting and disclosure guidance for hedging activities, allowing for more financial and nonfinancial hedging strategies to be eligible for hedge accounting. Under this guidance, a qualitative effectiveness assessment is permitted for certain hedges if an entity can reasonably support an expectation of high effectiveness throughout the term of the hedge, provided that an initial quantitative test establishes that the hedge relationship is highly effective. Also, for cash flow hedges determined to be highly effective, all changes in the fair value of the hedging instrument will be recorded in other comprehensive income, with a subsequent reclassification to earnings when the hedged item impacts earnings.	January 1, 2019	Modified retrospective for adjustments related to the measurement of ineffectiveness for cash flow hedges; prospective for the updated presentation and disclosure requirements.	The adoption did not have a material impact on the Consolidated Financial Statements.
Inclusion of the Secured Overnight Financing Rate ("SOFR") Overnight Index Swap ("OIS") Rate as a Benchmark Interest Rate for Hedge Accounting Purposes	Designated the OIS rate based on SOFR as an eligible U.S. benchmark interest rate for the purposes of applying hedge accounting.	January 1, 2019	Prospective	The adoption did not have a material impact on the Consolidated Financial Statements.

Presented in the table below are recently issued accounting standards that have not yet been adopted by the Company as of December 31, 2019:

Standard	Description	Date of Adoption	Application	Estimated Effect on the Consolidated Financial Statements
Measurement of Credit Losses on Financial Instruments	Updated the accounting guidance on reporting credit losses for financial assets held at amortized cost basis and available-for-sale debt securities. Under this guidance, expected credit losses are required to be measured based on historical experience, current conditions and reasonable and supportable forecasts that affect the collectability of the reported amount of financial assets. Also, this guidance requires that credit losses on available-for-sale debt securities be presented as an allowance rather than as a direct write-down.	January 1, 2020; early adoption permitted	Modified retrospective	The standard will not have a material impact on the Consolidated Financial Statements.
Changes to the Disclosure Requirements for Fair Value Measurement	Updated the disclosure requirements for fair value measurement. The guidance removes the requirements to disclose transfers between Level 1 and Level 2 measurements, the timing of transfers between levels, and the valuation processes for Level 3 measurements. Disclosure of transfers into and out of Level 3 measurements will be required. The guidance adds disclosure requirements for the change in unrealized gains and losses in other comprehensive income for recurring Level 3 measurements, as well as the range and weighted average of significant unobservable inputs used to develop Level 3 measurements.	January 1, 2020; early adoption permitted	Prospective for added disclosures and for the narrative description of measurement uncertainty; retrospective for all other amendments.	The standard will not have a material impact on the Consolidated Financial Statements.
Simplifying the Accounting for Income Taxes	Simplified the accounting for income taxes by removing certain exceptions and by adding certain requirements. The guidance removes exceptions related to the incremental approach for intraperiod tax allocation, the requirement to recognize a deferred tax liability for changes in ownership of a foreign subsidiary or equity method investment, and the general methodology for calculating income taxes in an interim period when the year-to-date loss exceeds the anticipated loss. The guidance adds requirements to reflect changes to tax laws or rates in the annual effective tax rate computation in the interim period in which the changes were enacted, to recognize franchise or other similar taxes that are partially based on income as an income-based tax and any incremental amounts as non-income-based tax, and to evaluate when a step up in the tax basis of goodwill should be considered part of the business combination in which the book goodwill was originally recognized and when it should be considered a separate transaction.	January 1, 2021; early adoption permitted	Modified retrospective for amendments related to changes in ownership of a foreign subsidiary or equity method investment; Modified retrospective or retrospective for amendments related to taxes partially based on income; Prospective for all other amendments.	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: Revenue Recognition

Disaggregated Revenues

Presented in the table below are operating revenues disaggregated for the year ended December 31, 2019:

	Revenues from Contracts with Customers	Other Revenues Not from Contracts with Customers (a)	Total Operating Revenues
Regulated Businesses:			
Water services:			
Residential	$ 1,734	$ 1	$ 1,735
Commercial	639	—	639
Fire service	142	—	142
Industrial	138	—	138
Public and other	214	—	214
Total water services	2,867	1	2,868
Wastewater services:			
Residential	119	—	119
Commercial	31	—	31
Industrial	3	—	3
Public and other	14	—	14
Total wastewater services	167	—	167
Miscellaneous utility charges	36	—	36
Alternative revenue programs	—	16	16
Lease contract revenue	—	7	7
Total Regulated Businesses	3,070	24	3,094
Market-Based Businesses	539	—	539
Other	(22)	(1)	(23)
Total operating revenues	$ 3,587	$ 23	$ 3,610

(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 Market-Based Businesses, 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 home warranty protection program contracts, and are recognized as revenue when the associated performance obligations are satisfied. Contract assets are included in unbilled revenues and contract liabilities are included in other current liabilities on the Consolidated Balance Sheets as of December 31, 2019.

Presented in the table below are the changes in contract assets and liabilities for the year ended December 31, 2019:

	Amount
Contract assets:	
Balance at January 1, 2019	$ 14
Additions	27
Transfers to accounts receivable, net	(28)
Balance at December 31, 2019	$ 13
Contract liabilities:	
Balance at January 1, 2019	$ 20
Additions	62
Transfers to operating revenues	(55)
Balance at December 31, 2019	$ 27

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, 2019, the Company's O&M and capital improvement contracts in the Market-Based Businesses have RPOs. Contracts with the U.S. government for work on various military installations expire between 2051 and 2070 and have RPOs of $5.4 billion as of December 31, 2019, 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 2021 and 2038 and have RPOs of $547 million as of December 31, 2019, as measured by estimated remaining contract revenue. Some of the Company's long-term contracts to operate and maintain a municipality's, the federal government'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 4: Acquisitions and Divestitures

Regulated Businesses

Acquisitions

During 2019, the Company closed on 21 acquisitions of various regulated water and wastewater systems for a total aggregate purchase price of $235 million. Assets acquired, principally utility plant, totaled $237 million. Liabilities assumed, primarily contributions in aid of construction, totaled $5 million. The Company recorded additional goodwill of $3 million associated with three of its acquisitions, which is reported in its Regulated Businesses segment, all of which is expected to be deductible for tax purposes. These acquisitions were predominately accounted for as business combinations, as the Company continues to grow its business through regulated acquisitions. The preliminary purchase price allocations related to these acquisitions will be finalized once the valuation of assets acquired has been completed, no later than one year after their acquisition date.

During 2018, the Company closed on 15 acquisitions of various regulated water and wastewater systems for a total aggregate purchase price of $33 million. Assets acquired, principally utility plant, totaled $32 million. Liabilities assumed, primarily contributions in aid of construction, totaled $1 million. The Company recorded additional goodwill of $2 million associated with one of its acquisitions, which is reported in its Regulated Businesses segment. Of this total goodwill, none is expected to be deductible for tax purposes.

During 2017, the Company closed on 18 acquisitions of various regulated water and wastewater systems for a total aggregate purchase price of $210 million. This included the acquisition of the wastewater system assets of the Municipal Authority of the City of McKeesport, Pennsylvania, on December 18, 2017. Assets acquired, principally utility plant, totaled $207 million. Liabilities assumed totaled $23 million, including $9 million of contributions in aid of construction and assumed debt of $7 million. The Company recorded additional goodwill of $29 million associated with four of its acquisitions, which is reported in its Regulated Businesses segment. Of this total goodwill, approximately $1 million is expected to be deductible for tax purposes. Additionally, the Company recognized a bargain purchase gain of $3 million associated with three of the acquisitions.

Assets Held for Sale

On November 20, 2019, the Company and the Company's New York subsidiary, entered into a Stock Purchase Agreement (the "Stock Purchase Agreement") with Liberty Utilities Co. ("Liberty"), pursuant to which Liberty will purchase all of the capital stock of the New York subsidiary (the "Stock Purchase") for an aggregate purchase price of approximately $608 million in cash, subject to adjustment as provided in the Stock Purchase Agreement. The Company's New York operations have approximately 125,000 customer connections in the State of New York. Algonquin Power & Utilities Corp., Liberty's parent company, executed and delivered an absolute and unconditional guaranty of the performance of all of the obligations of Liberty under the Stock Purchase Agreement.

The Stock Purchase Agreement contains customary representations, warranties and covenants. The completion of the Stock Purchase is subject to various conditions, including without limitation: (1) obtaining the approval of the New York State Public Service Commission without any terms or conditions that would reasonably be expected to be adverse to the Company or its affiliates (other than the New York subsidiary or its affiliates) or have a material adverse effect (as defined in the Stock Purchase Agreement) on the New York subsidiary or its affiliates or on Liberty and its affiliates; (2) the expiration or termination of the applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended; and (3) other customary closing conditions, including (a) subject to materiality qualifiers, the accuracy of the parties' representations and warranties contained in the Stock Purchase Agreement; (b) the absence of any law or order prohibiting the completion of the Stock Purchase or granting substantial damages in connection therewith; (c) the absence of any proceeding (excluding any such matter initiated by Liberty or any of its affiliates) pending before any governmental authority seeking to prohibit the completion of the Stock Purchase or recover substantial damages from Liberty or any affiliate resulting from the Stock Purchase; and (d) the compliance by the parties with their respective covenants, agreements and closing deliveries under the Stock Purchase Agreement. The Company currently estimates that the Stock Purchase is to be completed by early 2021. Accordingly, 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, 2019.

The Stock Purchase Agreement contains certain termination rights for both the Company and Liberty, including if the Stock Purchase is not consummated by June 30, 2021 (subject to extension for an additional six months if all of the conditions to closing, other than the conditions related to obtaining regulatory approvals, have been satisfied or are capable of being satisfied), as well as a termination right for Liberty if any governmental authority initiates a condemnation or eminent domain proceeding against a majority of the consolidated properties of the New York subsidiary, taken as a whole. If the Stock Purchase Agreement is terminated, such termination will be without liability of any party to the other parties to the Stock Purchase Agreement, except for liability or damages resulting from a willful breach of a party's representations, warranties, covenants or agreements in the Stock Purchase Agreement prior to termination.

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, 2019:

	December 31, 2019
Current assets	$ 14
Property, plant and equipment	456
Regulatory assets	55
Goodwill	39
Other assets	2
Assets held for sale	$ 566
Current liabilities	24
Deferred income taxes	67
Regulatory liabilities	37
Liabilities related to assets held for sale	$ 128

Market-Based Businesses

Pivotal Acquisition

On June 4, 2018, the Company, through its wholly owned subsidiary American Water Enterprises, LLC, completed the acquisition of Pivotal for a total purchase price of $365 million, net of cash received and including $9 million in working capital. Pivotal is complementary to the Company's Homeowner Services Group product offerings and enhances its presence in the home warranty solutions markets through utility partnerships. The results of Pivotal have been consolidated into the Homeowner Services Group non-reportable operating segment.

Divestitures

On December 12, 2019, as part of a strategic review undertaken by the Company, American Industrial Water LLC, a wholly owned subsidiary of the Company ("AIW"), sold all of the outstanding membership interests in Water Solutions Holdings, LLC ("WSH"), which was a wholly owned subsidiary of AIW, to a natural gas and oil industry investment group, for total cash consideration of $31 million, subject to adjustment based on post-closing working capital. WSH was the parent company of Keystone Clearwater Solutions, LLC. Keystone provides water transportation services to shale natural gas exploration and production customers in the Appalachian Basin. As a result of the sale, the Company recorded a pre-tax loss on sale of $44 million, or $35 million after-tax, during the fourth quarter of 2019.

The pro forma impact of the Company's acquisitions was not material to the Consolidated Statements of Operations for the years ended December 31, 2019, 2018 and 2017.

Note 5: Property, Plant and Equipment

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

	2019	2018	Range of Remaining Useful Lives	Weighted Average Useful Life
Utility plant:				
Land and other non-depreciable assets	$ 166	$ 155		
Sources of supply	858	821	2 to 127 Years	47 years
Treatment and pumping facilities	3,750	3,607	3 to 101 Years	41 years
Transmission and distribution facilities	10,807	10,164	9 to 149 Years	70 years
Services, meters and fire hydrants	4,304	4,008	5 to 90 Years	31 years
General structures and equipment	1,748	1,625	1 to 109 Years	16 years
Waste collection	1,153	943	5 to 114 Years	59 years
Waste treatment, pumping and disposal	720	570	3 to 139 Years	45 years
Construction work in progress	801	593		
Less: Utility plant included in assets held for sale (a)	(587)	—		
Total utility plant	23,720	22,486		
Nonutility property	226	718	3 to 50 Years	6 years
Less: Nonutility plant included in assets held for sale (a)	(5)	—		
Total property, plant and equipment	$ 23,941	$ 23,204		

(a) This property, plant and equipment is related to the pending transactions contemplated by the Stock Purchase Agreement and is included in assets held for sale on the Consolidated Balance Sheets. See Note 4—Acquisitions and Divestitures for additional information.

Property, plant and equipment depreciation expense amounted to $508 million, $497 million and $460 million for the years ended December 31, 2019, 2018 and 2017, 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 2.96%, 3.09% and 3.07% for years December 31, 2019, 2018 and 2017, 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 has determined that the Company is qualified to receive $164 million in tax credits over a ten year period. 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. As a result, the Company recorded receivables of $16 million and $148 million in other current assets and other long-term assets, respectively, on the Consolidated Balance Sheets as of December 31, 2019.

Note 6: Allowance for Uncollectible Accounts

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

	2019	2018	2017
Balance as of January 1	$ (45)	$ (42)	$ (40)
Amounts charged to expense	(28)	(33)	(29)
Amounts written off	32	34	30
Recoveries of amounts written off	—	(4)	(3)
Balance as of December 31	$ (41)	$ (45)	$ (42)

Note 7: Regulatory Assets and Liabilities

Regulatory Assets

Regulatory assets represent costs that are probable of recovery from customers in future rates. The majority of the regulatory assets earn a return. Presented in the table below is the composition of regulatory assets as of December 31:

	2019	2018
Deferred pension expense	$ 384	$ 362
Removal costs recoverable through rates	305	292
Regulatory balancing accounts	96	110
Other	398	392
Less: Regulatory assets included in assets held for sale (a)	(55)	—
Total regulatory assets	$ 1,128	$ 1,156

(a) These regulatory assets are related to the pending transactions contemplated by the Stock Purchase Agreement and are included in assets held for sale on the Consolidated Balance Sheets. See Note 4—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 $375 million and $352 million as of December 31, 2019 and 2018, 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 San Clemente Dam project costs, debt expense, purchase premium recoverable through rates, tank painting costs, certain construction costs for treatment facilities, property tax stabilization, employee-related costs, deferred other postretirement benefit expense, 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.

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:

	2019	2018
Income taxes recovered through rates	$ 1,258	$ 1,279
Removal costs recovered through rates	297	309
Postretirement benefit liability	186	209
Other	102	110
Less: Regulatory liabilities included in liabilities related to assets held for sale (a)	(37)	—
Total regulatory liabilities	$ 1,806	$ 1,907

(a) These regulatory liabilities are related to the pending transactions contemplated by the Stock Purchase Agreement and are included in liabilities related to assets held for sale on the Consolidated Balance Sheets. See Note 4—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 TCJA was signed into law, which, among other things, enacted significant and complex changes to the Internal Revenue Code of 1986 (the "Code"), including a reduction in the maximum U.S. federal corporate income tax rate from 35% to 21% as of January 1, 2018. The TCJA created significant excess deferred income taxes that the Company and its regulatory jurisdictions believe should be refunded to customers. Since these are significant refundable amounts, the Company believes it is probable these amounts will be refunded to customers through future rates, and as such the amounts have been recorded to a regulatory liability.

During 2018, the Company's 14 regulatory jurisdictions began to seek to address the impacts of the TCJA. The Company has adjusted customer rates to reflect the lower income tax rate in 11 states. In one of those 11 states, a portion of the tax savings is being used to reduce certain regulatory assets. In one additional state, the Company is using the tax savings to offset additional capital investment and to reduce a regulatory asset. Proceedings in the other two jurisdictions remain pending. With respect to excess accumulated deferred income taxes ("EADIT"), six of the Company's regulated subsidiaries are amortizing EADIT and crediting customers, including one which is using the EADIT to offset future infrastructure investments. The Company expects the timing of the amortization of EADIT credits by the eight remaining regulated subsidiaries to be addressed in pending or future rate cases or other proceedings.

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 TCJA reserve on revenue, pension and other postretirement benefit balancing accounts, legal settlement proceeds, deferred gains and various regulatory balancing accounts.

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, 2019 and 2018:

	Regulated Businesses		Market-Based Businesses		Consolidated		
	Cost	Accumulated Impairment	Cost	Accumulated Impairment	Cost	Accumulated Impairment	Total Net
Balance as of January 1, 2018	$ 3,492	$ (2,332)	$ 327	$ (108)	$ 3,819	$ (2,440)	$ 1,379
Goodwill from acquisitions	2	—	247	—	249	—	249
Goodwill impairment charge	—	—	—	(53)	—	(53)	(53)
Balance as of December 31, 2018	$ 3,494	$ (2,332)	$ 574	$ (161)	$ 4,068	$ (2,493)	$ 1,575
Goodwill from acquisitions	3	—	—	—	3	—	3
Goodwill reduced through sale of Keystone operations	—	—	(91)	53	(91)	53	(38)
Less: Goodwill included in assets held for sale (a)	(39)	—	—	—	(39)	—	(39)
Balance as of December 31, 2019	$ 3,458	$ (2,332)	$ 483	$ (108)	$ 3,941	$ (2,440)	$ 1,501

(a) This goodwill is related to the pending transactions contemplated by the Stock Purchase Agreement and is included in assets held for sale on the Consolidated Balance Sheets. See Note 4—Acquisitions and Divestitures for additional information.

In 2019, the Company acquired goodwill of $3 million associated with three of its acquisitions in the Regulated Businesses segment. Additionally, as part of the sale of the Company's Keystone operations on December 12, 2019, the Company reduced goodwill, net, by $38 million. See Note 4—Acquisitions and Divestitures for additional information.

The Company completed its annual impairment testing of goodwill as of November 30, 2019, which included quantitative assessments of its Regulated Businesses, Homeowner Services Group and Military Services Group 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, 2019.

In 2018, the Company acquired goodwill of $247 million associated with its acquisition of Pivotal, which was allocated to the Homeowner Services Group reporting unit, within the Market-Based Businesses. Additionally, the Company acquired goodwill of $2 million associated with one of its acquisitions in the Regulated Businesses segment.

During the third quarter of 2018, as a result of the narrowing the scope of the Company's former Keystone operations, the Company concluded there were indicators that the Keystone reporting unit may have been impaired. Accordingly, impairment testing was performed as part of the preparation of the Company's Consolidated Financial Statements during the third quarter of 2018. The results of this impairment test showed the fair value of the former Keystone reporting unit was lower than its carrying value, resulting in a non-cash, pre-tax goodwill impairment charge of $53 million. Additionally, the impairment test showed the fair value of the former Keystone reporting unit's customer relationship intangible asset was lower than its carrying value, resulting in a non-cash, pre-tax impairment charge of $4 million. In the aggregate, a non-cash, pre-tax impairment charge of $57 million was recorded in impairment charge on the Consolidated Statement of Operations for the year ended December 31, 2018, of which, $54 million was attributable to the Company, after adjustment for noncontrolling interest.

Intangible Assets

Presented in the tables below are the gross carrying value and accumulated amortization of the finite-lived intangible assets held by the Company as of December 31:

	2018	Disposals (a)	2019
Customer relationships	$ 86	$ (8)	$ 78
Other intangible assets	13	—	13
Total gross carrying value	$ 99	$ (8)	$ 91

(a) The disposals relate to customer relationship intangible assets disposed of as part of the sale of the Company's Keystone operations on December 12, 2019. See Note 4—Acquisitions and Divestitures for additional information.

	2018	Amortization	Disposals (a)	2019
Customer relationships	$ (13)	$ (12)	$ 5	$ (20)
Other intangible assets	(2)	(2)	—	(4)
Total accumulated amortization	$ (15)	$ (14)	$ 5	$ (24)
Total intangible assets, net	$ 84			$ 67

(a) The disposals relate to customer relationship intangible assets disposed of as part of the sale of the Company's Keystone operations on December 12, 2019. See Note 4—Acquisitions and Divestitures for additional information.

Intangible asset amortization expense amounted to $14 million, $12 million and $4 million for the years ended December 31, 2019, 2018 and 2017, respectively. Estimated amortization expense for the next five years subsequent to December 31, 2019 is as follows:

	Amount
2020	$ 12
2021	10
2022	9
2023	6
2024	5

Note 9: Shareholders' Equity

Common Stock

Under the dividend reinvestment and direct stock purchase plan (the "DRIP"), shareholders may reinvest cash dividends and purchase additional Company common stock, up to certain limits, through the plan administrator without commission fees. 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, 2019, 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 repurchased 0.4 million shares and 0.6 million shares of common stock in the open market at an aggregate cost of $36 million and $45 million under this program for the years ended December 31, 2019 and 2018, respectively. As of December 31, 2019, 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, 2019 and 2018:

	Defined Benefit Plans					
	Employee Benefit Plan Funded Status	**Amortization of Prior Service Cost**	**Amortization of Actuarial Loss**	**Foreign Currency Translation**	**Gain (Loss) on Cash Flow Hedge**	**Accumulated Other Comprehensive Loss**
Beginning balance as of January 1, 2018	$ (140)	$ 1	$ 49	$ 1	$ 10	$ (79)
Other comprehensive income (loss) before reclassification	60	—	—	—	(2)	58
TCJA tax effects reclassified from accumulated other comprehensive loss	(22)	—	—	—	2	(20)
Amounts reclassified from accumulated other comprehensive loss	—	—	7	—	—	7
Net other comprehensive income	38	—	7	—	—	45
Ending balance as of December 31, 2018	$ (102)	$ 1	$ 56	$ 1	$ 10	$ (34)
Other comprehensive income (loss) before reclassification	8	—	—	—	(13)	(5)
Amounts reclassified from accumulated other comprehensive loss	—	—	4	(1)	—	3
Net other comprehensive income (loss)	8	—	4	(1)	(13)	(2)
Ending balance as of December 31, 2019	$ (94)	$ 1	$ 60	$ —	$ (3)	$ (36)

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 capitalized 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.

During the second quarter of 2019, the Company substantially exited its foreign operations in Canada due to a contract expiration in its Contract Services Group. As a result, the Company recognized a pre-tax gain of $1 million from cumulative foreign currency translation, and a corresponding change of accumulated other comprehensive loss.

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

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 repayments of indebtedness from 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 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 2019, 2018 and 2017, the Company paid $353 million, $319 million and $289 million in cash dividends, respectively. Presented in the table below is the per share cash dividends paid for the years ended December 31:

	2019	**2018**	**2017**
December	$ 0.50	$ 0.455	$ 0.415
September	$ 0.50	$ 0.455	$ 0.415

June	$	0.50	$	0.455	$	0.415
March	$	0.455	$	0.415	$	0.375

On December 6, 2019, the Company's Board of Directors declared a quarterly cash dividend payment of $0.50 per share payable on March 4, 2020, to shareholders of record as of February 7, 2020.

Regulatory Restrictions

The issuance of long-term debt or equity securities by the Company or long-term debt by American Water Capital Corp. ("AWCC"), the Company's wholly owned financing subsidiary, does not require authorization of any state PUC if no guarantee or pledge of the regulated subsidiaries is utilized. However, state PUC authorization is required to issue long-term debt at most of the Company's regulated subsidiaries. The Company's regulated subsidiaries normally obtain the required approvals on a periodic basis to cover their anticipated financing needs for a period of time or in connection with a specific financing.

Under applicable law, the Company's subsidiaries can pay dividends only from retained, undistributed or current earnings. A significant loss recorded at a subsidiary may limit the dividends that the subsidiary can distribute to American Water. Furthermore, the ability of the Company's subsidiaries to pay upstream dividends or repay indebtedness to American Water is subject to compliance 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 other agreements or covenants made or entered into by the Company and its subsidiaries.

Note 10: Stock Based Compensation

The Company has granted stock options, stock units and dividend equivalents to non-employee directors, officers and other key employees of the Company pursuant to the terms of its 2007 Omnibus Equity Compensation Plan (the "2007 Plan"). Stock units under the 2007 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"). The 2007 Plan has been replaced by the 2017 Omnibus Plan, as defined below, 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.

In May 2017, the Company's shareholders approved the American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan (the "2017 Omnibus Plan"). The Company has granted stock units, including RSUs and PSUs, stock awards and dividend equivalents to non-employee directors, officers and employees under the 2017 Omnibus Plan. A total of 7.2 million shares of common stock may be issued under the 2017 Omnibus Plan. As of December 31, 2019, 6.8 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 cost of services received from employees in exchange for the issuance of stock options and restricted stock awards is measured based on the grant date fair value of the awards issued. The value of stock options and stock unit awards at the date of the grant is amortized through expense over the requisite service period. All awards granted in 2019, 2018 and 2017 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. 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:

	2019	2018	2017
Stock options	$ —	$ 1	$ 1
RSUs and PSUs	15	15	9
Nonqualified employee stock purchase plan	2	1	1
Stock-based compensation	17	17	11
Income tax benefit	(4)	(5)	(4)
Stock-based compensation expense, net of tax	$ 13	$ 12	$ 7

There were no significant stock-based compensation costs capitalized during the years ended December 31, 2019, 2018 and 2017.

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 recognizes the tax benefits, which have been included in deferred income tax assets, related to compensation costs. The tax deductions in excess of the 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 Options

There were no grants of stock options to employees in 2019, 2018 and 2017. The stock options that were previously issued vested ratably over the three-year service period beginning on January 1 of the year of the grant and have no performance vesting conditions. Expense was recognized using the straight-line method and was amortized over the requisite service period.

Presented in the table below is stock option activity for the year ended December 31, 2019:

	Shares (in thousands)	Weighted Average Exercise Price (per share)	Weighted Average Remaining Life (years)	Aggregate Intrinsic Value
Options outstanding as of December 31, 2018	517	$ 54.92	2.96	$ 19
Granted	—	—		
Forfeited or expired	—	—		
Exercised	(223)	52.45		
Options outstanding as of December 31, 2019	294	$ 56.80	2.04	$ 19
Options exercisable as of December 31, 2019	294	$ 56.80	2.04	$ 19

As of December 31, 2019, no unrecognized compensation cost related to nonvested stock options is expected to be recognized as all of the outstanding options are exercisable. The total fair value of stock options vested was $1 million, $1 million and $2 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Presented in the table below is additional information regarding stock options exercised during the years ended December 31:

	2019	2018	2017
Intrinsic value	$ 12	$ 9	$ 10
Exercise proceeds	14	7	11
Income tax benefit realized	3	2	3

Stock Units

During 2019, 2018 and 2017, the Company granted RSUs to certain employees under the 2007 Plan and 2017 Omnibus Plan, as applicable. RSUs generally vest based on continued employment with the Company over periods ranging from one to three years.

During 2019, 2018 and 2017, 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.

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.

Presented in the table below is RSU activity for the year ended December 31, 2019:

	Shares (in thousands)	Weighted Average Grant Date Fair Value (per share)
Non-vested total as of December 31, 2018	133	$ 77.44
Granted	67	101.25
Vested	(65)	85.27
Forfeited	(17)	86.38
Non-vested total as of December 31, 2019	118	$ 85.41

As of December 31, 2019, $4 million of total unrecognized compensation cost related to the nonvested RSUs is expected to be recognized over the weighted average remaining life of 1.72 years. The total fair value of stock units and RSUs vested was $4 million, $4 million and $3 million for the years ended December 31, 2019, 2018 and 2017, respectively.

During 2019, 2018 and 2017, the Company granted PSUs to certain employees under the 2007 Plan and 2017 Omnibus Plan, as applicable. 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, 2019:

	Shares (in thousands)	Weighted Average Grant Date Fair Value (per share)
Non-vested total as of December 31, 2018	308	$ 73.39
Granted	145	97.73
Vested	(112)	72.84
Forfeited	(25)	84.54
Non-vested total as of December 31, 2019	316	$ 83.89

As of December 31, 2019, $4 million of total unrecognized compensation cost related to the nonvested PSUs is expected to be recognized over the weighted average remaining life of 1.09 years. The total fair value of PSUs vested was $14 million, $12 million and $13 million for the years ended December 31, 2019, 2018 and 2017, 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 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 is 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:

	2019	2018	2017
Expected volatility	16.80%	17.23%	17.40%
Risk-free interest rate	2.47%	2.36%	1.53%
Expected life (years)	3.0	3.0	3.0
Grant date fair value per share	$ 110.37	$ 73.62	$ 72.81

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.

If dividends are paid with respect to shares of the Company's common stock before the shares underlying the RSUs and PSUs are distributed, the Company credits a liability for the value of the dividends that would have been paid if the RSUs and PSUs were shares of Company common stock. When the shares underlying the RSUs and PSUs are distributed, the Company pays the participant a lump sum cash payment equal to the value of the dividend equivalents accrued. The Company accrued dividend equivalents totaling $1 million, $1 million and less than $1 million to accumulated deficit in the accompanying Consolidated Statements of Changes in Shareholders' Equity for the years ended December 31, 2019, 2018 and 2017, respectively.

Employee Stock Purchase Plan

The Company maintains a nonqualified employee stock purchase plan (the "ESPP") that expires in 2027 through which employee participants (other than the Company's executive officers) may use payroll deductions to acquire Company common stock at a discount of 85% of the fair market value of the common stock at the end of the purchase period. A total of 2.0 million shares may be issued under the ESPP, and as of December 31, 2019, there were 1.8 million shares of common stock reserved for issuance under the ESPP. The ESPP is considered compensatory. During the years ended December 31, 2019, 2018 and 2017, the Company issued 88 thousand, 95 thousand and 93 thousand shares, respectively, under the ESPP and its predecessor plan.

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	Maturity	2019	2018
Long-term debt of AWCC: (a)					
Senior notes—fixed rate	2.95%-8.27%	4.18%	2021-2049	$ 7,191	$ 6,116
Private activity bonds and government funded debt—fixed rate	1.79%-5.38%	3.72%	2021-2040	191	192
Long-term debt of other American Water subsidiaries:					
Private activity bonds and government funded debt—fixed rate (b)	0.00%-5.60%	3.08%	2020-2048	724	727
Mortgage bonds—fixed rate	3.92%-9.71%	7.49%	2020-2039	578	606
Mandatorily redeemable preferred stock	8.47%-9.75%	8.59%	2024-2036	7	8
Finance lease obligations	12.25%	12.25%	2026	1	1
Term loan				—	6
Long-term debt				8,692	7,656
Unamortized debt premium, net (c)				1	7
Unamortized debt issuance costs				(21)	(16)
Less current portion of long-term debt				(28)	(71)
Total long-term debt				$ 8,644	$ 7,576

(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 guarantee by parent company of AWCC's payment obligations under such indebtedness.

(b) Includes $3 million and $3 million of variable rate debt as of December 31, 2019 and 2018, respectively, with variable-to-fixed interest rate swaps ranging between 3.93% and 4.65%. This debt was assumed via an acquisition in 2013.

(c) Primarily fair value adjustments previously recognized in acquisition purchase accounting.

All mortgage bonds, term loans and $723 million of the private activity bonds and government funded debt held by the Company's subsidiaries were collateralized as of December 31, 2019.

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 notes require the Company to maintain a ratio of consolidated total indebtedness to consolidated total capitalization of not more than 0.70 to 1.00. The ratio as of December 31, 2019 was 0.61 to 1.00. In addition, the Company has $877 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.

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

	Amount
2020	$ 28
2021	310
2022	14
2023	159
2024	473
Thereafter	7,708

Presented in the table below are the issuances of long-term debt in 2019:

Company	Type	Rate	Maturity	Amount
AWCC	Senior notes—fixed rate	3.45%-4.15%	2029-2049	$ 1,100
AWCC (a)	Private activity bonds and government funded debt—fixed rate	2.45%	2039	100
Other American Water subsidiaries	Private activity bonds and government funded debt—fixed rate	0.00%-5.00%	2021-2048	330
Total issuances				$ 1,530

(a) This indebtedness has a mandatory redemption provision callable in 2029.

The Company incurred debt issuance costs of $15 million related to the above issuances.

Presented in the table below are the retirements and redemptions of long-term debt in 2019 through sinking fund provisions, optional redemption or payment at maturity:

Company	Type	Rate	Maturity	Amount
AWCC	Private activity bonds and government funded debt—fixed rate	1.79%-6.25%	2021-2031	$ 101
AWCC	Senior notes—fixed rate	7.21%	2019	25
Other American Water subsidiaries	Private activity bonds and government funded debt—fixed rate	0.00%-6.20%	2019-2048	333
Other American Water subsidiaries	Mortgage bonds—fixed rate	5.48%-9.13%	2019-2021	28
Other American Water subsidiaries	Mandatorily redeemable preferred stock	8.49%-9.18%	2031-2036	2
Other American Water subsidiaries	Term loan	5.76%-5.81%	2021	6
Total retirements and redemptions				$ 495

On May 13, 2019, AWCC completed a $1.10 billion debt offering which included the sale of $550 million aggregate principal amount of its 3.45% Senior Notes due 2029 and $550 million aggregate principal amount of its 4.15% Senior Notes due 2049. At the closing of the offering, AWCC received, after deduction of underwriting discounts and before deduction of offering expenses, net proceeds of approximately $1.09 billion. AWCC used the net proceeds to: (i) lend funds to parent company and its regulated subsidiaries; (ii) repay $25 million principal amount of AWCC's 7.21% Series I Senior Notes at maturity on May 19, 2019; (iii) repay $26 million aggregate principal amount of regulated subsidiary debt at maturity during the second quarter of 2019; and (iv) repay AWCC's commercial paper obligations, and for general corporate purposes.

Interest, net includes interest income of approximately $4 million, $11 million and $14 million in 2019, 2018 and 2017, respectively.

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 swaps. The Company reduces exposure to interest rates by managing commercial paper and debt maturities. The Company also 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, credit-worthy financial institutions having long-term credit ratings of "A" or better.

On May 6, 2019, AWCC terminated five forward starting swap agreements with an aggregate notional amount of $510 million, realizing a net loss of $30 million, to be amortized through interest, net over 10 and 30 year periods, in accordance with the terms of the new debt issued on May 13, 2019. No ineffectiveness was recognized on hedging instruments for the years ended December 31, 2019 and 2018.

The Company has employed interest rate swaps to fix the interest cost on a portion of its variable-rate debt with an aggregate notional amount of $3 million. The Company has designated these instruments as economic hedges, accounted for at fair value, with gains or losses recognized in interest, net. The gain recognized by the Company was de minimis for the years ended 2019 and 2018.

Presented in the table below are the gross fair values of the Company's derivative liabilities, as well as the location of the liability balances on the Consolidated Balance Sheets as of December 31:

Derivative Instrument	Derivative Designation	Balance Sheet Classification	2019	2018
Liability derivative:				
Forward starting swaps	Cash flow hedge	Other current liabilities	$ —	$ 14

Note 12: Short-Term Debt

Short-term debt consists of commercial paper and credit facility borrowings totaling $786 million and $964 million as of December 31, 2019 and 2018, respectively. The weighted average interest rate on AWCC short-term borrowings was approximately 2.54% and 2.28% for the year ended December 31, 2019 and 2018, respectively. As of December 31, 2019 there were no borrowings outstanding with maturities greater than three months.

Liquidity needs for capital investment, working capital and other financial commitments are 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. The revolving credit facility provides $2.25 billion in aggregate total commitments from a diversified group of financial institutions. On April 9, 2019, the termination date of the credit agreement with respect to AWCC's revolving credit facility was extended, pursuant to the terms of the credit agreement, from March 21, 2023 to March 21, 2024. The facility is used principally to support AWCC's commercial paper program 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 up to two extensions of its expiration date each for up to a one-year period, as to which one such extension request remains. As of December 31, 2019, AWCC had no outstanding borrowings and $76 million of outstanding letters of credit under the revolving credit facility, with $2.17 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 LIBOR rate (or applicable market replacement rate) or base rate in accordance with Moody Investors Service's and Standard & Poor's Financial Services' then applicable credit rating on AWCC's senior unsecured, non-credit enhanced debt.

Presented in the table below are the aggregate credit facility commitments, letter of credit sublimit under the revolving credit facility and the commercial paper limit, as well as the available capacity for each, as of December 31, 2019 and 2018:

	Credit Facility Commitment	Available Credit Facility Capacity	Letter of Credit Sublimit	Available Letter of Credit Capacity	Commercial Paper Limit	Available Commercial Paper Capacity
December 31, 2019	$ 2,250	$ 2,174	$ 150	$ 74	$ 2,100	$ 1,314
December 31, 2018	2,262	2,177	150	69	2,100	1,146

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

	2019	2018
Average borrowings	$ 726	$ 1,029
Maximum borrowings outstanding	1,271	1,905
Weighted average interest rates, computed on daily basis	2.54%	2.28%
Weighted average interest rates, as of December 31	1.86%	2.84%

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, 2019 was 0.61 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.

As part of the normal course of business, the Company routinely enters contracts for the purchase and sale of water, energy, fuels 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. Depending on the Company's net position with the counterparty, the demand could be for the posting of collateral. In the absence of expressly agreed provisions that specify the collateral that must be provided, the obligation to supply the collateral requested will be a function of the facts and circumstances of the Company's situation at the time of the demand. If the Company can reasonably claim that it is willing and financially able to perform its obligations, it may be possible that no collateral would need to be posted or that only an amount equal to two or three months of future payments should be sufficient. 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.

Note 13: General Taxes

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

	2019	2018	2017
Gross receipts and franchise	$ 110	$ 112	$ 110
Property and capital stock	124	120	105
Payroll	35	33	31
Other general	11	12	13
Total general taxes	$ 280	$ 277	$ 259

Note 14: Income Taxes

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

	2019	2018	2017
Current income taxes:			
State	$ 4	$ 26	$ 25
Federal	—	1	(1)
Total current income taxes	$ 4	$ 27	$ 24
Deferred income taxes:			
State	$ 54	$ 33	$ 50
Federal	155	163	413
Amortization of deferred investment tax credits	(1)	(1)	(1)
Total deferred income taxes	208	195	462
Provision for income taxes	$ 212	$ 222	$ 486

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:

	2019	2018	2017
Income tax at statutory rate	21.0 %	21.0%	35.0 %
Increases (decreases) resulting from:			
State taxes, net of federal taxes	5.4 %	5.5%	5.4 %
TCJA	— %	1.5%	13.7 %
Other, net	(1.0)%	0.2%	(0.8)%
Effective tax rate	25.4 %	28.2%	53.3 %

On December 22, 2017, the TCJA was signed into law. Substantially all of the provisions of the TCJA are effective for taxable years beginning after December 31, 2017. The TCJA includes significant changes to the Code, including amendments which significantly change the taxation of individuals and business entities, and includes specific provisions related to regulated public utilities. The more significant changes that impact the Company included in the TCJA are reductions in the corporate federal income tax rate from 35% to 21%, and several technical provisions including, among others, limiting the utilization of net operating losses ("NOLs") arising after December 31, 2017 to 80% of taxable income with an indefinite carryforward. The specific provisions related to regulated public utilities in the TCJA generally allow for the continued deductibility of interest expense, the elimination of full expensing for tax purposes of certain property acquired after September 27, 2017 and the continuation of certain rate normalization requirements for accelerated depreciation benefits. Non-regulated segments of the Company's business may be able to take advantage of the full expensing provisions of the TCJA.

Changes in the Code from the TCJA had a material impact on the Company's financial statements in 2017. Under GAAP, specifically 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 income tax assets and liabilities to be measured at the enacted tax rate expected to apply when temporary differences are to be realized or settled. Thus, at the date of enactment, the Company's deferred income taxes were re-measured based upon the new tax rate. For the Company's regulated entities, substantially all of the change in deferred income taxes are recorded as an offset to either a regulatory asset or liability because changes are expected to be recovered by or refunded to customers. For the Company's unregulated operations, the change in deferred income taxes is recorded as a non-cash re-measurement adjustment to earnings.

The staff of the U.S. Securities and Exchange Commission recognized the complexity of reflecting the impacts of the TCJA, and on December 22, 2017 issued guidance in Staff Accounting Bulletin 118 ("SAB 118") which clarifies accounting for income taxes under ASC 740 if information is not yet available or complete and provides for up to a one year period in which to complete the required analyses and accounting. The Company made a reasonable estimate for the measurement and accounting of certain effects of the TCJA which were reflected in the financial statements as of December 31, 2017. The re-measurement of deferred income taxes at the new federal tax rate increased the 2017 deferred income tax provision by $125 million for the year ending December 31, 2017. Additionally, the accumulated deferred income tax liability decreased by $1.39 billion and regulatory liabilities increased by $1.51 billion, respectively, as of December 31, 2017.

As of December 31, 2018, the Company recorded all its reasonable estimates resulting from the TCJA under SAB 118. These estimates, however, are still subject to changes due to the future impacts of various items, including further changes in income tax laws, forecasted financial conditions and the actual tax return filings with the tax authorities. As of December 31, 2019, the Company has not identified any changes that would require its prior estimates to be modified.

ASC 740 requires the re-measurement of deferred income tax assets and liabilities as a result of a change in tax laws or rates to be presented in net income. Adjusting temporary differences originally recorded to AOCI through the income statement result in disproportionate tax effects remaining in AOCI. As of December 31, 2018, the Company adopted Accounting Standards Update 2018-02, *Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income,* which allows companies to reclassify the income tax effects of TCJA on items within AOCI to retained earnings. As a result of the TCJA tax rate reduction, there were income tax effects related to the Company's hedge and pension positions of $2 million and $22 million, respectively, remaining in the Company's accumulated other comprehensive loss balance. The Company reclassified these tax effects from accumulated other comprehensive loss to accumulated deficit as of December 31, 2018. No further adjustments were recorded during 2019 as a result of this re-measurement.

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

	2019	2018
Deferred tax assets:		
Advances and contributions	$ 410	$ 402
Tax losses and credits	136	131
Regulatory income tax assets	335	339
Pension and other postretirement benefits	94	91
Other	151	44
Total deferred tax assets	1,126	1,007
Valuation allowance	(21)	(14)
Total deferred tax assets, net of allowance	$ 1,105	$ 993
Deferred tax liabilities:		
Property, plant and equipment	$ 2,760	$ 2,537
Deferred pension and other postretirement benefits	77	77
Other	207	97
Total deferred tax liabilities	3,044	2,711
Less: Deferred tax liabilities included in liabilities related to assets held for sale (a)	67	—
Total deferred tax liabilities, net of deferred tax assets	$ (1,872)	$ (1,718)

(a) These deferred tax liabilities are related to the pending transactions contemplated by the Stock Purchase Agreement and are included in liabilities related to assets held for sale on the Consolidated Balance Sheets. See Note 4—Acquisitions and Divestitures for additional information.

As of December 31, 2019 and 2018, the Company recognized federal NOL carryforwards of $673 million and $813 million, respectively. The Company believes the federal NOL carryforwards are more likely than not to be recovered and require no valuation allowance. The Company expects to fully utilize its federal NOL carryforwards before they begin to expire in 2028.

As of December 31, 2019 and 2018, the Company had state NOLs of $453 million and $387 million, respectively, a portion of which are offset by a valuation allowance because the Company does not believe these NOLs are more likely than not to be realized. The state NOL carryforwards began to expire in 2019 through 2038.

The capital loss carryforward for federal income tax purposes have increased from the previous year due to the capital loss produced by the sale of the Company's Keystone operations. As of December 31, 2019, the capital loss carryforward for federal income tax purposes was approximately $66 million. As of December 31, 2019 and 2018, the Company had an insignificant amount of Canadian NOL carryforward.

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 2012. 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
Balance as of January 1, 2018	$ 106
Increases in current period tax positions	13
Decreases in prior period measurement of tax positions	(22)
Balance as of December 31, 2018	$ 97
Increases in current period tax positions	17
Decreases in prior period measurement of tax positions	(4)
Balance as of December 31, 2019	$ 110

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 expects to utilize its remaining federal NOLs in 2020, after the pending sale of the New York subsidiary is completed, 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, 2019, an unrecognized tax benefit of $12 million, excluding interest and penalties, would impact the Company's effective tax rate. The Company had an insignificant amount of interest and penalties related to its tax positions as of December 31, 2019 and 2018.

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

	Amount
Balance as of January 1, 2017	$ 6
Increases in current period tax positions	7
Balance as of December 31, 2017	$ 13
Increases in current period tax positions	1
Balance as of December 31, 2018	$ 14
Increases in current period tax positions	7
Balance as of December 31, 2019	$ 21

Note 15: Employee Benefits

Pension and Other Postretirement Benefits

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 5.25% of base pay defined contribution plan. 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 7—Regulatory Assets and Liabilities 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").

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 and commingled funds including equities and fixed income securities.

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 2018, the fair values and asset allocations of the pension plan assets include the American Water Pension Plan, the New York Water Service Corporation Pension Plan, and the Shorelands Water Company, Inc. Pension Plan.

Presented in the tables below are the fair values and asset allocations of the pension plan assets as of December 31, 2019 and 2018, respectively, by asset category:

Asset Category	2020 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, 2019
Cash		$ 39	$ 39	$ —	$ —	2%
Equity securities:	50%					
U.S. large cap		358	358	—	—	20%
U.S. small cap		84	78	6	—	5%
International		320	6	137	177	18%
Real estate fund		127	—	—	127	7%
REITs		7	—	7	—	—%
Fixed income securities:	50%					
U.S. Treasury securities and government bonds		169	158	11	—	10%
Corporate bonds		542	—	542	—	31%
Mortgage-backed securities		14	—	14	—	1%
Municipal bonds		26	—	26	—	1%
Treasury futures		8	8	—	—	1%
Long duration bond fund		8	8	—	—	1%
Guarantee annuity contracts		45	—	—	45	3%
Total	100%	$ 1,747	$ 655	$ 743	$ 349	100%

Asset Category	2019 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, 2018
Cash		$ 24	$ 24	$ —	$ —	2%
Equity securities:	50%					
U.S. large cap		297	297	—	—	20%
U.S. small cap		76	70	6	—	5%
International		256	2	132	122	17%
Real estate fund		65	—	—	65	4%
REITs		20	—	20	—	1%
Fixed income securities:	50%					
U.S. Treasury securities and government bonds		181	167	14	—	12%
Corporate bonds		491	—	491	—	33%
Mortgage-backed securities		11	—	11	—	1%
Municipal bonds		28	—	28	—	2%
Long duration bond fund		7	7	—	—	—%
Guarantee annuity contracts		43	—	—	43	3%
Total	100%	$ 1,499	$ 567	$ 702	$ 230	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 2019 and 2018, respectively:

	Level 3
Balance as of January 1, 2019	$ 230
Actual return on assets	25
Purchases, issuances and settlements, net	94
Balance as of December 31, 2019	$ 349

	Level 3
Balance as of January 1, 2018	$ 278
Actual return on assets	(23)
Purchases, issuances and settlements, net	(25)
Balance as of December 31, 2018	$ 230

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. 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.

In 2018, the Company announced plan design changes to the medical bargaining benefit plan, which resulted in a cap on future benefits and an over funded postretirement medical benefits bargaining plan. Given the change in funded status, the Retirement and Benefit Plans Investment Committee (the "Investment Committee"), which is responsible for overseeing the investment of the Company's pension and other postretirement benefit plans' assets, commissioned a new asset-liability study for the postretirement medical bargaining plan. This study concluded that it was prudent to decrease the investment risk in the plan due to the current funded status. The study also recommended reducing its exposure to changes in interest rates by matching the assets of the plan to the projected cash flows for future benefit payments of the liability. The Investment Committee approved the recommendations.

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 postretirement medical bargaining plan, 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. Voluntary Employees' Beneficiary Association ("VEBA") Trust assets include the American Water Postretirement Medical Benefits Bargaining Plan, the New York Water Service Corporation Postretirement Medical Benefits Bargaining Plan, the American Water Postretirement Medical Benefits Non-Bargaining Plan, and the American Water Life Insurance Trust.

Presented in the tables below are the fair values and asset allocations of the postretirement benefit plan assets as of December 31, 2019 and 2018, respectively, by asset category:

Asset Category	2020 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, 2019
Bargain VEBA:						
Cash		$ 6	$ 6	$ —	$ —	2%
Equity securities:	4%					
U.S. large cap		13	13	—	—	3%
Fixed income securities:	96%					
U.S. Treasury securities and government bonds		373	298	75	—	94%
Long duration bond fund		4	4	—	—	1%
Total bargain VEBA	100%	$ 396	$ 321	$ 75	$ —	100%
Non-bargain VEBA:						
Cash		$ 4	$ 4	$ —	$ —	—
Equity securities:	60%					
U.S. large cap		48	48	—	—	36%
International		30	30	—	—	23%
Fixed income securities:	40%					
Core fixed income bond fund (a)		50	—	50	—	41%
Total non-bargain VEBA	100%	$ 132	$ 82	$ 50	$ —	100%
Life VEBA:						
Equity securities:	70%					
U.S. large cap		$ 2	$ 2	$ —	$ —	50%
Fixed income securities:	30%					
Core fixed income bond fund (a)		2	2	—	—	50%
Total life VEBA	100%	$ 4	$ 4	$ —	$ —	100%
Total	100%	$ 532	$ 407	$ 125	$ —	100%

(a) Includes cash for margin requirements.

Asset Category	2019 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 12/31/2018
Bargain VEBA:						
Cash		$ 31	$ 31	$ —	$ —	—
Equity securities:	2%					
U.S. large cap		1	1	—	—	—%
International		17	—	—	17	4%
Fixed income securities:	98%					
U.S. Treasury securities and government bonds		179	178	1	—	47%
Corporate bonds		141	—	141	—	37%
Municipal bonds		9	—	9	—	3%
Long duration bond fund		4	4	—	—	1%
Future and option contracts (a)		—	—	—	—	8%
Total bargain VEBA	100%	$ 382	$ 214	$ 151	$ 17	100%
Non-bargain VEBA:						
Cash		$ 3	$ 3	$ —	$ —	—
Equity securities:	60%					
U.S. large cap		43	43	—	—	35%
International		24	24	—	—	20%
Fixed income securities:	40%					
Core fixed income bond fund (a)		52	—	52	—	45%
Total non-bargain VEBA	100%	$ 122	$ 70	$ 52	$ —	100%
Life VEBA:						
Equity securities:	70%					
U.S. large cap		$ 2	$ 2	$ —	$ —	67%
Fixed income securities:	30%					
Core fixed income bond fund (a)		1	1	—	—	33%
Total life VEBA	100%	$ 3	$ 3	$ —	$ —	100%
Total	100%	$ 507	$ 287	$ 203	$ 17	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.

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	
	2019	2018	2019	2018
Change in benefit obligation:				
Benefit obligation as of January 1,	$ 1,892	$ 2,034	$ 353	$ 614
Service cost	28	34	4	8
Interest cost	82	76	15	20
Plan participants' contributions	—	—	2	2
Plan amendments	—	(23)	(1)	(174)
Actuarial loss (gain)	264	(153)	25	(89)
Gross benefits paid	(105)	(76)	(25)	(29)
Federal subsidy	—	—	1	1
Benefit obligation as of December 31,	$ 2,161	$ 1,892	$ 374	$ 353
Change in plan assets:				
Fair value of plan assets as of January 1,	$ 1,499	$ 1,649	$ 507	$ 576
Actual return on plan assets	319	(97)	51	(40)
Employer contributions	33	24	(2)	(2)
Plan participants' contributions	—	—	2	2
Benefits paid	(104)	(77)	(26)	(29)
Fair value of plan assets as of December 31,	$ 1,747	$ 1,499	$ 532	$ 507
Funded value as of December 31,	$ (414)	$ (393)	$ 158	$ 154
Amounts recognized on the balance sheet:				
Noncurrent asset	$ —	$ —	$ 159	$ 155
Current liability	(3)	(3)	—	—
Noncurrent liability	(411)	(390)	(1)	(1)
Net amount recognized	$ (414)	$ (393)	$ 158	$ 154

On August 31, 2018, the Postretirement Medical Benefit Plan was remeasured to reflect a plan change. The plan change resulted in a $175 million reduction in future benefits payable to plan participants, and, in combination with other experience reflected as of the remeasurement date, resulted in a $227 million reduction to the net accumulated postretirement benefit obligation.

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	
	2019	2018	2019	2018
Net actuarial loss	$ 435	$ 431	$ 72	$ 83
Prior service credit	(19)	(22)	(257)	(291)
Net amount recognized	$ 416	$ 409	$ (185)	$ (208)
Regulatory assets (liabilities)	$ 375	$ 352	$ (185)	$ (208)
Accumulated other comprehensive income	41	57	—	—
Total	$ 416	$ 409	$ (185)	$ (208)

Presented in the tables below are the projected benefit obligation, accumulated benefit obligation and fair value of plan assets for pension plans with a projected obligation in excess of plan assets as of December 31, 2019 and 2018:

	Projected Benefit Obligation Exceeds the Fair Value of Plans' Assets	
	2019	2018
Projected benefit obligation	$ 2,161	$ 1,892
Fair value of plan assets	1,748	1,499

	Accumulated Benefit Obligation Exceeds the Fair Value of Plans' Assets	
	2019	2018
Accumulated benefit obligation	$ 2,018	$ 1,768
Fair value of plan assets	1,748	1,499

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.

In 2006, the PPA replaced the funding requirements for defined benefit pension plans by requiring 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 PPA was effective for the 2008 plan year with short-term phase-in provisions for both the funding target and at-risk determination. 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 2020 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:

	Pension Benefits	Other Benefits
2020 expected employer contributions:		
To plan trusts	$ 38	$ —
To plan participants	2	—

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
2020	$ 113	$ 27	$ 1
2021	115	27	1
2022	118	27	1
2023	123	27	1
2024	126	27	1
2025-2029	657	131	6

Because the above amounts are net benefits, plan participants' contributions have been excluded from the expected benefits.

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		
	2019	2018	2017	2019	2018	2017
Weighted average assumptions used to determine December 31 benefit obligations:						
Discount rate	3.44%	4.38%	3.75%	3.36%	4.32%	3.73%
Rate of compensation increase	2.97%	3.00%	3.02%	N/A	N/A	N/A
Medical trend	N/A	N/A	N/A	graded from	graded from	graded from
				6.50% in 2020	6.75% in 2019	7.00% in 2018
				to 5.00% in 2026+	to 5.00% in 2026+	to 4.50% in 2026+
Weighted average assumptions used to determine net periodic cost:						
Discount rate	4.38%	3.75%	4.28%	4.32%	4.23%	4.26%
Expected return on plan assets	6.20%	5.95%	6.49%	3.56%	4.77%	5.09%
Rate of compensation increase	3.00%	3.02%	3.07%	N/A	N/A	N/A
Medical trend	N/A	N/A	N/A	graded from	graded from	graded from
				6.75% in 2019	7.00% in 2018	7.00% in 2017
				to 5.00% in 2026+	to 4.50% in 2026+	to 5.00% in 2021+

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 6.20% to estimate its 2019 pension benefit costs, and an expected blended return based on weighted assets of 3.56% to estimate its 2019 other postretirement benefit costs.

The Company adopted a table based on the Society of Actuaries RP 2014 mortality table including a generational BB-2D projection scale. In 2018, the Company adopted the new MP-2018 mortality improvement scale to gradually adjust future mortality rates downward. In 2019, the Company maintained the MP-2018 mortality improvement scale until it can conduct a new experience study.

Presented in the table below are the components of net periodic benefit costs for the years ended December 31:

	2019	2018	2017
Components of net periodic pension benefit cost:			
Service cost	$ 28	$ 34	$ 33
Interest cost	82	76	80
Expected return on plan assets	(91)	(97)	(93)
Amortization of prior service (credit) cost	(3)	1	1
Amortization of actuarial loss	32	27	34
Net periodic pension benefit cost	$ 48	$ 41	$ 55
Other changes in plan assets and benefit obligations recognized in other comprehensive income:			
Current year actuarial (gain) loss	$ (8)	$ (60)	$ (7)
Amortization of actuarial loss	(4)	(7)	(7)
Total recognized in other comprehensive income	(12)	(67)	(14)
Total recognized in net periodic benefit cost and other comprehensive income	$ 36	$ (26)	$ 41
Components of net periodic other postretirement benefit (credit) cost:			
Service cost	$ 4	$ 8	$ 10
Interest cost	15	20	26
Expected return on plan assets	(18)	(26)	(26)
Amortization of prior service credit	(35)	(23)	(18)
Amortization of actuarial loss	3	3	10
Net periodic other postretirement benefit (credit) cost	$ (31)	$ (18)	$ 2

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.

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 of the current active membership for the plans.

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 $12 million, $12 million and $13 million for 2019, 2018 and 2017, respectively. Additionally, the Company's 5.25% of base pay defined contribution benefit expenses totaled $13 million, $11 million and $9 million for 2019, 2018 and 2017, 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 $579 million as of December 31, 2019.

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:

	Amount
2020	$ 65
2021	65
2022	65
2023	63
2024	49
Thereafter	605

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 3—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, 2019, the Company has accrued approximately $17 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 $25 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.

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, West Virginia-American Water Company ("WVAWC") and certain other Company affiliated entities did not admit, and will 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.

The aggregate pre-tax amount contributed by WVAWC of the $126 million portion of the Settlement with respect to the Company, net of insurance recoveries, is $19 million. As of December 31, 2019, $5 million of that $126 million has been reflected in accrued liabilities, and $5 million in offsetting insurance receivables have been reflected in other current assets on the Consolidated Balance Sheets. The amount reflected in accrued liabilities as of December 31, 2019 reflects reductions in the liability and appropriate reductions to the offsetting insurance receivable reflected in other current assets, associated with the ongoing processing of actual and potential Settlement claims. The Company funded WVAWC's contributions to the Settlement through existing sources of liquidity.

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 WVAWC's West Relay pumping station located in the City of Dunbar. 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 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 October 2017, WVAWC filed with the court a motion seeking to dismiss all of the *Jeffries* plaintiffs' counts alleging statutory and common law tort claims. Furthermore, WVAWC asserted that the Public Service Commission of West Virginia, and not the court, has primary jurisdiction over allegations involving violations of the applicable tariff, the public utility code and related rules. In May 2018, the court, at a hearing, denied WVAWC's motion to apply the primary jurisdiction doctrine, and in October 2018, the court issued a written order to that effect. On February 21, 2019, the court issued an order denying WVAWC's motion to dismiss the *Jeffries* plaintiffs' tort claims. On August 21, 2019, the court set a procedural schedule in this case, including a trial date of September 21, 2020. Discovery in this case is ongoing. On February 4, 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. A hearing on class certification is currently scheduled for March 11, 2020.

The Company and WVAWC believe that WVAWC has 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, Tennessee-American Water Company, a wholly owned subsidiary of the Company ("TAWC"), experienced a break of 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 break by early morning on September 14, 2019, and restored full water service by the afternoon on 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., a wholly owned subsidiary of the Company (collectively, the "Tennessee-American Water Defendants"), on behalf of an alleged class of individuals or entities who lost water service or suffered monetary losses as a result of the Chattanooga main break (the "Tennessee Plaintiffs"). The complaint alleges breach of contract and negligence against the Tennessee-American Water Defendants, as well as an equitable remedy of piercing the corporate veil. The Tennessee Plaintiffs seek 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.

On November 22, 2019, the Tennessee-American Water Defendants filed a motion to dismiss the complaint for failure to state a claim upon which relief may be granted, and, with respect to the Company, for lack of personal jurisdiction. A hearing on this motion is scheduled for February 18, 2020.

The Tennessee-American Water Defendants believe that they have meritorious defenses to the claims raised in this class action complaint, and they are vigorously defending themselves 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.

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:

	2019	2018	2017
Numerator:			
Net income attributable to common shareholders	$ 621	$ 567	$ 426
Denominator:			
Weighted average common shares outstanding—Basic	181	180	178
Effect of dilutive common stock equivalents	—	—	1
Weighted average common shares outstanding—Diluted	181	180	179

The effect of dilutive common stock equivalents is related to outstanding stock options, RSUs and PSUs granted under the Company's 2007 Plan and 2017 Omnibus Plan, as well as estimated shares to be purchased under the Company's 2017 Nonqualified Employee Stock Purchase Plan. Less than one million share-based awards were excluded from the computation of diluted EPS for the years ended December 31, 2019, 2018 and 2017, 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.

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 and unobservable inputs. The fair values of instruments classified as Level 2 and Level 3 are determined by a valuation model that is based on a conventional discounted cash flow methodology and utilizes assumptions of current market rates. The Company calculated a base yield curve using a risk-free rate (a U.S. Treasury securities yield curve) plus a credit spread that is based on the following two factors: an average of the Company's own publicly-traded debt securities and the current market rates for U.S. Utility A debt securities. The Company used these yield curve assumptions to derive a base yield for the Level 2 and Level 3 securities. Additionally, the Company adjusted the base yield for specific features of the debt securities including call features, coupon tax treatment and collateral for the Level 3 instruments.

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:

		December 31, 2019			
	Carrying Amount	Level 1	Level 2	Level 3	Total
Preferred stock with mandatory redemption requirements	$ 7	$ —	$ —	$ 9	$ 9
Long-term debt (excluding finance lease obligations)	8,664	7,689	417	1,664	9,770

		December 31, 2018			
	Carrying Amount	Level 1	Level 2	Level 3	Total
Preferred stock with mandatory redemption requirements	$ 8	$ —	$ —	$ 9	$ 9
Long-term debt (excluding finance lease obligations)	7,638	5,760	433	1,728	7,921

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:

	At Fair Value as of December 31, 2019			
	Level 1	**Level 2**	**Level 3**	**Total**
Assets:				
Restricted funds	$ 31	$ —	$ —	$ 31
Rabbi trust investments	17	—	—	17
Deposits	3	—	—	3
Other investments	8	—	—	8
Total assets	59	—	—	59
Liabilities:				
Deferred compensation obligations	21	—	—	21
Total liabilities	21	—	—	21
Total assets	$ 38	$ —	$ —	$ 38

	At Fair Value as of December 31, 2018			
	Level 1	**Level 2**	**Level 3**	**Total**
Assets:				
Restricted funds	$ 29	$ —	$ —	$ 29
Rabbi trust investments	15	—	—	15
Deposits	3	—	—	3
Other investments	3	—	—	3
Total assets	50	—	—	50
Liabilities:				
Deferred compensation obligations	17	—	—	17
Mark-to-market derivative liabilities	—	14	—	14
Total liabilities	17	14	—	31
Total assets (liabilities)	$ 33	$ (14)	$ —	$ 19

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. Long-term restricted funds of less than $1 million and $1 million were included in other long-term assets on the Consolidated Balance Sheets as of December 31, 2019 and December 31, 2018, respectively.

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 utilizes fixed-to-floating interest rate swaps, typically designated as fair-value hedges, to achieve a targeted level of variable-rate debt as a percentage of total debt. The Company also employs derivative financial instruments in the form of variable-to-fixed interest rate swaps and forward starting interest rate swaps, classified as economic hedges and cash flow hedges, respectively, 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—Other investments primarily represent money market funds used for active employee benefits. The Company includes other investments in other current assets on the Consolidated Balance Sheets.

Note 19: Leases

On January 1, 2019, the Company adopted Accounting Standards Update 2016-02, *Leases (Topic 842)*, and all related amendments (collectively, the "Standard"). The Company implemented the guidance in the Standard using the modified retrospective approach and applied the optional transition method, which allowed entities to apply the new Standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. Under this approach, prior periods have not been restated and continue to be reported under the accounting standards in effect for those periods. The Standard includes practical expedients, which relate to the identification and classification of leases that commenced before the adoption date, initial direct costs for leases that commenced before the adoption date, the ability to use hindsight in evaluating lessee options to extend or terminate a lease or to purchase the underlying asset and the ability to carry forward accounting treatment for existing land easements.

Adoption of the Standard resulted in the recognition of operating lease right-of-use ("ROU") assets and operating lease liabilities as of January 1, 2019 of approximately $117 million and $115 million, respectively. The difference between the ROU assets and operating lease liabilities was recorded as an adjustment to retained earnings. The Standard did not materially impact the Company's consolidated results of operations and had no impact on cash flows.

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 40 years, seven years, and five 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 $147 million and $147 million as of December 31, 2019 and 2018, 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 2020 through 2024, and $54 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 presented on the Consolidated Balance Sheets were $16 million for the year ended December 31, 2019. Rental expenses under operating leases which included variable and short-term lease costs were $35 million and $29 million for the years ended December 31, 2018 and 2017, respectively.

Presented in the table below is supplemental cash flow information for the year ended December 31:

	2019
Cash paid for amounts in lease liabilities (a)	$ 16
Right-of-use assets obtained in exchange for new operating lease liabilities	121

(a) Includes operating and financing cash flows from operating and finance leases.

Presented in the table below are the weighed-average remaining lease terms and the weighted-average discount rates for finance and operating leases:

	As of December 31, 2019
Weighted-average remaining lease term:	
Finance lease	6 years
Operating leases	19 years
Weighted-average discount rate:	
Finance lease	12%
Operating leases	4%

Presented in the table below are the future maturities of lease liabilities at December 31, 2019:

	Amount
2020	$ 14
2021	13
2022	11
2023	7
2024	7
Thereafter	100
Total lease payments	152
Imputed interest	(53)
Total	$ 99

Presented in the table below are the future minimum rental commitments, as of December 31, 2018, under operating leases that have initial or remaining non-cancelable lease terms over the next five years and thereafter:

	Amount
2019	$ 17
2020	15
2021	12
2022	11
2023	6
Thereafter	80
Total	$ 141

Note 20: Segment Information

The Company's operating segments are comprised of the revenue-generating components of its businesses for which separate financial information is internally produced and 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 Company also operates market-based businesses that, individually, do not meet the criteria of a reportable segment in accordance with GAAP, and are collectively presented as the Market-Based Businesses.

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 16 states.

The Company's primary Market-Based Businesses include the Homeowner Services Group, which provides various warranty protection programs and other home services to residential customers, and the Military Services Group, which enters into long-term contracts with the U.S. government to provide water and wastewater services on various military installations.

The accounting policies of the segments are the same as those described in Note 2—Significant Accounting Policies. The Regulated Businesses segment and Market-Based Businesses include intercompany costs that are allocated by American Water Works Service Company, Inc. and intercompany interest that is charged by AWCC, both of which are eliminated to reconcile to the Consolidated Statements of Operations. Inter-segment 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" includes corporate costs that are not allocated to the Company's operating segments, eliminations of inter-segment transactions, fair value adjustments, and associated income and deductions related to the acquisitions that have not been allocated to the operating segments for evaluation of performance and allocation of resource purposes. 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:

	2019			
	Regulated Businesses	Market-Based Businesses	Other	Consolidated
Operating revenues	$ 3,094	$ 539	$ (23)	$ 3,610
Depreciation and amortization	529	37	16	582
Total operating expenses, net	1,964	480	(4)	2,440
Interest, net	(295)	5	(92)	(382)
Income before income taxes	869	66	(102)	833
Provision for income taxes	215	20	(23)	212
Net income attributable to common shareholders	654	46	(79)	621
Total assets	20,318	1,008	1,356	22,682
Cash paid for capital expenditures	1,627	13	14	1,654

	2018			
	Regulated Businesses	Market-Based Businesses	Other	Consolidated
Operating revenues	$ 2,984	$ 476	$ (20)	$ 3,440
Depreciation and amortization	500	29	16	545
Impairment charge	—	57	—	57
Total operating expenses, net	1,912	441	(15)	2,338
Interest, net	(280)	4	(74)	(350)
Income before income taxes	826	41	(80)	787
Provision for income taxes	224	11	(13)	222
Net income attributable to common shareholders	602	32	(67)	567
Total assets	18,680	999	1,544	21,223
Cash paid for capital expenditures	1,477	13	96	1,586

	2017			
	Regulated Businesses	Market-Based Businesses	Other	Consolidated
Operating revenues	$ 2,958	$ 422	$ (23)	$ 3,357
Depreciation and amortization	462	18	12	492
Total operating expenses, net	1,766	360	(22)	2,104
Interest, net	(268)	3	(77)	(342)
Income before income taxes	925	66	(79)	912
Provision for income taxes	366	28	92	486
Net income attributable to common shareholders	559	38	(171)	426
Total assets	17,602	599	1,281	19,482
Cash paid for capital expenditures	1,316	18	100	1,434

Note 21: Unaudited Quarterly Data

Presented in the tables below are supplemental, unaudited, consolidated, quarterly financial data for each of the four quarters in the years ended December 31, 2019 and 2018, respectively. The operating results for any quarter are not indicative of results that may be expected for a full year or any future periods.

	2019			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Operating revenues	$ 813	$ 882	$ 1,013	$ 902
Operating income	238	302	406	224
Net income attributable to common shareholders	113	170	240	98
Basic earnings per share: (a)				
Net income attributable to common shareholders	$ 0.62	$ 0.94	$ 1.33	$ 0.54
Diluted earnings per share:				
Net income attributable to common shareholders	0.62	0.94	1.33	0.54

(a) Amounts may not sum due to rounding.

	2018			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Operating revenues	$ 761	$ 853	$ 976	$ 850
Operating income	217	302	335	248
Net income attributable to common shareholders	106	162	187	112
Basic earnings per share:				
Net income attributable to common shareholders	$ 0.60	$ 0.90	$ 1.04	$ 0.62
Diluted earnings per share: (a)				
Net income attributable to common shareholders	0.59	0.91	1.04	0.62

(a) Amounts may not sum due to rounding.

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 the Chief Executive Officer and the 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 Chief Executive Officer and Chief Financial Officer have concluded that, as of December 31, 2019, 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 provide reasonable assurance that the 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.

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 Chief Executive Officer and 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 Chief Executive Officer and the Chief Financial Officer, assessed the effectiveness of its internal control over financial reporting, as of December 31, 2019, 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, 2019.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2019 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

Approval of CEO Compensation Arrangements with Walter J. Lynch

As previously disclosed, in response to the previously announced retirement of Susan N. Story, the Company's President and Chief Executive Officer, effective April 1, 2020, and in accordance with the existing succession plan of the Company's Board of Directors (the "Board") for the Company's principal executive officer position, on December 6, 2019, the Board elected Walter J. Lynch, the Company's current Executive Vice President and Chief Operating Officer, to serve as successor to Susan N. Story, effective April 1, 2020. To provide for Mr. Lynch's compensation in his new role, the Company and Mr. Lynch have executed an employment offer letter, dated February 12, 2020 and effective April 1, 2020, which was unanimously approved by the independent members of the Board upon the unanimous recommendation of the Executive Development and Compensation Committee and its independent compensation consultant.

The employment offer letter provides for the following terms, effective April 1, 2020:

- Mr. Lynch's annual base salary is to be set at $925,000.
- Mr. Lynch is to receive a 2020 target award under the Annual Performance Plan (the "APP") as President and Chief Executive Officer. His target award opportunity is to be set at 100% of his annual base salary, which will be prorated to reflect the portions of the year he serves as Executive Vice President and Chief Operating Officer and will serve as President and Chief Executive Officer. His performance goals to be used to determine the corporate performance factor with respect to his 2020 APP award will be the same as those in his 2019 APP award.
- Mr. Lynch was granted LTPP awards under the Company's 2017 Omnibus Equity Compensation Plan pursuant to the terms of the Company's 2020 Long-Term Performance Plan ("LTPP"). In addition to standard LTPP awards granted to him on February 11, 2020 in his role as Executive Vice President and Chief Operating Officer (which were based on his current target award opportunity percentage of 165% and annual base salary of approximately $634,000), he was granted additional LTPP awards effective April 1, 2020 equal to the difference between the fair value of LTPP grants he would be eligible to receive as President and Chief Executive Officer as of April 1, 2020 based on a target award opportunity of 275% and his then annual base salary, and the fair value of the February 11, 2020 LTPP grants. The April 1, 2020 LTPP awards have standard terms and vesting conditions substantially similar to those granted to Mr. Lynch in February 2020. All of Mr. Lynch's 2020 LTPP awards will include the post-retirement continued vesting provisions applicable to the Company's executives serving in the CEO, CFO and COO roles.
- Mr. Lynch will continue to participate in the Company's Executive Severance Policy. Under this policy, in the event Mr. Lynch's employment as President and Chief Executive Officer is terminated by the Company without cause (as determined by the Board of Directors), he would be eligible to receive salary continuation and COBRA benefits, and would continue to participate in any Company-sponsored life insurance plan, for a period of 18 months following the date of termination. In that circumstance, he also would receive a pro rata APP award for the year in which the termination of employment occurs, to the extent such payment is provided for under the terms of the applicable APP award.
- Mr. Lynch will continue to be eligible to receive benefits as provided under the Company's qualified and nonqualified defined benefit pension plans, as they may be in effect from time to time.
- Mr. Lynch will continue to be eligible to participate in the Company's employee nonqualified deferred compensation plan and its 401(k) savings plan.
- Mr. Lynch will continue to be subject to the Company's executive stock ownership guidelines. Beginning April 1, 2020, he will be required to own common stock with a value of at least six times his annual base salary.

Election of Mr. Lynch to the Board

On February 12, 2020, the Board unanimously approved the election of Mr. Lynch, effective April 1, 2020, to fill the vacancy to be created when Ms. Story retires and steps down from the Board. Mr. Lynch will serve a term to commence April 1, 2020 and ending on the date of the Company's 2020 Annual Meeting of Shareholders (the "Annual Meeting"), and until his successor has been elected and qualified, or until his earlier death, resignation or removal. Mr. Lynch will not serve on any committees of the Board. On that same day, the Board nominated Mr. Lynch, effective April 1, 2020, as a nominee for election as a director at the Annual Meeting, to serve a term commencing on the date of the Annual Meeting and ending on the date of the Company's 2021 Annual Meeting of Shareholders, and until his successor has been elected and qualified, or until his earlier death, resignation or removal.

Other than as part of or in connection with the compensatory and other arrangements with Mr. Lynch described above, in connection with his election to the Board, (i) there are no other arrangements or understandings between Mr. Lynch and any other person, pursuant to which Mr. Lynch was selected as a director, (ii) no material plan, contract or arrangement has been entered into with Mr. Lynch, and no such plan, contract or arrangement with Mr. Lynch has been materially amended, and (iii) no grant of any award to Mr. Lynch or modification of an existing award has been made. Also, Mr. Lynch does not have any direct or indirect material interest in any transaction that would require reporting under Item 404(a) of Regulation S-K.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item and not given below or in Item 1—Business—Executive Officers of this Form 10-K, is incorporated by reference from the Company's Proxy Statement for the 2020 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 2020 Annual Meeting of Shareholders, under the captions entitled "Proposal 1—Election of Directors—Director Compensation Table," "Compensation Discussion and Analysis," "Executive Compensation," "Compensation Committee Interlocks and Insider Participation" and "Compensation Committee Report."

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 2020 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 2020 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 2020 Annual Meeting of Shareholders, under the caption entitled "Proposal 3—Ratification of Appointment of Independent Registered Public Accounting Firm—Fees Paid to Independent Registered Public Accounting Firm" and "Proposal 3—Ratification of Appointment of 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 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" below 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).

EXHIBIT INDEX

Exhibit Number	Exhibit Description
2.1#	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).
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 3.2 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed August 5, 2015).
4.1	Indenture, dated as of October 22, 2007, between American Water Capital Corp. and 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. 333-148284-01, filed December 21, 2007).
4.2	Indenture, dated as of December 4, 2009, between American Water Capital Corp. and 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 15, 2010, establishing the 6.00% Senior Monthly Notes due 2040 (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 15, 2010).
4.4	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).
4.5	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).
4.6	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).
4.7	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).
4.8	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).
4.9	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).
4.10	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).
4.11	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).
4.12	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).
4.13	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).
4.14	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).
4.15	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).
4.16	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).
4.17	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).

Exhibit Number	Exhibit Description
4.20	Description of American Water Works Company, Inc.'s Equity Securities (filed herewith).
10.1.1	Second Amended and Restated Credit Agreement, dated as of March 21, 2018, 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 Current Report on Form 8-K, File No. 001-34028, filed on March 21, 2018).
10.1.2	Extension Agreement, dated as of April 9, 2019, among American Water Works Company, Inc., American Water Capital Corp., each of the Lenders party thereto, and Wells Fargo Bank, National Association, as administrative agent (incorporated by reference to Exhibit 10.17.2 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 1, 2019).
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).
10.3.1*	Amended and Restated Letter Agreement between Loyd Warnock and American Water Works Company, Inc., dated May 7, 2014 (incorporated by reference to Exhibit 10.4 to American Water Works Company, Inc.'s Annual Report on Form 10-K, File No. 001-34028, filed February 25, 2016).
10.3.2*	Amendment, dated April 25, 2018, to Amended and Restated Letter Agreement between Loyd Warnock and American Water Works Company, Inc. (incorporated by reference to Exhibit 10.2.2 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 2, 2018).
10.3.3*	Amendment, dated July 25, 2019, to Amended and Restated Letter Agreement between Loyd Warnock and American Water Works Company, Inc. (incorporated by reference to Exhibit 10.1.3 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed October 30, 2019).
10.4.1*	Letter Agreement, dated February 17, 2015, between Michael A. Sgro and American Water Works Company, Inc. (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 August 5, 2015).
10.4.2*	Amendment, dated December 6, 2018, to Letter Agreement between Michael A. Sgro and American Water Works Company, Inc. (incorporated by reference to Exhibit 10.6.2 to American Water Works Company, Inc.'s Annual Report on Form 10-K, File No. 001-34028, filed February 19, 2019).
10.5*	Executive Employment Agreement, dated November 1, 2018, between Radhakrishnan Swaminathan and American Water Works Service Company, Inc. (incorporated by reference to Exhibit 10.7 to American Water Works Company, Inc.'s Annual Report on Form 10-K, File No. 001-34028, filed February 19, 2019).
10.6*	Offer Letter for Employment, dated May 1, 2019, between American Water Works Company, Inc. and M. Susan Hardwick (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 31, 2019).
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. 333-145757-01, and American Water Works Company, Inc.'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).
10.9.1*	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 January 1, 2009 (incorporated by reference to Exhibit 10.37 to American Water Works Company, Inc.'s Registration Statement on Form S-1, File No. 333-155245, filed November 18, 2008).
10.9.2*	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 January 1, 2017 (incorporated by reference to Exhibit 10.9.2 to American Water Works Company, Inc.'s Annual Report on Form 10-K, File No. 001-34028, filed February 19, 2019).
10.9.3*	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).
10.9.4*	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).
10.10*	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).
10.11.1*	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).
10.11.2*	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).
10.12*	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, 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).
10.13.1*	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).
10.13.2*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2014 Nonqualified Stock Option Grant Form for ML2 – L5 (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 7, 2014).
10.13.3*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan May 2014 Nonqualified Stock Option Grant Form for Susan N. Story (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 6, 2014).
10.13.5*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2015 Nonqualified Stock Option Grant (incorporated by reference to Exhibit 10.13.10 to American Water Works Company, Inc.'s Annual Report on Form 10-K, File No. 001-34028, filed February 25, 2016).
10.13.6*	Amendment to American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2015 Nonqualified Stock Option Grant (incorporated by reference to Exhibit 10.13.11 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
10.13.7*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2015 Nonqualified Stock Option Grant (for certain executives) (incorporated by reference to Exhibit 10.13.12 to American Water Works Company, Inc.'s Annual Report on Form 10-K, File No. 001-34028, filed February 25, 2016).
10.13.8*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2016 Nonqualified Stock Option Grant (incorporated by reference to Exhibit 10.1.1 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 4, 2016).
10.13.9*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2016 Nonqualified Stock Option Grant (for certain executives) (incorporated by reference to Exhibit 10.1.2 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 4, 2016).
10.13.10*	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 Quarterly Report on Form 10-Q, File No. 001-34028, filed May 4, 2016).
10.13.11*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2016 Restricted Stock Unit Grant (for certain executives) (incorporated by reference to Exhibit 10.2.2 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 4, 2016).
10.13.12*	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 Quarterly Report on Form 10-Q, File No. 001-34028, filed May 3, 2017).
10.13.13*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2017 Restricted Stock Unit Grant (for certain executives) (incorporated by reference to Exhibit 10.1.2 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 3, 2017).
10.13.14*	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).
10.13.15*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2016 Performance Stock Unit Grant Form A-2 (incorporated by reference to Exhibit 10.3.2 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 4, 2016).
10.13.16*	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-Q, File No. 001-34028, filed May 4, 2016).
10.13.17*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2016 Performance Stock Unit Grant Form B-2 (incorporated by reference to Exhibit 10.3.4 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 4, 2016).
10.13.18*	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 Quarterly Report on Form 10-Q, File No. 001-34028, filed May 3, 2017).
10.13.19*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2017 Performance Stock Unit Grant Form A-2 (incorporated by reference to Exhibit 10.2.2 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 3, 2017).
10.13.20*	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).
10.13.21*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2017 Performance Stock Unit Grant Form B-2 (incorporated by reference to Exhibit 10.2.4 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 3, 2017).
10.13.22*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2011 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 August 3, 2011).
10.13.23*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2012 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 2, 2012).
10.13.24*	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).
10.13.25*	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).
10.13.26*	American Water Works Company, Inc. 2007 Omnibus Equity Compensation Plan 2015 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 5, 2015).
10.13.27*	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).
10.14.1*	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).
10.14.2*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2017 Restricted Stock Unit Grant (incorporated by reference to Exhibit 10.3 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed May 12, 2017).
10.14.3*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2017 Restricted Stock Unit Grant (for certain executives) (incorporated by reference to Exhibit 10.4 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed May 12, 2017).
10.14.4*	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).
10.14.5*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2018 Restricted Stock Unit Grant (for certain executives) (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 May 2, 2018).
10.14.6*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2018 Restricted Stock Unit Grant (for Chief Executive Officer, Chief Financial Officer and Chief Operating Officer) (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 2, 2018).
10.14.7*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2018 Restricted Stock Unit Grant (for Loyd A. Warnock) (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 2, 2018).

Exhibit Number	Exhibit Description
10.14.8*	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).
10.14.9*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Restricted Stock Unit Grant (for certain executives) (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 1, 2019).
10.14.10*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Restricted Stock Unit Grant (for Chief Executive Officer, Chief Financial Officer and Chief Operating Officer) (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 1, 2019).
10.14.11*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Restricted Stock Unit Grant (for Loyd A. Warnock) (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 May 1, 2019).
10.14.12*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Restricted Stock Unit Grant (for Radhakrishnan Swaminathan), (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 1, 2019).
10.14.13*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Restricted Stock Unit Grant (for M. Susan Hardwick) (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 31, 2019).
10.14.14*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Restricted Stock Unit Grant (for Brian Chin) (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 July 31, 2019).
10.14.15*	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).
10.14.16*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2017 Performance Stock Unit Grant Form A-2 (incorporated by reference to Exhibit 10.6 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed May 12, 2017).
10.14.17*	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).
10.14.18*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2017 Performance Stock Unit Grant Form B-2 (incorporated by reference to Exhibit 10.8 to American Water Works Company, Inc.'s Current Report on Form 8-K, File No. 001-34028, filed May 12, 2017).
10.14.19*	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).
10.14.20*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2018 Performance Stock Unit Grant Form A-2 (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).
10.14.21*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2018 Performance Stock Unit Grant Form A-3 (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 2, 2018).
10.14.22*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2018 Performance Stock Unit Grant Form A (for Loyd A. Warnock) (incorporated by reference to Exhibit 10.10 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 2, 2018).
10.14.23*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2018 Performance Stock Unit Grant Form B-1 (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 May 2, 2018).
10.14.24*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2018 Performance Stock Unit Grant Form B-2 (incorporated by reference to Exhibit 10.12 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 2, 2018).
10.14.25*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2018 Performance Stock Unit Grant Form B-3 (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 2, 2018).
10.14.26*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2018 Performance Stock Unit Grant Form B (for Loyd A. Warnock) (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 2, 2018).
10.14.27*	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).
10.14.28*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Performance Stock Unit Grant Form A-2 (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 1, 2019).
10.14.29*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Performance Stock Unit Grant Form A-3 (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 1, 2019).
10.14.30*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Performance Stock Unit Grant Form A (for Loyd A. Warnock), (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 1, 2019).
10.14.31*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Performance Stock Unit Grant Form A (for Radhakrishnan Swaminathan), (incorporated by reference to Exhibit 10.10 to American Water Works Company, Inc.'s Quarterly Report on Form 10-Q, File No. 001-34028, filed May 1, 2019).
10.14.32*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Performance Stock Unit Grant Form A (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 July 31, 2019).
10.14.33*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Performance Stock Unit Grant Form B-1 (corrected) (filed herewith).
10.14.34*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Performance Stock Unit Grant Form B-3 (corrected) (filed herewith).
10.14.35*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Performance Stock Unit Grant Form B (corrected) (for Loyd A. Warnock) (filed herewith).
10.14.36*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Performance Stock Unit Grant Form B (corrected) (for M. Susan Hardwick) (filed herewith).

Exhibit Number	Exhibit Description
10.14.37*	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).
10.14.38*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2018 Non-Employee Director 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 August 1, 2018).
10.14.39*	American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan 2019 Non-Employee Director Stock Unit Grant (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 July 31, 2019).
10.15*	American Water Works Company, Inc. Executive Severance Policy, dated as of December 16, 2008 (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 November 3, 2010).
10.16.1*	American Water Works Company, Inc. Pension Plan for Employees, amended and restated effective January 1, 2016 (filed herewith)
10.16.2*	American Water Works Company, Inc. Amendment Two to the Pension Plan for Employees, amended and restated effective January 1, 2016 (filed herewith)
21.1	Subsidiaries of American Water Works Company, Inc. (filed herewith).
23.1	Consent of PricewaterhouseCoopers LLP (filed herewith).
31.1	Certification of Susan N. Story, President and Chief Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act (filed herewith).
31.2	Certification of M. Susan Hardwick, Executive Vice President and Chief Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act (filed herewith).
32.1	Certification of Susan N. Story, President and Chief Executive Officer, pursuant to Section 906 of the Sarbanes-Oxley Act (furnished herewith).
32.2	Certification of M. Susan Hardwick, 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 herewith has been included to provide investors and security holders with information regarding its terms. It 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 Stock Purchase Agreement (i) were made by the parties thereto only for purposes of that agreement and as of specific dates; (ii) were made solely for the benefit of the parties to the Stock Purchase 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 Stock Purchase 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 Stock Purchase Agreement instead of establishing these matters as facts; and (v) may be subject to standards of materiality applicable to the contracting parties 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 thereto, or any of their respective subsidiaries or affiliates. Additionally, the representations, warranties, covenants, conditions and other terms of the Stock Purchase Agreement 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 Stock Purchase Agreement, which subsequent information may or may not be fully reflected in the Company's public disclosures. The Stock Purchase Agreement should not be read alone, but should instead be read in conjunction with the other information regarding the Company and its New York subsidiary 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.

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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 18th day of February, 2020.

AMERICAN WATER WORKS COMPANY, INC.

BY: /s/ SUSAN N. STORY

Susan N. Story
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed on the 18th day of February, 2020, by the following persons in the capacities indicated.

/s/ SUSAN N. STORY **Susan N. Story** **President and Chief Executive Officer** **(Principal Executive Officer and Director)**	/s/ JEFFREY N. EDWARDS **Jeffrey N. Edwards** **(Director)**
/s/ M. SUSAN HARDWICK **M. Susan Hardwick** **Executive Vice President and Chief Financial Officer** **(Principal Financial Officer)**	/s/ MARTHA CLARK GOSS **Martha Clark Goss** **(Director)**
/s/ MELISSA K. WIKLE **Melissa K. Wikle** **Vice President and Controller** **(Principal Accounting Officer)**	/s/ VERONICA M. HAGEN **Veronica M. Hagen** **(Director)**
/s/ KIMBERLY J. HARRIS **Kimberly J. Harris** **(Director)**	/s/ JULIA L. JOHNSON **Julia L. Johnson** **(Director)**
/s/ PATRICIA L. KAMPLING **Patricia L. Kampling** **(Director)**	/s/ KARL F. KURZ **Karl F. Kurz** **(Director)**
/s/ GEORGE MacKENZIE **George MacKenzie** **(Director)**	/s/ JAMES G. STAVRIDIS **James G. Stavridis** **(Director)**

DESCRIPTION OF AMERICAN WATER WORKS COMPANY, INC.'S EQUITY SECURITIES

The following description of the Company's common stock, par value $0.01 per share (the "Common Stock"), is not intended to be complete. For more information regarding the Common Stock, please refer to the Company's Restated Certificate of Incorporation (the "Certificate of Incorporation"), and the Company's Amended and Restated Bylaws (the "Bylaws"), which have been filed as Exhibits 3.1 and 3.2, respectively, to the Company's Annual Report on Form 10-K for the year ended December 31, 2019. The following descriptions are based on the Certificate of Incorporation and Bylaws in effect as of February 18, 2020. The terms and provisions of the Certificate of Incorporation and Bylaws are hereby incorporated by reference herein. The terms of these securities also may be affected by the General Corporation Law of the State of Delaware (the "DGCL").

General

The Company's authorized capital stock consists of 500,000,000 shares of Common Stock and 50,000,000 shares of preferred stock. As of February 13, 2020, there were 180,974,719 shares of Common Stock outstanding and no shares of preferred stock outstanding.

Common Stock

Voting Rights

Other than with respect to director elections, except as otherwise required by law, all matters to be voted on by the Company's shareholders must be approved by a majority of the shares present in person or proxy at such meeting and entitled to vote on the subject matter. With respect to uncontested director elections, the Bylaws require that in order to be elected, a director nominee must receive a majority of the votes cast (for this purpose, a majority of the votes cast means that the number of shares voted "for" a director nominee must exceed the number of votes cast "against" that nominee). For contested director elections where the number of nominees exceeds the number of directors to be elected, the Bylaws require that the directors shall be elected by the vote of a plurality of the shares represented in person or by proxy at any such meeting and entitled to vote on the election of directors.

Dividends

Holders of Common Stock will share equally in any dividend declared by the Company's board of directors (the "Board"), subject to the rights of the holders of any outstanding preferred stock.

Liquidation Rights

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company's affairs, holders of Common Stock would be entitled, after payment of the liquidation preference to all holders of any outstanding preferred stock, to share ratably in the Company's assets that are legally available for distribution to shareholders after payment of liabilities. The Company must pay the applicable distribution to any holders of its preferred stock before it may pay distributions to the holders of Common Stock.

Other Rights

The Company's shareholders have no preemptive or other rights to subscribe for additional shares.

Preferred Stock

The Board may authorize the issuance of preferred stock from time to time in one or more series, without shareholder approval. Subject to the limits imposed by the DGCL, the Board is authorized to fix for any series of preferred stock the number of shares of such series and the voting powers (if any), designation, preferences and relative, participating, optional or other special rights, and qualifications, limitations or restrictions of such series. The Board is also authorized to increase or decrease the number of shares of any series, but not below the number of shares of that series then outstanding, without any further vote or action by the Company's shareholders.

The Board may authorize the issuance of preferred stock with voting or conversion rights that affect adversely the voting power or other rights of holders of Common Stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could have the effect of delaying, deferring or preventing a change in control, causing the market price of a share of Common Stock to decline, or impairing the voting and other rights of the holders of Common Stock.

Certain Anti-Takeover Provisions of the Certificate of Incorporation and Bylaws, and the DGCL

The following provisions of the Certificate of Incorporation and Bylaws could deter, delay or prevent a third party from acquiring the Company, even if doing so would benefit the Company's shareholders.

Undesignated Preferred Stock

The ability to authorize undesignated preferred stock makes it possible for the Board to authorize the issuance of preferred stock with super voting, special approval, dividend or other rights or preferences on a discriminatory basis that could impede the success of any attempt to acquire the Company. These and other provisions may have the effect of deferring, delaying or discouraging hostile takeovers, or changes in control or management of the Company.

Requirements for Advance Notification of Shareholder Meetings, Nominations and Proposals

The Bylaws provide that special meetings of shareholders may be called only upon the request of the majority of the members of the Board, upon request of the Chairman of the Board, or by the Secretary of the Company upon request of shareholders holding at least 15% of the outstanding Common Stock. The Bylaws prohibit the conduct of any business at a special meeting other than as specified in the notice for such meeting.

The Bylaws establish advance notice procedures with respect to shareholder proposals for annual meetings and the nomination of candidates for election as directors, other than nominations made by or at the direction of the Board or a committee thereof. A shareholder who wishes to bring a matter before a meeting must comply with the Company's advance notice requirements and provide the Company with certain information. Additionally, vacancies and newly created directorships may be filled only by a vote of a majority of the members of the Board then in office, even though less than a quorum, or by shareholders. These provisions may defer, delay or discourage a potential acquiror from conducting a solicitation of proxies to elect the acquiror's own slate of directors or otherwise attempting to obtain control of the Company.

Shareholder Action by Written Consent

As permitted by Section 228 of the DGCL, the Certificate of Incorporation states that any action required or permitted to be taken by the Company's shareholders must be effected at a duly called annual or special meeting and may not be effected by consent in writing by such shareholders.

Certain Anti-Takeover Matters

A significant number of the Company's regulated subsidiaries are subject to economic regulation by state public utility commissions. Some of these states have enacted laws that require regulatory approval for the acquisition of "control" of any regulated utility. In those states, obtaining "control" of the parent or any other company that controls a regulated utility also requires prior regulatory approval. The threshold for a change in control is a fact-specific inquiry that varies by state. For example, in some states, a presumption of control will arise when an acquiring party acquires more than 9.9% of the voting securities of the regulated utility or the controlling entity. In addition to ownership, other states may analyze the degree of influence or control an acquiror may exert over the company. Any person acquiring Common Stock in an offering or in any other purchase of Common Stock in an amount sufficient to trigger a change in control under state law would need the prior approval of the applicable state public utility commission.

Certain Other Provisions of the Certificate of Incorporation and Bylaws and the DGCL

Board of Directors

The Certificate of Incorporation provides that the number of directors is fixed in the manner provided in the Bylaws. The Bylaws provide that the number of directors will be fixed from time to time by the Board.

Business Combinations under Delaware Law

The Company is subject to Section 203 of the DGCL, which prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the time the shareholder became an "interested stockholder," subject to certain exceptions, including if, prior to such time, the board of directors approved the business combination or the transaction which resulted in the shareholder becoming an "interested stockholder." "Business combinations" include mergers, asset sales and other transactions resulting in a financial benefit to the "interested stockholder." Subject to various exceptions, an "interested stockholder" is a person who, together with his or her affiliates and associates, owns, or within the prior three years did own, 15% or more of the corporation's outstanding voting stock. These restrictions generally prohibit or delay the accomplishment of mergers or other takeover or change-in-control attempts that are not approved by a company's board of directors.

Limitations of Liability and Indemnification of Directors and Officers

The DGCL authorizes corporations to limit or eliminate the personal liability of directors to corporations and their shareholders for monetary damages for breaches of directors' fiduciary duties. The Certificate of Incorporation includes a provision that eliminates the personal liability of directors for monetary damages for actions taken as a director to the fullest extent authorized by the DGCL. The DGCL does not permit exculpation for liability:

- for breach of the duty of loyalty;
- for acts or omissions not in good faith or involving intentional misconduct or knowing violation of law;
- under Section 174 of the DGCL (relating to unlawful dividends or stock repurchases); or
- for transactions from which the director derived an improper personal benefit.

The Certificate of Incorporation and Bylaws provide that the Company will indemnify its directors and officers to the fullest extent permitted by law. The Bylaws also expressly authorize the Company to carry directors' and officers' insurance providing indemnification for its directors, officers and certain employees and agents for certain liabilities.

The limitation of liability and indemnification provisions in the Certificate of Incorporation and Bylaws may discourage shareholders from bringing a lawsuit against the Company's directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against the Company's directors and officers, even though such an action, if successful, might otherwise benefit the Company and its shareholders. In addition, an investment in the Common Stock may be adversely affected to the extent the Company pays the costs of settlement and damage awards against directors and officers in accordance with these indemnification provisions.

Transfer Agent and Registrar

American Stock Transfer & Trust Company, LLC serves as the registrar and transfer agent for the Common Stock.

New York Stock Exchange Listing

The Common Stock is listed on the New York Stock Exchange under the trading symbol "AWK."

Exhibit 10.14.33

AMERICAN WATER WORKS COMPANY, INC.
2017 OMNIBUS EQUITY COMPENSATION PLAN
PERFORMANCE STOCK UNIT GRANT

This PERFORMANCE STOCK UNIT GRANT, dated as of February 14, 2019 (the "Date of Grant"), is delivered by American Water Works Company, Inc. (the "Company") to _________ ________________ (the "Participant").

RECITALS

WHEREAS, the Committee (as defined in the American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan (the "Plan")) has adopted a 2019 Long Term Performance Plan ("2019 LTPP") pursuant to which designated employees will be granted equity awards (collectively, the "Equity Award") for shares of Common Stock of the Company, par value $0.01 per share (the "Company Stock");

WHEREAS, the Equity Award is comprised of three separate grants: a restricted stock unit and two performance stock unit grants;

WHEREAS, the Committee has determined that the Participant is eligible to participate in the 2019 LTPP and to grant the Participant an Equity Award under the 2019 LTPP; and

WHEREAS, the Committee has determined that the performance stock unit portion of the Equity Award granted to the Participant pursuant to the 2019 LTPP shall be issued under the Plan, and the terms and conditions of the performance stock unit grant that may be earned based on Performance Goals (defined below) relating to compounded earnings per share, as set forth in Exhibit A attached hereto, shall be memorialized in this grant (the "Grant").

NOW, THEREFORE, the parties to this Grant, intending to be legally bound hereby, agree as follows:

1. Grant of Performance Stock Units. Subject to the terms and conditions set forth in this Grant and the Plan, the Company hereby grants to the Participant ______ performance stock units (the "Performance Units"). The Performance Units are contingently awarded and will be earned and distributable if and only to the extent that the Performance Goals and other conditions set forth in this Grant are met. Each Performance Unit shall be a phantom right and shall be equivalent to one share of Company Stock on the applicable payment date, as described in Paragraph 5 below. The number of Performance Units set forth above is equal to the target number of shares of Company Stock that the Participant will earn for 100% achievement of the Performance Goals described in this Grant (the "Target Award").

2. Performance Unit Account. The Company shall establish and maintain a Performance Unit account as a bookkeeping account on its records (the "Performance Unit Account") for the Participant and shall record in such Performance Unit Account the number of Performance Units

granted to the Participant. The Participant shall not have any interest in any fund or specific assets of the Company by reason of this grant or the Performance Unit Account established for the Participant.

3. Performance Goals.

(a) Unless a Change of Control (as defined below) occurs prior to the end of the Performance Period (as defined below), the distribution of the shares of Company Stock attributable to the Performance Units is contingent upon achievement of the performance goals set forth in Exhibit A attached hereto (the "Performance Goals") and the Participant satisfying the continuation of employment and service with the Employer (as defined in the Plan) requirement described in Paragraph 4 below.

(b) As soon as administratively practicable following the end of the Performance Period (as defined in Paragraph 3(d) below), the Committee will determine whether and to what extent the Performance Goals have been met and the number of Performance Units the Participant has earned, if any. Except as described in Paragraph 4 below, the Participant must be employed by, or providing service to, the Employer on the last day of the Performance Period in order to earn the Performance Units.

(c) If a Change of Control occurs prior to the end of the Performance Period, the Company is not the surviving corporation (or survives only as a subsidiary of another corporation or entity (the "surviving corporation")) and the Performance Units are not converted to similar grants of the surviving corporation (or a parent or subsidiary of the surviving corporation), then the Performance Period will end on the date of the Change of Control and the Performance Units will be deemed earned at the Target Award level as of the date of the Change of Control (the "Change of Control Date"). In the event the Participant's Performance Units are assumed by the surviving corporation but the Participant ceases to be employed by, or providing service to, the surviving corporation (or a parent or subsidiary of the surviving corporation) within twelve (12) months after the date of the Change of Control on account of (i) a termination of such Participant's employment by the surviving corporation (or a parent of subsidiary of the surviving corporation) for any reason other than on account of Cause (as defined in paragraph 4(c) hereof), or on account of death or Disability (each as defined in the Plan), or (ii) a termination of employment or service by the Participant for Good Reason (as defined in the Plan), then the Performance Period will end on the date of such termination of employment or service (the "Termination Date") and the Performance Units will be deemed earned at the Target Award level as of the Termination Date. For purposes of this Grant, "Change of Control" shall mean as such term is defined in the Plan, except that a Change of Control shall not be deemed to have occurred for purposes of this Grant unless the event constituting the Change of Control constitutes a change in ownership or effective control of the Company, or in the ownership of a substantial portion of the assets of the Company, within the meaning of section 409A of the Internal Revenue Code of 1986, as amended (the "Code") and its corresponding regulations.

(d) For purposes of this Grant, the term "Performance Period" shall mean the three (3)-year period beginning on January 1, 2019 and ending December 31, 2021.

4. Termination of Employment or Service.

(a) Except as set forth in Paragraph 3(c), if, at least one year after the beginning of the Performance Period, but prior to the end of the Performance Period, the Participant ceases to be employed by, or provide service to, the Employer on account of any reason other than a termination for Cause (as defined below), the Participant will earn a pro-rata portion of the Performance Units, if the Performance Goals and the requirements of this Grant are met as of the last day of the Performance Period. The pro-rata portion earned will be equal to the number of Performance Units that would have been earned if the Participant had remained employed through the last day of the Performance Period, multiplied by a fraction, which fraction shall be equal to (i) 1/3, if the Participant’s employment or service with the Employer terminates on or after January 31, 2020, but prior to January 31, 2021; (ii) 2/3, if the Participant’s employment or service with the Employer terminates on or after January 31, 2021, but prior to January 31, 2022; and (iii) 3/3, if the Participant’s employment or service terminates with the Employer on or after January 31, 2022. If the Participant ceases to be employed by, or provide service to, the Employer for any reason other than on account of Cause, the prorated number of Performance Units earned by the Participant pursuant to this Paragraph 4(a) will be distributed in accordance with Paragraph 5.

(b) If at any time prior to the earlier of January 31, 2020 or a Change of Control, the Participant’s employment or service with the Employer is terminated by the Employer on account of any reason or no reason or by the Participant for any reason or no reason, all of the Performance Units subject to this Grant shall be immediately forfeited as of the date of the Participant’s termination of employment or service with the Employer and the Participant shall not have any rights with respect to the distribution of any portion of the Performance Units.

(c) If at any time prior to the date the Performance Units are distributed in accordance with Paragraph 5 the Participant’s employment or service with the Employer is terminated on account of Cause, all of the Performance Units subject to this Grant shall be immediately forfeited and the Participant will not have any rights with respect to the distribution of any portion of the Performance Units, irrespective of the level of achievement of the Performance Goals. For purposes of this Grant, “Cause” shall mean a finding by the Committee that the Participant (i) has breached his or her employment or service contract with the Employer, if any; (ii) has engaged in disloyalty to the Employer, including, without limitation, fraud, embezzlement, theft, commission of a felony or proven dishonesty; (iii) has disclosed trade secrets or confidential information of the Employer to persons not entitled to receive such information; (iv) has breached any written noncompetition or non-solicitation agreement between the Participant and the Employer; or (v) has engaged in such other behavior detrimental to the interests of the Employer as the Committee determines.

5. Time and Form of Payment with Respect to Performance Units. Unless an election is made pursuant to Paragraph 6 below, the Participant will receive a distribution with respect to the Performance Units earned as described in Paragraphs 3 and 4 above within seventy (70) days following the earliest of (a) January 31, 2022 (the “Distribution Date”), (b) the Change of Control Date, or (c) the Termination Date. The Performance Units will be distributed in shares of Company Stock, with each Performance Unit earned equivalent to one share of Company Stock. Any

Performance Units not earned because of the failure to attain the Performance Goals and service condition will be immediately forfeited.

6. Deferrals. The Participant may make an irrevocable election to defer the Distribution Date (or further defer the Deferred Date (as defined below), if applicable) of all of the Performance Units that are earned, plus dividend equivalents earned on such Performance Units as described in Paragraph 7 below, to a later date, provided that (a) the election shall not take effect until at least twelve (12) months after the date on which the election is made, (b) the deferred Distribution Date cannot be earlier than five (5) years from the original Distribution Date under Paragraph 5 above (or five (5) years from the applicable Deferred Date, if a subsequent deferral of a Deferred Date is being made), and (c) the election must be made no less than twelve (12) months prior to the date of the Distribution Date (twelve (12) months prior to the previously applicable Deferred Date, if a subsequent deferral of a Deferred Date is being made). To defer the Distribution Date, the Participant must elect to defer 100% of the Performance Units, including corresponding dividend equivalents, earned by the Participant under this Grant, as well as 100% of the other performance stock units, including corresponding dividend equivalents, earned by the Participant under the 2019 LTPP, complete the deferral election form provided to the Participant by the Committee, and return such form to the Company in the manner and by the deadline provided therein. If the Participant desires to make a further deferral, the Participant must make such election on a separate form provided by the Committee for such purpose. Any such election shall be made in accordance with section 409A of the Code and any corresponding guidance and regulations issued under section 409A of the Code. Notwithstanding a Participant's election pursuant to this Paragraph, if the Change of Control Date or the Termination Date occurs prior to the Deferred Date, the distribution of the Participant's earned Performance Units, plus corresponding dividend, equivalents will be the Change of Control Date or the Termination Date, as applicable. If a Distribution Date is delayed one or more times pursuant to this Paragraph 6, the new Distribution Date shall be referred to as the "Deferred Date."

7. Dividend Equivalents. Until the earlier of the Distribution Date (or the Deferred Date, if elected), the Change of Control Date or the Termination Date, if any dividends are paid with respect to the shares of Company Stock, the Company shall credit to a dividend equivalent account (the "Dividend Equivalent Account") the value of the dividends that would have been distributed if the Performance Units credited to the Participant's Performance Unit Account as of the date of payment of any such dividend were shares of Company Stock. At the same time that the Performance Units are converted to shares of Company Stock and distributed to the Participant, the Company shall pay to the Participant in a lump sum cash equal to the value of the dividends credited to the Participant's Dividend Equivalent Account; provided, however, that any dividends that were credited to the Participant's Dividend Equivalent Account that are attributable to Performance Units that have been forfeited as provided in Paragraph 3 and 4 above shall be forfeited and not payable to the Participant. No interest shall accrue on any dividend equivalents credited to the Participant's Dividend Equivalent Account.

8. Change of Control. Except as set forth above, the provisions set forth in the Plan applicable to a Change of Control (as defined in the Plan) shall apply to the Performance Units, and, in the event of a Change of Control, the Committee may take such actions as it deems appropriate pursuant to the Plan and is consistent with the requirements of section 409A of the Code.

9. <u>Acknowledgment by Participant</u>. By accepting this Grant, the Participant acknowledges that, with respect to any right to distribution pursuant to the Plan or this Grant, the Participant is and shall be an unsecured general creditor of the Company without any preference as against other unsecured general creditors of the Company, and the Participant hereby covenants for himself or herself, and anyone at any time claiming through or under the Participant, not to claim any such preference, and hereby disclaims and waives any such preference which may at any time be at issue, to the fullest extent permitted by applicable law.

10. <u>Restrictions on Issuance or Transfer of Shares of Company Stock</u>.

(a) To the extent permitted by Code section 409A, the obligation of the Company to deliver shares of Company Stock upon the Participant earning the Performance Units shall be subject to the condition that shares of Company Stock be qualified for listing on the New York Stock Exchange or another securities exchange and be registered under the Securities Act of 1933, as amended, and that any consent or approval of any governmental regulatory body that is necessary to issue shares of Company Stock has been so obtained, and that shares of Company Stock may not be issued in whole or in part unless such listing, registration, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the Committee.

(b) The issuance of shares of Company Stock and the payment of cash to the Participant pursuant to this Grant is subject to any applicable taxes and other laws or regulations of the United States or of any state having jurisdiction thereof.

(c) As a condition to receive any shares of Company Stock upon conversion of the earned Performance Units, the Participant agrees:

(i) to be bound by, and to comply with, the Company's policies and practices (as they may be in effect from time to time) regarding the restrictions or limitations on the transfer of such shares, and understands that the Participant may be restricted or prohibited at any time and/or from time to time from selling, transferring, pledging, donating, assigning, margining, mortgaging, hypothecating or otherwise encumbering the shares in accordance with such policies and practices, including without limitation the Company's Insider Trading and Prohibited Transactions Policy and the Personal Securities Trading and Preclearance Practice; and

(ii) that any shares of Company Stock received by the Participant upon the distribution of the earned Performance Units pursuant to this Grant shall be subject to the guidelines and restrictions set forth in the Company's Executive Stock Ownership Guidelines and Executive Stock Retention Requirements, effective as of March 4, 2015 (and as they may be amended, restated, supplemented and interpreted), and any applicable clawback or recoupment policies and other policies that may be implemented by the Company's Board of Directors or a duly authorized committee thereof, from time to time.

11. Participant Undertaking. The Participant agrees to take whatever additional actions and execute whatever additional documents the Company may deem necessary or advisable in order to carry out or effect one or more of the obligations or restrictions imposed on the Participant pursuant to the provisions of this Grant.

12. Grant Subject to Plan Provisions. This Grant is made pursuant to the Plan, the terms of which are incorporated herein by reference, and in all respects shall be interpreted in accordance with the Plan. In the event of any contradiction, distinction or difference between this Grant and the terms of the Plan, the terms of the Plan will control. Except as otherwise defined in this Grant, capitalized terms used in this Grant shall have the meanings set forth in the Plan. This Grant is subject to the interpretations, regulations and determinations concerning the Plan established from time to time by the Committee in accordance with the provisions of the Plan, including, but not limited to, provisions pertaining to (a) rights and obligations with respect to withholding taxes, (b) the registration, qualification or listing of the shares of Company Stock, (c) changes in capitalization of the Company, and (d) other requirements of applicable law. The Committee shall have the authority to interpret and construe this Grant pursuant to the terms of the Plan, its decisions shall be conclusive as to any questions arising hereunder. By accepting this Grant, the Participant agrees (i) to be bound by the terms of the Plan and this Grant, (ii) to be bound by the determinations and decisions of the Committee with respect to this Grant, the Plan and the Participant's rights to benefits under this Grant and the Plan, and (iii) that all such determinations and decisions of the Committee shall be binding on the Participant, his or her beneficiaries and any other person having or claiming an interest under this Grant and the Plan on behalf of the Participant.

13. No Rights as Stockholder. The Participant shall not have any rights as a stockholder of the Company, including the right to any cash dividends (except with respect to the dividend equivalent rights provided in Paragraph 7), or the right to vote, with respect to any Performance Units.

14. No Rights to Continued Employment or Service. This Grant shall not confer upon the Participant any right to be retained in the employment or service of the Employer and shall not interfere in any way with the right of the Employer to terminate the Participant's employment or service at any time. The right of the Employer to terminate at will the Participant's employment or service at any time for any reason is specifically reserved.

15. Assignment and Transfers. No Performance Units or dividend equivalents awarded to the Participant under this Grant may be transferred, assigned, pledged, or encumbered by the Participant and the Performance Units and dividend equivalents shall be distributed during the lifetime of the Participant only for the benefit of the Participant. Any attempt to transfer, assign, pledge, or encumber the Performance Units or dividend equivalents under this Grant by the Participant shall be null, void and without effect. The rights and protections of the Company hereunder shall extend to any successors or assigns of the Company. This Grant may be assigned by the Company without the Participant's consent.

16. Withholding. The Participant shall be required to pay to the Employer, or make other arrangements satisfactory to the Employer to provide for the payment of, any federal, state, local or other taxes that the Employer is required to withhold with respect to the grant, vesting and distribution of the Performance Units and dividend equivalents. Any tax withholding obligation of

the Employer with respect to the distribution of shares of Company Stock pursuant to the Performance Units that are earned by the Participant under this Grant may, at the Committee's discretion, be satisfied by having shares of Company Stock withheld up to an amount that does not exceed the minimum applicable withholding tax rate for federal (including FICA), state, local and other tax liabilities.

17. Effect on Other Benefits. The value of shares of Company Stock and dividend equivalents distributed with respect to the Performance Units shall not be considered eligible earnings for purposes of any other plans maintained by the Company or the Employer. Neither shall such value be considered part of the Participant's compensation for purposes of determining or calculating other benefits that are based on compensation, such as life insurance.

18. Applicable Law. The validity, construction, interpretation and effect of this Grant shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to the conflict of laws provisions thereof.

19. Notice. Any notice to the Company provided for in this instrument shall be addressed to the Company in care of the General Counsel at the Company's corporate headquarters, and any notice to the Participant shall be addressed to such Participant at the current address shown on the payroll records of the Employer, or to such other address as the Participant may designate to the Employer in writing. Any notice shall be (i) delivered by hand, (ii) delivered by a national overnight courier or delivery service, (iii) enclosed in a properly sealed envelope addressed as stated above, registered and deposited, postage prepaid, in a post office regularly maintained by the United States Postal Service, or (iv) in the case of notices by the Company to the Participant, delivered by e-mail or other electronic means (with confirmation of receipt to be made by any oral, electronic or written means).

20. Taxation; Code Section 409A. As applicable, this Grant is intended to comply with the requirements of section 409A of the Code and shall be interpreted and administered in accordance with Code section 409A. Notwithstanding any provision to the contrary herein, if the Performance Units constitute "deferred compensation" under section 409A of the Code, distributions made with respect to this Grant may only be made in a manner and upon an event permitted by Code section 409A. To the extent that any provision of the Grant would cause a conflict with the requirements of Code section 409A, or would cause the administration of the Grant to fail to satisfy the requirements of Code section 409A, such provision shall, to the extent practicable if permitted by applicable law, be deemed null and void. In the event that it is determined not feasible to void a provision of this Grant, such provision shall be construed in a manner as to comply with the Code section 409A requirements. This Grant may be amended without the consent of the Participant in any respect deemed by the Committee or its delegate to be necessary in order to comply with Code section 409A. Unless a valid election is made pursuant to Paragraph 6 above, in no event may the Participant, directly or indirectly, designate the calendar year of distribution. Notwithstanding anything in the Plan or the Grant to the contrary, the Participant shall be solely responsible for the tax consequences of this Grant, and in no event shall the Company have any responsibility or liability if this Grant does not meet any applicable requirements of Code section 409A.

21. Severability. In the event one or more of the provisions of this Grant should, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provisions of this Grant, and this Grant will be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

[*SIGNATURE PAGE FOLLOWS*]

IN WITNESS WHEREOF, the Company has caused its duly authorized officer to execute this Grant, effective as of the Date of Grant.

AMERICAN WATER WORKS COMPANY, INC.

By: Susan N. Story

/s/ SUSAN N. STORY

Its: President and CEO

"PSU GRANT B – EPS"

EXHIBIT A

PERFORMANCE GOALS

The number of Performance Units that may be earned shall be determined based on the achievement of Compounded Earnings Per Share Growth (as described below) over the Performance Period.

Compounded Earnings Per Share ("EPS") Growth – will be calculated based on fully diluted EPS calculated in accordance with US GAAP as reported in the Company's audited consolidated financial statements adjusted to exclude all items of gain, loss or expense for the fiscal year determined to be extraordinary or unusual in nature or infrequent in occurrence or related to the disposal of a segment of a business or related to a change in accounting principle or, as determined by the Committee, any other change or event similar in nature. The starting point for the calculation will be adjusted EPS of $3.30 for the year ended December 31, 2018. The ending point for the calculation will be EPS for the year ended December 31, 2021, adjusted to exclude all items of gain, loss or expense for the fiscal year determined to be extraordinary or unusual in nature or infrequent in occurrence or related to the disposal of a segment of a business or related to a change in accounting principle or, as determined by the Committee, any other change or event similar in nature.

The award scale for Compounded EPS Growth is as follows:

Compounded EPS Growth

Actual Compounded EPS Growth	Target Award
11.0% or more	200%
9.8%	175%
8.5%	100%
7.3%	25%
< 6.0%	0%

If actual achievement of the Performance Goal does not meet threshold performance (i.e., less than 6.0% for Compounded EPS Growth, then that Performance Goal will be reflected in the final result for determining the number of earned Performance Units at its assigned weighting with a 0%. The maximum award that may be earned for each Performance Goal is capped at 200%, and the maximum award that may be earned by the Participant is capped at 200% of the Target Award.

Example:

The following is an example calculation for a Participant with a Target Award of 1,000 Performance Units:

Earnings Per Share

	12/31/2018 Adjusted	12/31/2021 Illustration
Adjusted diluted earnings per share from continuing operations	$ 3.30	$ 4.27
Compounded EPS growth		**8.97%**

Earned Performance Units

	Achievement	Award
Compounded EPS Growth	8.97%	127.5%

In this example, the individual who was awarded a Target Grant of 1,000 Performance Units would earn 1,275 Performance Units (1,000 x 1.275), which is convertible into an equivalent number of shares of Company Stock assuming all other terms and conditions of the Grant have been satisfied.

AMERICAN WATER WORKS COMPANY, INC.
2017 OMNIBUS EQUITY COMPENSATION PLAN
PERFORMANCE STOCK UNIT GRANT

This PERFORMANCE STOCK UNIT GRANT, dated as of February 14, 2019 (the "Date of Grant"), is delivered by American Water Works Company, Inc. (the "Company") to _________________ (the "Participant").

RECITALS

WHEREAS, the Committee (as defined in the American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan (the "Plan")) has adopted a 2019 Long Term Performance Plan ("2019 LTPP") pursuant to which designated employees will be granted equity awards (collectively, the "Equity Award") for shares of Common Stock of the Company, par value $0.01 per share (the "Company Stock");

WHEREAS, the Equity Award is comprised of three separate grants: a restricted stock unit and two performance stock unit grants;

WHEREAS, the Committee has determined that the Participant is eligible to participate in the 2019 LTPP and to grant the Participant an Equity Award under the 2019 LTPP; and

WHEREAS, the Committee has determined that the performance stock unit portion of the Equity Award granted to the Participant pursuant to the 2019 LTPP shall be issued under the Plan, and the terms and conditions of the performance stock unit grant that may be earned based on Performance Goals (defined below) relating to compounded earnings per share, as set forth in Exhibit A attached hereto, shall be memorialized in this grant (the "Grant").

NOW, THEREFORE, the parties to this Grant, intending to be legally bound hereby, agree as follows:

1. Grant of Performance Stock Units. Subject to the terms and conditions set forth in this Grant and the Plan, the Company hereby grants to the Participant ______ performance stock units (the "Performance Units"). The Performance Units are contingently awarded and will be earned and distributable if and only to the extent that the Performance Goals and other conditions set forth in this Grant are met. Each Performance Unit shall be a phantom right and shall be equivalent to one share of Company Stock on the applicable payment date, as described in Paragraph 5 below. The number of Performance Units set forth above is equal to the target number of shares of Company Stock that the Participant will earn for 100% achievement of the Performance Goals described in this Grant (the "Target Award").

2. Performance Unit Account. The Company shall establish and maintain a Performance Unit account as a bookkeeping account on its records (the "Performance Unit Account") for the Participant and shall record in such Performance Unit Account the number of Performance Units

granted to the Participant. The Participant shall not have any interest in any fund or specific assets of the Company by reason of this grant or the Performance Unit Account established for the Participant.

3. Performance Goals.

(a) Unless a Change of Control (as defined below) occurs prior to the end of the Performance Period (as defined below), the distribution of the shares of Company Stock attributable to the Performance Units is contingent upon achievement of the performance goals set forth in Exhibit A attached hereto (the "Performance Goals") and the Participant satisfying the continuation of employment and service with the Employer (as defined in the Plan) requirement described in Paragraph 4 below.

(b) As soon as administratively practicable following the end of the Performance Period (as defined in Paragraph 3(d) below), the Committee will determine whether and to what extent the Performance Goals have been met and the number of Performance Units the Participant has earned, if any. Except as described in Paragraph 4 below, the Participant must be employed by, or providing service to, the Employer on the last day of the Performance Period in order to earn the Performance Units.

(c) If a Change of Control occurs prior to the end of the Performance Period, the Company is not the surviving corporation (or survives only as a subsidiary of another corporation or entity (the "surviving corporation")) and the Performance Units are not converted to similar grants of the surviving corporation (or a parent or subsidiary of the surviving corporation), then the Performance Period will end on the date of the Change of Control and the Performance Units will be deemed earned at the Target Award level as of the date of the Change of Control (the "Change of Control Date"). In the event the Participant's Performance Units are assumed by the surviving corporation but the Participant ceases to be employed by, or providing service to, the surviving corporation (or a parent or subsidiary of the surviving corporation) within twelve (12) months after the date of the Change of Control on account of (i) a termination of such Participant's employment by the surviving corporation (or a parent of subsidiary of the surviving corporation) for any reason other than on account of Cause (as defined in Paragraph 4(e) hereof), or on account of death or Disability (each as defined in the Plan), or (ii) a termination of employment or service by the Participant for Good Reason (as defined in the Plan), then the Performance Period will end on the date of such termination of employment or service (the "Termination Date") and the Performance Units will be deemed earned at the Target Award level as of the Termination Date. For purposes of this Grant, "Change of Control" shall mean as such term is defined in the Plan, except that a Change of Control shall not be deemed to have occurred for purposes of this Grant unless the event constituting the Change of Control constitutes a change in ownership or effective control of the Company, or in the ownership of a substantial portion of the assets of the Company, within the meaning of section 409A of the Internal Revenue Code of 1986, as amended (the "Code") and its corresponding regulations.

(d) For purposes of this Grant, the term "Performance Period" shall mean the three (3)-year period beginning on January 1, 2019 and ending December 31, 2021.

4. Termination of Employment or Service.

(a) Except as set forth in Paragraphs 3(c), 4(b) or 4(c), if, at least one year after the beginning of the Performance Period, but prior to the end of the Performance Period, the Participant ceases to be employed by, or provide service to, the Employer on account of any reason other than a termination for Cause (as defined below), the Participant will earn a pro-rata portion of the Performance Units, if the Performance Goals and the requirements of this Grant are met as of the last day of the Performance Period. The pro-rata portion earned will be equal to the number of Performance Units that would have been earned if the Participant had remained employed through the last day of the Performance Period, multiplied by a fraction, which fraction shall be equal to (i) 1/3, if the Participant's employment or service with the Employer terminates on or after January 31, 2020, but prior to January 31, 2021; (ii) 2/3, if the Participant's employment or service with the Employer terminates on or after January 31, 2021, but prior to January 31, 2022; and (iii) 3/3, if the Participant's employment or service terminates with the Employer on or after January 31, 2022. If the Participant ceases to be employed by, or provide service to, the Employer for any reason other than on account of Cause, the prorated number of Performance Units earned by the Participant pursuant to this Paragraph 4(a) will be distributed in accordance with Paragraph 5.

(b) Notwithstanding any provision of this Agreement to the contrary, if prior to the end of the Performance Period, the Participant ceases to be employed by, or provide service to, the Employer on account of Normal Retirement, then the Participant will earn the number of Performance Units that would have been earned if the Participant has remained employed through the last day of the Performance Period, if the Performance Goals and the requirements of this Grant are met as of the last day of the Performance Period. If the Participant ceases to be employed by, or provide service to, the Employer on account of Normal Retirement pursuant to this subparagraph (b), the number of Performance Units that are earned based on the Performance Goals and other requirements of this Grant will be distributed in accordance with Paragraph 5. For purposes of this Grant, "Normal Retirement" shall mean termination of employment or service with the Employer (other than for Cause) after the Participant has attained age sixty (60) and has five (5) total years of employment or service with the Employer which includes at least three (3) consecutive full calendar years of service in the position of Chief Executive Officer, Chief Operating Officer or Chief Financial Officer, or any combination thereof.

(c) Notwithstanding any provision of this Agreement to the contrary, if prior to the end of the Performance Period, the Participant ceases to be employed by, or provide service to, the Employer on account of Early Retirement, then the Participant will earn 75% of the number of Performance Units that would have been earned if the Participant had remained employed through the last day of the Performance Period, if the Performance Goals and the requirements of this Grant are met as of the last day of the Performance Period, and unearned Performance Units shall be immediately forfeited. If the Participant ceases to be employed by, or provide service to, the Employer on account of Early Retirement pursuant to this subparagraph (c), then the number of Performance Units that are earned based on the Performance Goals and other requirements of this Grant will be distributed in accordance with Paragraph 5. For purposes of this Grant, "Early Retirement" shall mean termination of employment or service with the Employer (other than for Cause) after the Participant has attained age fifty-five (55) and has five (5) total years of employment or service with the Employer which includes at least three (3) consecutive full calendar years of service in the position of Chief Executive Officer, Chief Operating Officer or Chief Financial Officer, or any combination thereof.

(d) Except as set forth in Paragraphs 4(b) or 4(c), if at any time prior to the earlier of January 31, 2020 or a Change of Control, the Participant's employment or service with the Employer is terminated by the Employer on account of any reason or no reason or by the Participant for any reason or no reason, all of the Performance Units subject to this Grant shall be immediately forfeited as of the date of the Participant's termination of employment or service with the Employer and the Participant shall not have any rights with respect to the distribution of any portion of the Performance Units.

(e) If at any time prior to the date the Performance Units are distributed in accordance with Paragraph 5 the Participant's employment or service with the Employer is terminated on account of Cause, all of the Performance Units subject to this Grant shall be immediately forfeited and the Participant will not have any rights with respect to the distribution of any portion of the Performance Units, irrespective of the level of achievement of the Performance Goals. For purposes of this Grant, "Cause" shall mean a finding by the Committee that the Participant (i) has breached his or her employment or service contract with the Employer, if any; (ii) has engaged in disloyalty to the Employer, including, without limitation, fraud, embezzlement, theft, commission of a felony or proven dishonesty; (iii) has disclosed trade secrets or confidential information of the Employer to persons not entitled to receive such information; (iv) has breached any written noncompetition or non-solicitation agreement between the Participant and the Employer; or (v) has engaged in such other behavior detrimental to the interests of the Employer as the Committee determines.

5. Time and Form of Payment with Respect to Performance Units. Unless an election is made pursuant to Paragraph 6 below, the Participant will receive a distribution with respect to the Performance Units earned as described in Paragraphs 3 and 4 above within seventy (70) days following the earliest of (a) January 31, 2022 (the "Distribution Date"), (b) the Change of Control Date, or (c) the Termination Date. The Performance Units will be distributed in shares of Company Stock, with each Performance Unit earned equivalent to one share of Company Stock. Any Performance Units not earned because of the failure to attain the Performance Goals and service condition will be immediately forfeited.

6. Deferrals. The Participant may make an irrevocable election to defer the Distribution Date (or further defer the Deferred Date (as defined below), if applicable) of all of the Performance Units that are earned, plus dividend equivalents earned on such Performance Units as described in Paragraph 7 below, to a later date, provided that (a) the election shall not take effect until at least twelve (12) months after the date on which the election is made, (b) the deferred Distribution Date cannot be earlier than five (5) years from the original Distribution Date under Paragraph 5 above (or five (5) years from the applicable Deferred Date, if a subsequent deferral of a Deferred Date is being made), and (c) the election must be made no less than twelve (12) months prior to the date of the Distribution Date (twelve (12) months prior to the previously applicable Deferred Date, if a subsequent deferral of a Deferred Date is being made). To defer the Distribution Date, the Participant must elect to defer 100% of the Performance Units, including corresponding dividend equivalents,

earned by the Participant under this Grant, as well as 100% of the other performance stock units, including corresponding dividend equivalents, earned by the Participant under the 2019 LTPP, complete the deferral election form provided to the Participant by the Committee, and return such form to the Company in the manner and by the deadline provided therein. If the Participant desires to make a further deferral, the Participant must make such election on a separate form provided by the Committee for such purpose. Any such election shall be made in accordance with section 409A of the Code and any corresponding guidance and regulations issued under section 409A of the Code. Notwithstanding a Participant's election pursuant to this Paragraph, if the Change of Control Date or the Termination Date occurs prior to the Deferred Date, the distribution of the Participant's earned Performance Units, plus corresponding dividend equivalents, will be the Change of Control Date or the Termination Date, as applicable. If a Distribution Date is delayed one or more times pursuant to this Paragraph 6, the new Distribution Date shall be referred to as the "Deferred Date."

7. Dividend Equivalents. Until the earlier of the Distribution Date (or the Deferred Date, if elected), the Change of Control Date or the Termination Date, if any dividends are paid with respect to the shares of Company Stock, the Company shall credit to a dividend equivalent account (the "Dividend Equivalent Account") the value of the dividends that would have been distributed if the Performance Units credited to the Participant's Performance Unit Account as of the date of payment of any such dividend were shares of Company Stock. At the same time that the Performance Units are converted to shares of Company Stock and distributed to the Participant, the Company shall pay to the Participant in a lump sum cash equal to the value of the dividends credited to the Participant's Dividend Equivalent Account; provided, however, that any dividends that were credited to the Participant's Dividend Equivalent Account that are attributable to Performance Units that have been forfeited as provided in Paragraph 3 and 4 above shall be forfeited and not payable to the Participant. No interest shall accrue on any dividend equivalents credited to the Participant's Dividend Equivalent Account.

8. Change of Control. Except as set forth above, the provisions set forth in the Plan applicable to a Change of Control (as defined in the Plan) shall apply to the Performance Units, and, in the event of a Change of Control, the Committee may take such actions as it deems appropriate pursuant to the Plan and is consistent with the requirements of section 409A of the Code.

9. Acknowledgment by Participant. By accepting this Grant, the Participant acknowledges that, with respect to any right to distribution pursuant to the Plan or this Grant, the Participant is and shall be an unsecured general creditor of the Company without any preference as against other unsecured general creditors of the Company, and the Participant hereby covenants for himself or herself, and anyone at any time claiming through or under the Participant, not to claim any such preference, and hereby disclaims and waives any such preference which may at any time be at issue, to the fullest extent permitted by applicable law.

10. Restrictions on Issuance or Transfer of Shares of Company Stock.

(a) To the extent permitted by Code section 409A, the obligation of the Company to deliver shares of Company Stock upon the Participant earning the Performance Units shall be subject to the condition that shares of Company Stock be qualified for listing on the New York Stock Exchange or another securities exchange and be registered under the Securities Act of 1933, as amended, and that any consent or approval of any governmental regulatory body that is necessary to issue shares of Company Stock has been so obtained, and that shares of Company Stock may not be issued in whole or in part unless such listing, registration, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the Committee.

(b) The issuance of shares of Company Stock and the payment of cash to the Participant pursuant to this Grant is subject to any applicable taxes and other laws or regulations of the United States or of any state having jurisdiction thereof.

(c) As a condition to receive any shares of Company Stock upon conversion of the earned Performance Units, the Participant agrees:

(i) to be bound by, and to comply with, the Company's policies and practices (as they may be in effect from time to time) regarding the restrictions or limitations on the transfer of such shares, and understands that the Participant may be restricted or prohibited at any time and/or from time to time from selling, transferring, pledging, donating, assigning, margining, mortgaging, hypothecating or otherwise encumbering the shares in accordance with such policies and practices, including without limitation the Company's Insider Trading and Prohibited Transactions Policy and the Personal Securities Trading and Preclearance Practice; and

(ii) that any shares of Company Stock received by the Participant upon the distribution of the earned Performance Units pursuant to this Grant shall be subject to the guidelines and restrictions set forth in the Company's Executive Stock Ownership Guidelines and Executive Stock Retention Requirements, effective as of March 4, 2015 (and as they may be amended, restated, supplemented and interpreted), and any applicable clawback or recoupment policies and other policies that may be implemented by the Company's Board of Directors or a duly authorized committee thereof, from time to time.

11. Participant Undertaking. The Participant agrees to take whatever additional actions and execute whatever additional documents the Company may deem necessary or advisable in order to carry out or effect one or more of the obligations or restrictions imposed on the Participant pursuant to the provisions of this Grant.

12. Grant Subject to Plan Provisions. This Grant is made pursuant to the Plan, the terms of which are incorporated herein by reference, and in all respects shall be interpreted in accordance with the Plan. In the event of any contradiction, distinction or difference between this Grant and the terms of the Plan, the terms of the Plan will control. Except as otherwise defined in this Grant, capitalized terms used in this Grant shall have the meanings set forth in the Plan. This Grant is subject to the interpretations, regulations and determinations concerning the Plan established from time to time by the Committee in accordance with the provisions of the Plan, including, but not limited to, provisions pertaining to (a) rights and obligations with respect to withholding taxes, (b) the registration, qualification or listing of the shares of Company Stock, (c) changes in capitalization of the Company, and (d) other requirements of applicable law. The Committee shall have the

authority to interpret and construe this Grant pursuant to the terms of the Plan, its decisions shall be conclusive as to any questions arising hereunder. By accepting this Grant, the Participant agrees (i) to be bound by the terms of the Plan and this Grant, (ii) to be bound by the determinations and decisions of the Committee with respect to this Grant, the Plan and the Participant's rights to benefits under this Grant and the Plan, and (iii) that all such determinations and decisions of the Committee shall be binding on the Participant, his or her beneficiaries and any other person having or claiming an interest under this Grant and the Plan on behalf of the Participant.

13. No Rights as Stockholder. The Participant shall not have any rights as a stockholder of the Company, including the right to any cash dividends (except with respect to the dividend equivalent rights provided in Paragraph 7), or the right to vote, with respect to any Performance Units.

14. No Rights to Continued Employment or Service. This Grant shall not confer upon the Participant any right to be retained in the employment or service of the Employer and shall not interfere in any way with the right of the Employer to terminate the Participant's employment or service at any time. The right of the Employer to terminate at will the Participant's employment or service at any time for any reason is specifically reserved.

15. Assignment and Transfers. No Performance Units or dividend equivalents awarded to the Participant under this Grant may be transferred, assigned, pledged, or encumbered by the Participant and the Performance Units and dividend equivalents shall be distributed during the lifetime of the Participant only for the benefit of the Participant. Any attempt to transfer, assign, pledge, or encumber the Performance Units or dividend equivalents under this Grant by the Participant shall be null, void and without effect. The rights and protections of the Company hereunder shall extend to any successors or assigns of the Company. This Grant may be assigned by the Company without the Participant's consent.

16. Withholding. The Participant shall be required to pay to the Employer, or make other arrangements satisfactory to the Employer to provide for the payment of, any federal, state, local or other taxes that the Employer is required to withhold with respect to the grant, vesting and distribution of the Performance Units and dividend equivalents. Any tax withholding obligation of the Employer with respect to the distribution of shares of Company Stock pursuant to the Performance Units that are earned by the Participant under this Grant may, at the Committee's discretion, be satisfied by having shares of Company Stock withheld up to an amount that does not exceed the minimum applicable withholding tax rate for federal (including FICA), state, local and other tax liabilities.

17. Effect on Other Benefits. The value of shares of Company Stock and dividend equivalents distributed with respect to the Performance Units shall not be considered eligible earnings for purposes of any other plans maintained by the Company or the Employer. Neither shall such value be considered part of the Participant's compensation for purposes of determining or calculating other benefits that are based on compensation, such as life insurance.

18. Applicable Law. The validity, construction, interpretation and effect of this Grant shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to the conflict of law provisions thereof.

19. Notice. Any notice to the Company provided for in this instrument shall be addressed to the Company in care of the General Counsel at the Company's corporate headquarters, and any notice to the Participant shall be addressed to such Participant at the current address shown on the payroll records of the Employer, or to such other address as the Participant may designate to the Employer in writing. Any notice shall be (i) delivered by hand, (ii) delivered by a national overnight courier or delivery service, (iii) enclosed in a properly sealed envelope addressed as stated above, registered and deposited, postage prepaid, in a post office regularly maintained by the United States Postal Service, or (iv) in the case of notices by the Company to the Participant, delivered by e-mail or other electronic means (with confirmation of receipt to be made by any oral, electronic or written means).

20. Taxation; Code Section 409A. As applicable, this Grant is intended to comply with the requirements of section 409A of the Code and shall be interpreted and administered in accordance with Code section 409A. Notwithstanding any provision to the contrary herein, if the Performance Units constitute "deferred compensation" under section 409A of the Code, distributions made with respect to this Grant may only be made in a manner and upon an event permitted by Code section 409A. To the extent that any provision of the Grant would cause a conflict with the requirements of Code section 409A, or would cause the administration of the Grant to fail to satisfy the requirements of Code section 409A, such provision shall, to the extent practicable if permitted by applicable law, be deemed null and void. In the event that it is determined not feasible to void a provision of this Grant, such provision shall be construed in a manner as to comply with the Code section 409A requirements. This Grant may be amended without the consent of the Participant in any respect deemed by the Committee or its delegate to be necessary in order to comply with Code section 409A. Unless a valid election is made pursuant to Paragraph 6 above, in no event may the Participant, directly or indirectly, designate the calendar year of distribution. Notwithstanding anything in the Plan or the Grant to the contrary, the Participant shall be solely responsible for the tax consequences of this Grant, and in no event shall the Company have any responsibility or liability if this Grant does not meet any applicable requirements of Code section 409A.

21. Severability. In the event one or more of the provisions of this Grant should, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provisions of this Grant, and this Grant will be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

[*SIGNATURE PAGE FOLLOWS*]

IN WITNESS WHEREOF, the Company has caused its duly authorized officer to execute this Grant, effective as of the Date of Grant.

AMERICAN WATER WORKS COMPANY, INC.

/s/ SUSAN N. STORY

By: Susan N. Story
Its: President and CEO

"PSU GRANT B – EPS"

EXHIBIT A

PERFORMANCE GOALS

The number of Performance Units that may be earned shall be determined based on the achievement of Compounded Earnings Per Share Growth (as described below) over the Performance Period.

Compounded Earnings Per Share ("EPS") Growth – will be calculated based on fully diluted EPS calculated in accordance with US GAAP as reported in the Company's audited consolidated financial statements adjusted to exclude all items of gain, loss or expense for the fiscal year determined to be extraordinary or unusual in nature or infrequent in occurrence or related to the disposal of a segment of a business or related to a change in accounting principle or, as determined by the Committee, any other change or event similar in nature. The starting point for the calculation will be adjusted EPS of $3.30 for the year ended December 31, 2018. The ending point for the calculation will be EPS for the year ended December 31, 2021, adjusted to exclude all items of gain, loss or expense for the fiscal year determined to be extraordinary or unusual in nature or infrequent in occurrence or related to the disposal of a segment of a business or related to a change in accounting principle or, as determined by the Committee, any other change or event similar in nature.

The award scale for Compounded EPS Growth is as follows:

Compounded EPS Growth

Actual Compounded EPS Growth	Target Award
11.0% or more	200%
9.8%	175%
8.5%	100%
7.3%	25%
< 6.0%	0%

If actual achievement of the Performance Goal does not meet threshold performance (i.e., less than 6.0% for Compounded EPS Growth, then that Performance Goal will be reflected in the final result for determining the number of earned Performance Units at its assigned weighting with a 0%. The maximum award that may be earned for each Performance Goal is capped at 200%, and the maximum award that may be earned by the Participant is capped at 200% of the Target Award.

Example:

The following is an example calculation for a Participant with a Target Award of 1,000 Performance Units:

Earnings Per Share

	12/31/2018 Adjusted	12/31/2021 Illustration
Adjusted diluted earnings per share from continuing operations	$ 3.30	$ 4.27
Compounded EPS growth		**8.97%**

Earned Performance Units

	Achievement	Award
Compounded EPS Growth	8.97%	127.5%

In this example, the individual who was awarded a Target Grant of 1,000 Performance Units would earn 1,275 Performance Units (1,000 x 1.275), which is convertible into an equivalent number of shares of Company Stock assuming all other terms and conditions of the Grant have been satisfied.

Exhibit 10.14.35

AMERICAN WATER WORKS COMPANY, INC.
2017 OMNIBUS EQUITY COMPENSATION PLAN
PERFORMANCE STOCK UNIT GRANT

This PERFORMANCE STOCK UNIT GRANT, dated as of February 14, 2019 (the "Date of Grant"), is delivered by American Water Works Company, Inc. (the "Company") to Loyd A. Warnock (the "Participant").

RECITALS

WHEREAS, the Committee (as defined in the American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan (the "Plan")) has adopted a 2019 Long Term Performance Plan ("2019 LTPP") pursuant to which designated employees will be granted equity awards (collectively, the "Equity Award") for shares of Common Stock of the Company, par value $0.01 per share (the "Company Stock");

WHEREAS, the Equity Award is comprised of three separate grants: a restricted stock unit and two performance stock unit grants;

WHEREAS, the Committee has determined that the Participant is eligible to participate in the 2019 LTPP and to grant the Participant an Equity Award under the 2019 LTPP; and

WHEREAS, the Committee has determined that the performance stock unit portion of the Equity Award granted to the Participant pursuant to the 2019 LTPP shall be issued under the Plan, and the terms and conditions of the performance stock unit grant that may be earned based on Performance Goals (defined below) relating to compounded earnings per share, as set forth in Exhibit A attached hereto, shall be memorialized in this grant (the "Grant").

NOW, THEREFORE, the parties to this Grant, intending to be legally bound hereby, agree as follows:

1. Grant of Performance Stock Units. Subject to the terms and conditions set forth in this Grant and the Plan, the Company hereby grants to the Participant 1,602 performance stock units (the "Performance Units"). The Performance Units are contingently awarded and will be earned and distributable if and only to the extent that the Performance Goals and other conditions set forth in this Grant are met. Each Performance Unit shall be a phantom right and shall be equivalent to one share of Company Stock on the applicable payment date, as described in Paragraph 5 below. The number of Performance Units set forth above is equal to the target number of shares of Company Stock that the Participant will earn for 100% achievement of the Performance Goals described in this Grant (the "Target Award").

2. Performance Unit Account. The Company shall establish and maintain a Performance Unit account as a bookkeeping account on its records (the "Performance Unit Account") for the Participant and shall record in such Performance Unit Account the number of Performance Units

granted to the Participant. The Participant shall not have any interest in any fund or specific assets of the Company by reason of this grant or the Performance Unit Account established for the Participant.

3. Performance Goals.

(a) Unless a Change of Control (as defined below) occurs prior to the end of the Performance Period (as defined below), the distribution of the shares of Company Stock attributable to the Performance Units is contingent upon achievement of the performance goals set forth in Exhibit A attached hereto (the "Performance Goals") and the Participant satisfying the continuation of employment and service with the Employer (as defined in the Plan) requirement described in Paragraph 4 below.

(b) As soon as administratively practicable following the end of the Performance Period (as defined in Paragraph 3(d) below), the Committee will determine whether and to what extent the Performance Goals have been met and the number of Performance Units the Participant has earned, if any. Except as described in Paragraph 4 below, the Participant must be employed by, or providing service to, the Employer on the last day of the Performance Period in order to earn the Performance Units.

(c) If a Change of Control occurs prior to the end of the Performance Period, the Company is not the surviving corporation (or survives only as a subsidiary of another corporation or entity (the "surviving corporation")) and the Performance Units are not converted to similar grants of the surviving corporation (or a parent or subsidiary of the surviving corporation), then the Performance Period will end on the date of the Change of Control and the Performance Units will be deemed earned at the Target Award level as of the date of the Change of Control (the "Change of Control Date"). In the event the Participant's Performance Units are assumed by the surviving corporation but the Participant ceases to be employed by, or providing service to, the surviving corporation (or a parent or subsidiary of the surviving corporation) within twelve (12) months after the date of the Change of Control on account of (i) a termination of such Participant's employment by the surviving corporation (or a parent of subsidiary of the surviving corporation) for any reason other than on account of Cause (as defined in paragraph 4(c) hereof), or on account of death or Disability (each as defined in the Plan), or (ii) a termination of employment or service by the Participant for Good Reason (as defined in the Plan), then the Performance Period will end on the date of such termination of employment or service (the "Termination Date") and the Performance Units will be deemed earned at the Target Award level as of the Termination Date. For purposes of this Grant, "Change of Control" shall mean as such term is defined in the Plan, except that a Change of Control shall not be deemed to have occurred for purposes of this Grant unless the event constituting the Change of Control constitutes a change in ownership or effective control of the Company, or in the ownership of a substantial portion of the assets of the Company, within the meaning of section 409A of the Internal Revenue Code of 1986, as amended (the "Code") and its corresponding regulations.

(d) For purposes of this Grant, the term "Performance Period" shall mean the three (3)-year period beginning on January 1, 2019 and ending December 31, 2021.

4. Termination of Employment or Service.

(a) Except as set forth in Paragraph 3(c), unless the Participant's employment or service with the Employer terminates before January 1, 2021, the Participant will vest in the Performance Units, if the Performance Goals and the requirements of this Grant are met as of the last day of the Performance Period. The number of Performance Units earned by the Participant pursuant to this Paragraph 4(a) will be distributed in accordance with Paragraph 5.

(b) If at any time prior to the earlier of January 1, 2021 or a Change of Control, the Participant's employment or service with the Employer is terminated by the Employer on account of any reason or no reason or by the Participant for any reason or no reason, all of the Performance Units subject to this Grant shall be immediately forfeited as of the date of the Participant's termination of employment or service with the Employer and the Participant shall not have any rights with respect to the distribution of any portion of the Performance Units.

(c) If at any time prior to the date the Performance Units are distributed in accordance with Paragraph 5 the Participant's employment or service with the Employer is terminated on account of Cause, all of the Performance Units subject to this Grant shall be immediately forfeited and the Participant will not have any rights with respect to the distribution of any portion of the Performance Units, irrespective of the level of achievement of the Performance Goals. For purposes of this Grant, "Cause" shall mean a finding by the Committee that the Participant (i) has breached his or her employment or service contract with the Employer, if any; (ii) has engaged in disloyalty to the Employer, including, without limitation, fraud, embezzlement, theft, commission of a felony or proven dishonesty; (iii) has disclosed trade secrets or confidential information of the Employer to persons not entitled to receive such information; (iv) has breached any written noncompetition or non-solicitation agreement between the Participant and the Employer; or (v) has engaged in such other behavior detrimental to the interests of the Employer as the Committee determines.

5. Time and Form of Payment with Respect to Performance Units. Unless an election is made pursuant to Paragraph 6 below, the Participant will receive a distribution with respect to the Performance Units earned as described in Paragraphs 3 and 4 above within seventy (70) days following the earliest of (a) January 1, 2021 (the "Distribution Date"), (b) the Change of Control Date, or (c) the Termination Date. The Performance Units will be distributed in shares of Company Stock, with each Performance Unit earned equivalent to one share of Company Stock. Any Performance Units not earned because of the failure to attain the Performance Goals and service condition will be immediately forfeited.

6. Deferrals. The Participant may make an irrevocable election to defer the Distribution Date (or further defer the Deferred Date (as defined below), if applicable) of all of the Performance Units that are earned, plus dividend equivalents earned on such Performance Units as described in Paragraph 7 below, to a later date, provided that (a) the election shall not take effect until at least twelve (12) months after the date on which the election is made, (b) the deferred Distribution Date cannot be earlier than five (5) years from the original Distribution Date under Paragraph 5 above (or five (5) years from the applicable Deferred Date, if a subsequent deferral of a Deferred Date is being made), and (c) the election must be made no less than twelve (12) months prior to the date of the Distribution Date (twelve (12) months prior to the previously applicable Deferred Date, if a

subsequent deferral of a Deferred Date is being made). To defer the Distribution Date, the Participant must elect to defer 100% of the Performance Units, including corresponding dividend equivalents, earned by the Participant under this Grant, as well as 100% of the other performance stock units, including corresponding dividend equivalents, earned by the Participant under the 2019 LTPP, complete the deferral election form provided to the Participant by the Committee, and return such form to the Company in the manner and by the deadline provided therein. If the Participant desires to make a further deferral, the Participant must make such election on a separate form provided by the Committee for such purpose. Any such election shall be made in accordance with section 409A of the Code and any corresponding guidance and regulations issued under section 409A of the Code. Notwithstanding a Participant's election pursuant to this Paragraph, if the Change of Control Date or the Termination Date occurs prior to the Deferred Date, the distribution of the Participant's earned Performance Units, plus corresponding dividend, equivalents will be the Change of Control Date or the Termination Date, as applicable. If a Distribution Date is delayed one or more times pursuant to this Paragraph 6, the new Distribution Date shall be referred to as the "Deferred Date."

7. Dividend Equivalents. Until the earlier of the Distribution Date (or the Deferred Date, if elected), the Change of Control Date or the Termination Date, if any dividends are paid with respect to the shares of Company Stock, the Company shall credit to a dividend equivalent account (the "Dividend Equivalent Account") the value of the dividends that would have been distributed if the Performance Units credited to the Participant's Performance Unit Account as of the date of payment of any such dividend were shares of Company Stock. At the same time that the Performance Units are converted to shares of Company Stock and distributed to the Participant, the Company shall pay to the Participant in a lump sum cash equal to the value of the dividends credited to the Participant's Dividend Equivalent Account; provided, however, that any dividends that were credited to the Participant's Dividend Equivalent Account that are attributable to Performance Units that have been forfeited as provided in Paragraph 3 and 4 above shall be forfeited and not payable to the Participant. No interest shall accrue on any dividend equivalents credited to the Participant's Dividend Equivalent Account.

8. Change of Control. Except as set forth above, the provisions set forth in the Plan applicable to a Change of Control (as defined in the Plan) shall apply to the Performance Units, and, in the event of a Change of Control, the Committee may take such actions as it deems appropriate pursuant to the Plan and is consistent with the requirements of section 409A of the Code.

9. Acknowledgment by Participant. By accepting this Grant, the Participant acknowledges that, with respect to any right to distribution pursuant to the Plan or this Grant, the Participant is and shall be an unsecured general creditor of the Company without any preference as against other unsecured general creditors of the Company, and the Participant hereby covenants for himself or herself, and anyone at any time claiming through or under the Participant, not to claim any such preference, and hereby disclaims and waives any such preference which may at any time be at issue, to the fullest extent permitted by applicable law.

10. Restrictions on Issuance or Transfer of Shares of Company Stock.

(a) To the extent permitted by Code section 409A, the obligation of the Company to deliver shares of Company Stock upon the Participant earning the Performance Units shall be subject to the condition that shares of Company Stock be qualified for listing on the New York Stock Exchange or another securities exchange and be registered under the Securities Act of 1933, as amended, and that any consent or approval of any governmental regulatory body that is necessary to issue shares of Company Stock has been so obtained, and that shares of Company Stock may not be issued in whole or in part unless such listing, registration, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the Committee.

(b) The issuance of shares of Company Stock and the payment of cash to the Participant pursuant to this Grant is subject to any applicable taxes and other laws or regulations of the United States or of any state having jurisdiction thereof.

(c) As a condition to receive any shares of Company Stock upon conversion of the earned Performance Units, the Participant agrees:

(i) to be bound by, and to comply with, the Company's policies and practices (as they may be in effect from time to time) regarding the restrictions or limitations on the transfer of such shares, and understands that the Participant may be restricted or prohibited at any time and/or from time to time from selling, transferring, pledging, donating, assigning, margining, mortgaging, hypothecating or otherwise encumbering the shares in accordance with such policies and practices, including without limitation the Company's Insider Trading and Prohibited Transactions Policy and the Personal Securities Trading and Preclearance Practice; and

(ii) that any shares of Company Stock received by the Participant upon the distribution of the earned Performance Units pursuant to this Grant shall be subject to the guidelines and restrictions set forth in the Company's Executive Stock Ownership Guidelines and Executive Stock Retention Requirements, effective as of March 4, 2015 (and as they may be amended, restated, supplemented and interpreted), and any applicable clawback or recoupment policies and other policies that may be implemented by the Company's Board of Directors or a duly authorized committee thereof, from time to time.

11. Participant Undertaking. The Participant agrees to take whatever additional actions and execute whatever additional documents the Company may deem necessary or advisable in order to carry out or effect one or more of the obligations or restrictions imposed on the Participant pursuant to the provisions of this Grant.

12. Grant Subject to Plan Provisions. This Grant is made pursuant to the Plan, the terms of which are incorporated herein by reference, and in all respects shall be interpreted in accordance with the Plan. In the event of any contradiction, distinction or difference between this Grant and the terms of the Plan, the terms of the Plan will control. Except as otherwise defined in this Grant, capitalized terms used in this Grant shall have the meanings set forth in the Plan. This Grant is subject to the interpretations, regulations and determinations concerning the Plan established from time to time by the Committee in accordance with the provisions of the Plan, including, but not limited to, provisions pertaining to (a) rights and obligations with respect to withholding taxes, (b) the

registration, qualification or listing of the shares of Company Stock, (c) changes in capitalization of the Company, and (d) other requirements of applicable law. The Committee shall have the authority to interpret and construe this Grant pursuant to the terms of the Plan, its decisions shall be conclusive as to any questions arising hereunder. By accepting this Grant, the Participant agrees (i) to be bound by the terms of the Plan and this Grant, (ii) to be bound by the determinations and decisions of the Committee with respect to this Grant, the Plan and the Participant's rights to benefits under this Grant and the Plan, and (iii) that all such determinations and decisions of the Committee shall be binding on the Participant, his or her beneficiaries and any other person having or claiming an interest under this Grant and the Plan on behalf of the Participant.

13. No Rights as Stockholder. The Participant shall not have any rights as a stockholder of the Company, including the right to any cash dividends (except with respect to the dividend equivalent rights provided in Paragraph 7), or the right to vote, with respect to any Performance Units.

14. No Rights to Continued Employment or Service. This Grant shall not confer upon the Participant any right to be retained in the employment or service of the Employer and shall not interfere in any way with the right of the Employer to terminate the Participant's employment or service at any time. The right of the Employer to terminate at will the Participant's employment or service at any time for any reason is specifically reserved.

15. Assignment and Transfers. No Performance Units or dividend equivalents awarded to the Participant under this Grant may be transferred, assigned, pledged, or encumbered by the Participant and the Performance Units and dividend equivalents shall be distributed during the lifetime of the Participant only for the benefit of the Participant. Any attempt to transfer, assign, pledge, or encumber the Performance Units or dividend equivalents under this Grant by the Participant shall be null, void and without effect. The rights and protections of the Company hereunder shall extend to any successors or assigns of the Company. This Grant may be assigned by the Company without the Participant's consent.

16. Withholding. The Participant shall be required to pay to the Employer, or make other arrangements satisfactory to the Employer to provide for the payment of, any federal, state, local or other taxes that the Employer is required to withhold with respect to the grant, vesting and distribution of the Performance Units and dividend equivalents. Any tax withholding obligation of the Employer with respect to the distribution of shares of Company Stock pursuant to the Performance Units that are earned by the Participant under this Grant may, at the Committee's discretion, be satisfied by having shares of Company Stock withheld up to an amount that does not exceed the minimum applicable withholding tax rate for federal (including FICA), state, local and other tax liabilities.

17. Effect on Other Benefits. The value of shares of Company Stock and dividend equivalents distributed with respect to the Performance Units shall not be considered eligible earnings for purposes of any other plans maintained by the Company or the Employer. Neither shall such value be considered part of the Participant's compensation for purposes of determining or calculating other benefits that are based on compensation, such as life insurance.

18. Applicable Law. The validity, construction, interpretation and effect of this Grant shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to the conflict of laws provisions thereof.

19. Notice. Any notice to the Company provided for in this instrument shall be addressed to the Company in care of the General Counsel at the Company's corporate headquarters, and any notice to the Participant shall be addressed to such Participant at the current address shown on the payroll records of the Employer, or to such other address as the Participant may designate to the Employer in writing. Any notice shall be (i) delivered by hand, (ii) delivered by a national overnight courier or delivery service, (iii) enclosed in a properly sealed envelope addressed as stated above, registered and deposited, postage prepaid, in a post office regularly maintained by the United States Postal Service, or (iv) in the case of notices by the Company to the Participant, delivered by e-mail or other electronic means (with confirmation of receipt to be made by any oral, electronic or written means).

20. Taxation; Code Section 409A. As applicable, this Grant is intended to comply with the requirements of section 409A of the Code and shall be interpreted and administered in accordance with Code section 409A. Notwithstanding any provision to the contrary herein, if the Performance Units constitute "deferred compensation" under section 409A of the Code, distributions made with respect to this Grant may only be made in a manner and upon an event permitted by Code section 409A. To the extent that any provision of the Grant would cause a conflict with the requirements of Code section 409A, or would cause the administration of the Grant to fail to satisfy the requirements of Code section 409A, such provision shall, to the extent practicable if permitted by applicable law, be deemed null and void. In the event that it is determined not feasible to void a provision of this Grant, such provision shall be construed in a manner as to comply with the Code section 409A requirements. This Grant may be amended without the consent of the Participant in any respect deemed by the Committee or its delegate to be necessary in order to comply with Code section 409A. Unless a valid election is made pursuant to Paragraph 6 above, in no event may the Participant, directly or indirectly, designate the calendar year of distribution. Notwithstanding anything in the Plan or the Grant to the contrary, the Participant shall be solely responsible for the tax consequences of this Grant, and in no event shall the Company have any responsibility or liability if this Grant does not meet any applicable requirements of Code section 409A.

21. Severability. In the event one or more of the provisions of this Grant should, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provisions of this Grant, and this Grant will be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

[*SIGNATURE PAGE FOLLOWS*]

IN WITNESS WHEREOF, the Company has caused its duly authorized officer to execute this Grant, effective as of the Date of Grant.

AMERICAN WATER WORKS COMPANY, INC.

By: Susan N. Story

/s/ SUSAN N. STORY

Its: President and CEO

"PSU GRANT B – EPS"

EXHIBIT A

PERFORMANCE GOALS

The number of Performance Units that may be earned shall be determined based on the achievement of Compounded Earnings Per Share Growth (as described below) over the Performance Period.

Compounded Earnings Per Share ("EPS") Growth – will be calculated based on fully diluted EPS calculated in accordance with US GAAP as reported in the Company's audited consolidated financial statements adjusted to exclude all items of gain, loss or expense for the fiscal year determined to be extraordinary or unusual in nature or infrequent in occurrence or related to the disposal of a segment of a business or related to a change in accounting principle or, as determined by the Committee, any other change or event similar in nature. The starting point for the calculation will be adjusted EPS of $3.30 for the year ended December 31, 2018. The ending point for the calculation will be EPS for the year ended December 31, 2021, adjusted to exclude all items of gain, loss or expense for the fiscal year determined to be extraordinary or unusual in nature or infrequent in occurrence or related to the disposal of a segment of a business or related to a change in accounting principle or, as determined by the Committee, any other change or event similar in nature.

The award scale for Compounded EPS Growth is as follows:

Compounded EPS Growth

Actual Compounded EPS Growth	Target Award
11.0% or more	200%
9.8%	175%
8.5%	100%
7.3%	25%
< 6.0%	0%

If actual achievement of the Performance Goal does not meet threshold performance (i.e., less than 6.0% for Compounded EPS Growth, then that Performance Goal will be reflected in the final result for determining the number of earned Performance Units at its assigned weighting with a 0%. The maximum award that may be earned for each Performance Goal is capped at 200%, and the maximum award that may be earned by the Participant is capped at 200% of the Target Award.

Example:

The following is an example calculation for a Participant with a Target Award of 1,000 Performance Units:

Earnings Per Share

	12/31/2018 Adjusted	12/31/2021 Illustration
Adjusted diluted earnings per share from continuing operations	$ 3.30	$ 4.27
Compounded EPS growth		**8.97%**

Earned Performance Units

	Achievement	Award
Compounded EPS Growth	8.97%	127.5%

In this example, the individual who was awarded a Target Grant of 1,000 Performance Units would earn 1,275 Performance Units (1,000 x 1.275), which is convertible into an equivalent number of shares of Company Stock assuming all other terms and conditions of the Grant have been satisfied.

Exhibit 10.14.36

AMERICAN WATER WORKS COMPANY, INC.
2017 OMNIBUS EQUITY COMPENSATION PLAN
PERFORMANCE STOCK UNIT GRANT

This PERFORMANCE STOCK UNIT GRANT, dated as of June 3, 2019 (the "Date of Grant"), is delivered by American Water Works Company, Inc. (the "Company") to M. Susan Hardwick (the "Participant").

RECITALS

WHEREAS, the Committee (as defined in the American Water Works Company, Inc. 2017 Omnibus Equity Compensation Plan (the "Plan")) has adopted a 2019 Long Term Performance Plan ("2019 LTPP") pursuant to which designated employees will be granted equity awards (collectively, the "Equity Award") for shares of Common Stock of the Company, par value $0.01 per share (the "Company Stock");

WHEREAS, the Equity Award is comprised of three separate grants: a restricted stock unit and two performance stock unit grants;

WHEREAS, the Committee has determined that the Participant is eligible to participate in the 2019 LTPP and to grant the Participant an Equity Award under the 2019 LTPP; and

WHEREAS, the Committee has determined that the performance stock unit portion of the Equity Award granted to the Participant pursuant to the 2019 LTPP shall be issued under the Plan, and the terms and conditions of the performance stock unit grant that may be earned based on Performance Goals (defined below) relating to compounded earnings per share, as set forth in Exhibit A attached hereto, shall be memorialized in this grant (the "Grant").

NOW, THEREFORE, the parties to this Grant, intending to be legally bound hereby, agree as follows:

1. Grant of Performance Stock Units. Subject to the terms and conditions set forth in this Grant and the Plan, the Company hereby grants to the Participant 1470 performance stock units (the "Performance Units"). The Performance Units are contingently awarded and will be earned and distributable if and only to the extent that the Performance Goals and other conditions set forth in this Grant are met. Each Performance Unit shall be a phantom right and shall be equivalent to one share of Company Stock on the applicable payment date, as described in Paragraph 5 below. The number of Performance Units set forth above is equal to the target number of shares of Company Stock that the Participant will earn for 100% achievement of the Performance Goals described in this Grant (the "Target Award").

2. Performance Unit Account. The Company shall establish and maintain a Performance Unit account as a bookkeeping account on its records (the "Performance Unit Account") for the Participant and shall record in such Performance Unit Account the number of Performance Units granted to the Participant. The Participant shall not have any interest in any fund or specific assets

of the Company by reason of this grant or the Performance Unit Account established for the Participant.

3. Performance Goals.

(a) Unless a Change of Control (as defined below) occurs prior to the end of the Performance Period (as defined below), the distribution of the shares of Company Stock attributable to the Performance Units is contingent upon achievement of the performance goals set forth in Exhibit A attached hereto (the "Performance Goals") and the Participant satisfying the continuation of employment and service with the Employer (as defined in the Plan) requirement described in Paragraph 4 below.

(b) As soon as administratively practicable following the end of the Performance Period (as defined in Paragraph 3(d) below), the Committee will determine whether and to what extent the Performance Goals have been met and the number of Performance Units the Participant has earned, if any. Except as described in Paragraph 4 below, the Participant must be employed by, or providing service to, the Employer on the last day of the Performance Period in order to earn the Performance Units.

(c) If a Change of Control occurs prior to the end of the Performance Period, the Company is not the surviving corporation (or survives only as a subsidiary of another corporation or entity (the "surviving corporation")) and the Performance Units are not converted to similar grants of the surviving corporation (or a parent or subsidiary of the surviving corporation), then the Performance Period will end on the date of the Change of Control and the Performance Units will be deemed earned at the Target Award level as of the date of the Change of Control (the "Change of Control Date"). In the event the Participant's Performance Units are assumed by the surviving corporation but the Participant ceases to be employed by, or providing service to, the surviving corporation (or a parent or subsidiary of the surviving corporation) within twelve (12) months after the date of the Change of Control on account of (i) a termination of such Participant's employment by the surviving corporation (or a parent of subsidiary of the surviving corporation) for any reason other than on account of Cause (as defined in Paragraph 4(e) hereof), or on account of death or Disability (each as defined in the Plan), or (ii) a termination of employment or service by the Participant for Good Reason (as defined in the Plan), then the Performance Period will end on the date of such termination of employment or service (the "Termination Date") and the Performance Units will be deemed earned at the Target Award level as of the Termination Date. For purposes of this Grant, "Change of Control" shall mean as such term is defined in the Plan, except that a Change of Control shall not be deemed to have occurred for purposes of this Grant unless the event constituting the Change of Control constitutes a change in ownership or effective control of the Company, or in the ownership of a substantial portion of the assets of the Company, within the meaning of section 409A of the Internal Revenue Code of 1986, as amended (the "Code") and its corresponding regulations.

(d) For purposes of this Grant, the term "Performance Period" shall mean the three (3)-year period beginning on January 1, 2019 and ending December 31, 2021.

4. Termination of Employment or Service.

(a) Except as set forth in Paragraphs 3(c) 4(b), 4(c) or 4(d), if, at least one year after the beginning of the Performance Period, but prior to the end of the Performance Period, the Participant ceases to be employed by, or provide service to, the Employer on account of any reason other than a termination for Cause (as defined below), the Participant will earn a pro-rata portion of the Performance Units, if the Performance Goals and the requirements of this Grant are met as of the last day of the Performance Period. The pro-rata portion earned will be equal to the number of Performance Units that would have been earned if the Participant had remained employed through the last day of the Performance Period, multiplied by a fraction, which fraction shall be equal to (i) 1/3, if the Participant's employment or service with the Employer terminates on or after January 31, 2020, but prior to January 31, 2021; (ii) 2/3, if the Participant's employment or service with the Employer terminates on or after January 31, 2021, but prior to January 31, 2022; and (iii) 3/3, if the Participant's employment or service terminates with the Employer on or after January 31, 2022. If the Participant ceases to be employed by, or provide service to, the Employer for any reason other than on account of Cause, the prorated number of Performance Units earned by the Participant pursuant to this Paragraph 4(a) will be distributed in accordance with Paragraph 5.

(b) Notwithstanding any provision of this Agreement to the contrary, if prior to the end of the Performance Period, the Participant ceases to be employed by, or provide service to, the Employer on account of Normal Retirement, then the Participant will earn the number of Performance Units that would have been earned if the Participant has remained employed through the last day of the Performance Period, if the Performance Goals and the requirements of this Grant are met as of the last day of the Performance Period. If the Participant ceases to be employed by, or provide service to, the Employer on account of Normal Retirement pursuant to this subparagraph (b), the number of Performance Units that are earned based on the Performance Goals and other requirements of this Grant will be distributed in accordance with Paragraph 5. For purposes of this Grant, "Normal Retirement" shall mean termination of employment or service with the Employer (other than for Cause) after the Participant has attained age sixty (60) and has five (5) total years of employment or service with the Employer which includes at least three (3) consecutive full calendar years of service in the position of Chief Executive Officer, Chief Operating Officer or Chief Financial Officer, or any combination thereof.

(c) Notwithstanding any provision of this Agreement to the contrary, if prior to the end of the Performance Period, the Participant ceases to be employed by, or provide service to, the Employer on account of Early Retirement, then the Participant will earn 75% of the number of Performance Units that would have been earned if the Participant had remained employed through the last day of the Performance Period, if the Performance Goals and the requirements of this Grant are met as of the last day of the Performance Period, and unearned Performance Units shall be immediately forfeited. If the Participant ceases to be employed by, or provide service to, the Employer on account of Early Retirement pursuant to this subparagraph (c), then the number of Performance Units that are earned based on the Performance Goals and other requirements of this Grant will be distributed in accordance with Paragraph 5. For purposes of this Grant, "Early Retirement" shall mean termination of employment or service with the Employer (other than for Cause) after the Participant has attained age fifty-five (55) and has five (5) total years of employment or service with the Employer which includes at least three (3) consecutive full calendar years of service in the position of Chief Executive Officer, Chief Operating Officer or Chief Financial Officer, or any combination thereof.

(d) If at any time prior to January 31, 2022, the Participant's employment or service with the Employer terminates on account of Normal Retirement or Early Retirement before achieving five (5) total years of employment or service with the Employer, but the Participant has completed a minimum of three (3) years of service in the position of Chief Financial Officer and has achieved the required Normal Retirement or Early Retirement age, then the Participant will earn the number of Performance Units that would have been earned if the Participant had remained employed through the last day of the Performance Period, if the Performance Goal and the requirements of this Grant are met as of the last day of the Performance Period following the Participant's termination of employment or service on account of Normal Retirement or Early Retirement, so long as the Participant has used good faith efforts (as determined by the Chief Executive Officer) to identify and develop a Chief Financial Officer successor who is approved by the Chief Executive Officer and the Board of Directors.

(e) Except as set forth in Paragraphs 4(b), 4(c) or 4(d), if at any time prior to the earlier of January 31, 2020 or a Change of Control, the Participant's employment or service with the Employer is terminated by the Employer on account of any reason or no reason or by the Participant for any reason or no reason, all of the Performance Units subject to this Grant shall be immediately forfeited as of the date of the Participant's termination of employment or service with the Employer and the Participant shall not have any rights with respect to the distribution of any portion of the Performance Units.

(f) If at any time prior to the date the Performance Units are distributed in accordance with Paragraph 5 the Participant's employment or service with the Employer is terminated on account of Cause, all of the Performance Units subject to this Grant shall be immediately forfeited and the Participant will not have any rights with respect to the distribution of any portion of the Performance Units, irrespective of the level of achievement of the Performance Goals. For purposes of this Grant, "Cause" shall mean a finding by the Committee that the Participant (i) has breached his or her employment or service contract with the Employer, if any; (ii) has engaged in disloyalty to the Employer, including, without limitation, fraud, embezzlement, theft, commission of a felony or proven dishonesty; (iii) has disclosed trade secrets or confidential information of the Employer to persons not entitled to receive such information; (iv) has breached any written noncompetition or non-solicitation agreement between the Participant and the Employer; or (v) has engaged in such other behavior detrimental to the interests of the Employer as the Committee determines.

5. Time and Form of Payment with Respect to Performance Units. Unless an election is made pursuant to Paragraph 6 below, the Participant will receive a distribution with respect to the Performance Units earned as described in Paragraphs 3 and 4 above within seventy (70) days following the earliest of (a) January 31, 2022 (the "Distribution Date"), (b) the Change of Control Date, or (c) the Termination Date. The Performance Units will be distributed in shares of Company Stock, with each Performance Unit earned equivalent to one share of Company Stock. Any

Performance Units not earned because of the failure to attain the Performance Goals and service condition will be immediately forfeited.

6. Deferrals. The Participant may make an irrevocable election to defer the Distribution Date (or further defer the Deferred Date (as defined below), if applicable) of all of the Performance Units that are earned, plus dividend equivalents earned on such Performance Units as described in Paragraph 7 below, to a later date, provided that (a) the election shall not take effect until at least twelve (12) months after the date on which the election is made, (b) the deferred Distribution Date cannot be earlier than five (5) years from the original Distribution Date under Paragraph 5 above (or five (5) years from the applicable Deferred Date, if a subsequent deferral of a Deferred Date is being made), and (c) the election must be made no less than twelve (12) months prior to the date of the Distribution Date (twelve (12) months prior to the previously applicable Deferred Date, if a subsequent deferral of a Deferred Date is being made). To defer the Distribution Date, the Participant must elect to defer 100% of the Performance Units, including corresponding dividend equivalents, earned by the Participant under this Grant, as well as 100% of the other performance stock units, including corresponding dividend equivalents, earned by the Participant under the 2019 LTPP, complete the deferral election form provided to the Participant by the Committee, and return such form to the Company in the manner and by the deadline provided therein. If the Participant desires to make a further deferral, the Participant must make such election on a separate form provided by the Committee for such purpose. Any such election shall be made in accordance with section 409A of the Code and any corresponding guidance and regulations issued under section 409A of the Code. Notwithstanding a Participant's election pursuant to this Paragraph, if the Change of Control Date or the Termination Date occurs prior to the Deferred Date, the distribution of the Participant's earned Performance Units, plus corresponding dividend equivalents, will be the Change of Control Date or the Termination Date, as applicable. If a Distribution Date is delayed one or more times pursuant to this Paragraph 6, the new Distribution Date shall be referred to as the "Deferred Date."

7. Dividend Equivalents. Until the earlier of the Distribution Date (or the Deferred Date, if elected), the Change of Control Date or the Termination Date, if any dividends are paid with respect to the shares of Company Stock, the Company shall credit to a dividend equivalent account (the "Dividend Equivalent Account") the value of the dividends that would have been distributed if the Performance Units credited to the Participant's Performance Unit Account as of the date of payment of any such dividend were shares of Company Stock. At the same time that the Performance Units are converted to shares of Company Stock and distributed to the Participant, the Company shall pay to the Participant in a lump sum cash equal to the value of the dividends credited to the Participant's Dividend Equivalent Account; provided, however, that any dividends that were credited to the Participant's Dividend Equivalent Account that are attributable to Performance Units that have been forfeited as provided in Paragraph 3 and 4 above shall be forfeited and not payable to the Participant. No interest shall accrue on any dividend equivalents credited to the Participant's Dividend Equivalent Account.

8. Change of Control. Except as set forth above, the provisions set forth in the Plan applicable to a Change of Control (as defined in the Plan) shall apply to the Performance Units, and, in the event of a Change of Control, the Committee may take such actions as it deems appropriate pursuant to the Plan and is consistent with the requirements of section 409A of the Code.

9. <u>Acknowledgment by Participant</u>. By accepting this Grant, the Participant acknowledges that, with respect to any right to distribution pursuant to the Plan or this Grant, the Participant is and shall be an unsecured general creditor of the Company without any preference as against other unsecured general creditors of the Company, and the Participant hereby covenants for himself or herself, and anyone at any time claiming through or under the Participant, not to claim any such preference, and hereby disclaims and waives any such preference which may at any time be at issue, to the fullest extent permitted by applicable law.

10. <u>Restrictions on Issuance or Transfer of Shares of Company Stock</u>.

(a) To the extent permitted by Code section 409A, the obligation of the Company to deliver shares of Company Stock upon the Participant earning the Performance Units shall be subject to the condition that shares of Company Stock be qualified for listing on the New York Stock Exchange or another securities exchange and be registered under the Securities Act of 1933, as amended, and that any consent or approval of any governmental regulatory body that is necessary to issue shares of Company Stock has been so obtained, and that shares of Company Stock may not be issued in whole or in part unless such listing, registration, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the Committee.

(b) The issuance of shares of Company Stock and the payment of cash to the Participant pursuant to this Grant is subject to any applicable taxes and other laws or regulations of the United States or of any state having jurisdiction thereof.

(c) As a condition to receive any shares of Company Stock upon conversion of the earned Performance Units, the Participant agrees:

(i) to be bound by, and to comply with, the Company's policies and practices (as they may be in effect from time to time) regarding the restrictions or limitations on the transfer of such shares, and understands that the Participant may be restricted or prohibited at any time and/or from time to time from selling, transferring, pledging, donating, assigning, margining, mortgaging, hypothecating or otherwise encumbering the shares in accordance with such policies and practices, including without limitation the Company's Insider Trading and Prohibited Transactions Policy and the Personal Securities Trading and Preclearance Practice; and

(ii) that any shares of Company Stock received by the Participant upon the distribution of the earned Performance Units pursuant to this Grant shall be subject to the guidelines and restrictions set forth in the Company's Executive Stock Ownership Guidelines and Executive Stock Retention Requirements, effective as of March 4, 2015 (and as they may be amended, restated, supplemented and interpreted), and any applicable clawback or recoupment policies and other policies that may be implemented by the Company's Board of Directors or a duly authorized committee thereof, from time to time.

11. Participant Undertaking. The Participant agrees to take whatever additional actions and execute whatever additional documents the Company may deem necessary or advisable in order to carry out or effect one or more of the obligations or restrictions imposed on the Participant pursuant to the provisions of this Grant.

12. Grant Subject to Plan Provisions. This Grant is made pursuant to the Plan, the terms of which are incorporated herein by reference, and in all respects shall be interpreted in accordance with the Plan. In the event of any contradiction, distinction or difference between this Grant and the terms of the Plan, the terms of the Plan will control. Except as otherwise defined in this Grant, capitalized terms used in this Grant shall have the meanings set forth in the Plan. This Grant is subject to the interpretations, regulations and determinations concerning the Plan established from time to time by the Committee in accordance with the provisions of the Plan, including, but not limited to, provisions pertaining to (a) rights and obligations with respect to withholding taxes, (b) the registration, qualification or listing of the shares of Company Stock, (c) changes in capitalization of the Company, and (d) other requirements of applicable law. The Committee shall have the authority to interpret and construe this Grant pursuant to the terms of the Plan, its decisions shall be conclusive as to any questions arising hereunder. By accepting this Grant, the Participant agrees (i) to be bound by the terms of the Plan and this Grant, (ii) to be bound by the determinations and decisions of the Committee with respect to this Grant, the Plan and the Participant's rights to benefits under this Grant and the Plan, and (iii) that all such determinations and decisions of the Committee shall be binding on the Participant, his or her beneficiaries and any other person having or claiming an interest under this Grant and the Plan on behalf of the Participant.

13. No Rights as Stockholder. The Participant shall not have any rights as a stockholder of the Company, including the right to any cash dividends (except with respect to the dividend equivalent rights provided in Paragraph 7), or the right to vote, with respect to any Performance Units.

14. No Rights to Continued Employment or Service. This Grant shall not confer upon the Participant any right to be retained in the employment or service of the Employer and shall not interfere in any way with the right of the Employer to terminate the Participant's employment or service at any time. The right of the Employer to terminate at will the Participant's employment or service at any time for any reason is specifically reserved.

15. Assignment and Transfers. No Performance Units or dividend equivalents awarded to the Participant under this Grant may be transferred, assigned, pledged, or encumbered by the Participant and the Performance Units and dividend equivalents shall be distributed during the lifetime of the Participant only for the benefit of the Participant. Any attempt to transfer, assign, pledge, or encumber the Performance Units or dividend equivalents under this Grant by the Participant shall be null, void and without effect. The rights and protections of the Company hereunder shall extend to any successors or assigns of the Company. This Grant may be assigned by the Company without the Participant's consent.

16. Withholding. The Participant shall be required to pay to the Employer, or make other arrangements satisfactory to the Employer to provide for the payment of, any federal, state, local or other taxes that the Employer is required to withhold with respect to the grant, vesting and distribution of the Performance Units and dividend equivalents. Any tax withholding obligation of

the Employer with respect to the distribution of shares of Company Stock pursuant to the Performance Units that are earned by the Participant under this Grant may, at the Committee's discretion, be satisfied by having shares of Company Stock withheld up to an amount that does not exceed the minimum applicable withholding tax rate for federal (including FICA), state, local and other tax liabilities.

17. Effect on Other Benefits. The value of shares of Company Stock and dividend equivalents distributed with respect to the Performance Units shall not be considered eligible earnings for purposes of any other plans maintained by the Company or the Employer. Neither shall such value be considered part of the Participant's compensation for purposes of determining or calculating other benefits that are based on compensation, such as life insurance.

18. Applicable Law. The validity, construction, interpretation and effect of this Grant shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to the conflict of laws provisions thereof.

19. Notice. Any notice to the Company provided for in this instrument shall be addressed to the Company in care of the General Counsel at the Company's corporate headquarters, and any notice to the Participant shall be addressed to such Participant at the current address shown on the payroll records of the Employer, or to such other address as the Participant may designate to the Employer in writing. Any notice shall be (i) delivered by hand, (ii) delivered by a national overnight courier or delivery service, (iii) enclosed in a properly sealed envelope addressed as stated above, registered and deposited, postage prepaid, in a post office regularly maintained by the United States Postal Service, or (iv) in the case of notices by the Company to the Participant, delivered by e-mail or other electronic means (with confirmation of receipt to be made by any oral, electronic or written means).

20. Taxation; Code Section 409A. As applicable, this Grant is intended to comply with the requirements of section 409A of the Code and shall be interpreted and administered in accordance with Code section 409A. Notwithstanding any provision to the contrary herein, if the Performance Units constitute "deferred compensation" under section 409A of the Code, distributions made with respect to this Grant may only be made in a manner and upon an event permitted by Code section 409A. To the extent that any provision of the Grant would cause a conflict with the requirements of Code section 409A, or would cause the administration of the Grant to fail to satisfy the requirements of Code section 409A, such provision shall, to the extent practicable if permitted by applicable law, be deemed null and void. In the event that it is determined not feasible to void a provision of this Grant, such provision shall be construed in a manner as to comply with the Code section 409A requirements. This Grant may be amended without the consent of the Participant in any respect deemed by the Committee or its delegate to be necessary in order to comply with Code section 409A. Unless a valid election is made pursuant to Paragraph 6 above, in no event may the Participant, directly or indirectly, designate the calendar year of distribution. Notwithstanding anything in the Plan or the Grant to the contrary, the Participant shall be solely responsible for the tax consequences of this Grant, and in no event shall the Company have any responsibility or liability if this Grant does not meet any applicable requirements of Code section 409A.

21. Severability. In the event one or more of the provisions of this Grant should, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provisions of this Grant, and this Grant will be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

[*SIGNATURE PAGE FOLLOWS*]

IN WITNESS WHEREOF, the Company has caused its duly authorized officer to execute this Grant, effective as of the Date of Grant.

AMERICAN WATER WORKS COMPANY, INC.

By: Susan N. Story

/s/ SUSAN N. STORY

Its: President and CEO

"PSU GRANT B – EPS"

EXHIBIT A

PERFORMANCE GOALS

The number of Performance Units that may be earned shall be determined based on the achievement of Compounded Earnings Per Share Growth (as described below) over the Performance Period.

Compounded Earnings Per Share ("EPS") Growth – will be calculated based on fully diluted EPS calculated in accordance with US GAAP as reported in the Company's audited consolidated financial statements adjusted to exclude all items of gain, loss or expense for the fiscal year determined to be extraordinary or unusual in nature or infrequent in occurrence or related to the disposal of a segment of a business or related to a change in accounting principle or, as determined by the Committee, any other change or event similar in nature. The starting point for the calculation will be adjusted EPS of $3.30 for the year ended December 31, 2018. The ending point for the calculation will be EPS for the year ended December 31, 2021, adjusted to exclude all items of gain, loss or expense for the fiscal year determined to be extraordinary or unusual in nature or infrequent in occurrence or related to the disposal of a segment of a business or related to a change in accounting principle or, as determined by the Committee, any other change or event similar in nature.

The award scale for Compounded EPS Growth is as follows:

Compounded EPS Growth

Actual Compounded EPS Growth	Target Award
11.0% or more	200%
9.8%	175%
8.5%	100%
7.3%	25%
< 6.0%	0%

If actual achievement of the Performance Goal does not meet threshold performance (i.e., less than 6.0% for Compounded EPS Growth, then that Performance Goal will be reflected in the final result for determining the number of earned Performance Units at its assigned weighting with a 0%. The maximum award that may be earned for each Performance Goal is capped at 200%, and the maximum award that may be earned by the Participant is capped at 200% of the Target Award.

Example:

The following is an example calculation for a Participant with a Target Award of 1,000 Performance Units:

Earnings Per Share

	12/31/2018 Adjusted	12/31/2021 Illustration
Adjusted diluted earnings per share from continuing operations	$ 3.30	$ 4.27
Compounded EPS growth		**8.97%**

Earned Performance Units

	Achievement	Award
Compounded EPS Growth	8.97%	127.5%

In this example, the individual who was awarded a Target Grant of 1,000 Performance Units would earn 1,275 Performance Units (1,000 x 1.275), which is convertible into an equivalent number of shares of Company Stock assuming all other terms and conditions of the Grant have been satisfied.

Exhibit 10.16.1

PENSION PLAN
FOR EMPLOYEES OF
AMERICAN WATER WORKS COMPANY, INC.
AND
ITS DESIGNATED SUBSIDIARIES

(As Amended and Restated Effective January 1, 2016)

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Certain appendices to this agreement have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Company will furnish the omitted appendices to the SEC upon request.

PENSION PLAN FOR EMPLOYEES OF
AMERICAN WATER WORKS COMPANY, INC.
AND ITS DESIGNATED SUBSIDIARIES

(As Amended And Restated Effective January 1, 2016)

ARTICLE I.
PURPOSE

The purpose of this Plan is to provide retirement income for participating Employees. The pensions provided by the Plan will be in addition to any Social Security benefits payable under Federal or State law. The provisions of this Plan shall govern with respect to retirement income over any bargaining unit agreement, but shall not supersede, modify, change or substitute any terms and provisions not relating to retirement income of participating Employees that appear in such agreements. The rules set out in Appendix 2 shall apply should the Plan become a Top-Heavy Plan, as defined therein.

Effective as of July 1, 2011, in connection with that certain Stock Purchase Agreement, dated as of January 23, 2011, by and among the Company, Arizona-American Water Company, New Mexico-American Water Company, Inc. and EPCOR Water (USA), Inc., pursuant to which the Company agreed to sell all of the issued and outstanding stock of Arizona-American Water Company and New Mexico-American Water Company, Inc. to EPCOR Water (USA), Inc., (the “Sale”) the Company is transferring the assets and liabilities attributable to those Participants who are, or were previously, employed by Arizona-American Water Company and New Mexico-American Water Company, Inc. to the Pension Plan for Employees of Arizona-American Water Company and New Mexico-American Water Company, Inc. (the “Arizona-New Mexico Pension Plan”), a new pension plan established for such Participants. Such assets and liabilities include those attributable to active Participants as of June 30, 2011, terminated vested Participants, and retired Participants (or their Beneficiaries) who are receiving benefit payments from the Plan, all of whom are, or were previously, employed by Arizona-American Water Company or New Mexico-American Water Company, Inc. (collectively, the “Arizona-New Mexico Employees”). Any benefit to which an Arizona-New Mexico Employee may have been entitled under the Plan immediately prior to July 1, 2011 shall not be provided under the Plan, but instead shall be provided under the Arizona-New Mexico Pension Plan. In addition, with respect to any Participant who is transferred to the employment of Arizona-American Water Company and New Mexico-American Water Company, Inc. from the Employer on or after July 1, 2011 and prior to the consummation date of the Sale, assets and liabilities with respect to such Participant’s Accrued Benefit under the Plan, if any, shall be transferred to the Arizona-New Mexico Pension Plan. Furthermore, with respect to any participant under the Arizona-New Mexico Pension Plan who transfers employment from Arizona-American

Water Company and New Mexico-American Water Company, Inc. to the Employer prior to the consummation date of the Sale, assets and liabilities with respect to such participant's Accrued Benefit under the Arizona-New Mexico Pension Plan shall be transferred back to this Plan and be payable from this Plan to such transferred participant. The Arizona-New Mexico Employees described in this paragraph are identified in Appendix 6 attached hereto.

Effective as of May 1, 2012, in connection with that certain Stock Purchase Agreement, dated as of July 8, 2011, by and among the Company, Ohio-American Water Company, and Aqua Ohio, Inc. ("Aqua Ohio"), pursuant to which the Company agreed to sell all of the issued and outstanding stock of Ohio-American Water Company to Aqua Ohio (the "Sale"), the Company is transferring the assets and liabilities attributable to those Participants who are, or were previously, employed by Ohio-American Water Company to the Retirement Income Plan for Aqua America, Inc. and Subsidiaries ("Aqua Plan"). Such assets and liabilities include those attributable to active Participants as of April 30, 2012, terminated vested Participants, and retired Participants (or their Beneficiaries) who are receiving benefit payments from the Plan, all of whom are, or were previously, employed by Ohio-American Water Company ("Ohio Employees"). Any benefit to which an Ohio Employee may have been entitled under the Plan immediately prior to May 1, 2012 shall not be provided under the Plan, but instead shall be provided under the Aqua Plan.

The amendment and restatement of the Plan is effective January 1, 2016, except as otherwise specifically provided herein.

The benefits payable under this Plan with respect to any Participant whose service terminated before January 1, 2016 shall be determined under the provisions of the Plan as in effect when such Participant's service with the Employer terminated, except that the factors under Tables 2 through 4(a) shall be derived from the Tables in effect when the benefit in question is to begin. Notwithstanding the foregoing, the benefits payable under this Plan with respect to any individual who participated in a merged plan but terminated employment before the date that plan was merged into this Plan shall be determined under the provisions of the merged plan as in effect at the time the individual terminated employment.

Except as otherwise provided in an applicable Appendix, the terms of the Plan are as follows:

ARTICLE II.
DEFINITIONS

Section 2.1 Definitions. Unless the context clearly indicates otherwise, the following terms shall have the following meanings:

(a) “Accrued Benefit” means the accrued benefit of a Participant expressed in terms of a monthly single life annuity beginning at or after his Normal Retirement Date determined under Sections 5.1 and 5.2, as applicable, on the basis of the Participant’s Years of Service for benefit accrual to the date as of which the computation is made.

(b) “Actuarial Equivalent” means a benefit of equivalent value (A) computed on the basis set out in Tables 2 through 4(a), appended hereto, (B) derived based on interest rates and mortality tables set forth in Table 5 or (C) in any instance in which neither (A) nor (B) applies, based on an assumed interest rate of 8% and using the 1983 Group Annuity Mortality Table (set back 1 year for Participants and set back 5 years for Contingent Annuitants). For the purpose of determining lump sum present values pursuant to Sections 6.6 and 6.7, the calculation shall be made using the “applicable mortality table” under section 417(e)(3)(B) of the Code and shall be based on the “applicable interest rate” under section 417(e)(3)(C) of the Code for the third calendar month preceding the calendar month during which the Annuity Starting Date occurs.

(c) “Annuity Starting Date” means the first day of the first month for which an amount is payable as an annuity or in any other form.

(d) “Board of Directors” means the Board of Directors of American Water Works Company, Inc.

(e) “Break-in-Service” means a 12 consecutive month period, measured from the date an Employee is first credited with an Hour of Service or any anniversary thereof (or his re-employment commencement date or any anniversary thereof), within which he is not credited with more than 500 Hours of Service.

(f) “Code” means the Internal Revenue Code of 1986, as amended, and, unless otherwise provided, applicable provisions of successor laws.

(g) “Committee” means the Retirement/Benefits Committee charged with the administration of the Plan as provided in Section 2.2. The Committee shall be deemed to be the Plan’s “administrator” and “named fiduciary” as defined in sections 3(16)(A) and 402(a)(2), respectively, of ERISA, or any corresponding provisions of successor laws. In addition, any reference to the Committee herein shall be construed to mean the Committee or its designee.

(h) “Company” means American Water Works Company, Inc., a Delaware corporation.

(i) “Contingent Annuitant” means:

(i) the Participant’s spouse; or

(ii) the person designated by the Participant, with the consent of the Participant's spouse if the Participant is married, as Contingent Annuitant in a manner prescribed by the Committee, or,

(iii) if the Participant has no spouse and benefits are payable in the form of a life and certain annuity under Section 6.4(b)(ii), the Participant's estate.

A married Participant may designate a person or persons other than his spouse as Contingent Annuitant, provided that such spouse consents in writing in a manner prescribed by the Committee which satisfies the requirements of Section 6.2. Such consent shall not be required if it is established to the satisfaction of the Committee that the consent cannot be obtained because there is no spouse, because the spouse cannot be located or because of such other circumstances as the Secretary of the Treasury may prescribe by regulations. A subsequent spouse of the Participant shall not be bound by any such consent.

(j) "Continuous Service" means that uninterrupted period of employment, prior to the Normal, Early or Disability Retirement Date of an Employee with the Company, a Designated Subsidiary or former Designated Subsidiary, or Predecessor thereof. Transfers of employment between any corporations which are or were the Company, a Designated Subsidiary, a former Designated Subsidiary, or any Predecessor thereof, any absence due to temporary layoff not exceeding 12 months, Qualified Military Service or approved leave of absence for sickness, accident or other cause shall not be considered an interruption or termination of employment. Employees similarly situated shall be accorded uniform and nondiscriminatory treatment by the Committee in approving leaves of absence. A completed year of Continuous Service means a 12 month period ending on the day prior to the anniversary date of employment during which the Employee's customary employment was for more than 1,100 hours. Notwithstanding the foregoing, each Employee who became a Participant on July 1, 1952 shall, if his Service has been Continuous since July 1, 1952, receive Continuous Service credit for all periods of employment prior to July 1, 1952 with the Company, any Predecessor thereof, or any Subsidiary or former Subsidiary from the date when he was first employed by such Company, Predecessor or Subsidiary, including any period of Qualified Military Service, but excluding any other period when not actively employed.

(k) "Designated Subsidiary" means any Subsidiary named by the Board of Directors as such under this Plan, or any Subsidiary to which, prior to July 1, 1975, the board of directors of its immediate parent company designated this Plan to be applicable, which naming may be changed by the Board of Directors from time to time.

(l) "Disability Retirement Date" means the date a Participant retires before his Normal Retirement Date in accordance with the provisions of Section 4.3.

(m) "Early Retirement Date" means the first day of the calendar month coinciding with or immediately following the date a Participant reaches age 55, provided that the sum of his age and Years of Service is at least 70.

(n) "Earnings:"

(i) General Rule. Earnings shall mean, for any Participant, his total compensation for services as an Employee paid as an annual or other periodic salary or as an hourly wage (including overtime pay and shift differentials), by the Company, by any Designated Subsidiary, any former Designated Subsidiary or any Predecessor thereof, plus (a) amounts paid under the Company's Annual Incentive Plan that have not been deferred by the Employee, (b) amounts that would be paid to the Employee during the year but for the Employee's election under a cash or deferred arrangement described in section 401(k) of the Code or a cafeteria plan described in section 125 of the Code or a qualified transportation fringe benefit program described in section 132(0(4) of the Code, and (c) amounts paid under the Company's Business Development Incentive Plan.

(ii) Maximum Annual Dollar Limit. The annual Earnings of each Participant (who performs at least one Hour of Service on or after July 1, 2002) taken into account in determining benefit accruals in any Plan Year beginning after December 31, 2001, shall not exceed the dollar limitation specified in section 401(a)(17) of the Code as in effect for the Plan Year ($270,000 for 2017), adjusted for cost-of-living increases in accordance with section 401(a)(17)(B) of the Code. The cost-of-living adjustment in effect for a calendar year applies to annual compensation for the determination period that begins with or within such calendar year. In determining benefit accruals in Plan Years beginning after December 31, 2001, the annual Earnings limit for any prior determination period shall be limited to $200,000. Effective for Limitation Years beginning after July 1, 2007, this Section 2.1(n)(ii) shall also apply to Article C.3 of Appendix 2.

(o) "Effective Date" of the Plan means July 1, 1952. The effective date of this amendment and restatement of the Plan is January 1, 2016, except as otherwise specifically stated herein.

(p) "Employee" means:

(i) an individual who is employed by the Employer;

(ii) an individual who is not employed by the Employer but is a Leased Employee within the meaning of section 414(n)(2) of the Code, provided that if the total number of Leased Employees constitutes 20% or less of the Employer's nonhighly compensated work force, within the meaning of section 414(n)(5)(C)(ii) of the Code. The term "Employee" shall not include those Leased Employees covered by a "safe harbor" plan described in section 414(n)(5)(B) of the Code; and

(iii) when required under Section 2.1(u), for purposes of crediting Hours of Service, a former Employee.

(q) "Employer" means the Company, its Designated Subsidiaries, and for purposes of computing an Employee's Years of Service for purposes of vesting and eligibility, but not benefit accrual:

(i) any other employer included with the Company in a controlled group of corporations or trades or businesses within the meaning of section 414(b) or (c) of the Code, or an affiliated service group within the meaning of section 414(m) of the Code; and

(ii) any other entity required to be aggregated with the Company pursuant to regulations under section 414(o) of the Code;

provided, that any such employer shall be included with the term "Employer" only while member of such a group including the Company.

(r) "ERISA" means the Employee Retirement Income Security Act of 1974, as amended.

(s) "Final Average Earnings" means, for any Employee, the average of the Employee's Earnings for those 60 consecutive full months of the final 120 months of employment as an eligible Employee which yield the highest average. If within the 60 month period (or lesser period of employment) applicable in the determination of Final Average Earnings a Participant is absent due to layoff, sickness or accident, Qualified Military Service, leave of absence or other cause to the extent specified in Section 2.1(nn)(ii), his Earnings during such period of absence shall be considered to be his Scheduled Monthly Earnings. If within such 60 month period the Participant is absent due to a cause not specified in Section 2.1(nn)(ii), including but not limited to a strike or other work stoppage, his Final Average Earnings shall be computed on the basis of the last 60 months (or lesser period of employment) during which he actually received Earnings, or is absent under such circumstances that he is credited with Hours of Service under Section 2.1(nn)(ii). If a Participant does not have Earnings for 60 consecutive months, that Participant's Final Average Earnings shall be the amount determined by dividing that Participant's Earnings as an eligible Employee by the number of months in which Earnings were actually received. Notwithstanding the foregoing, in determining Final Average Earnings, overtime in the last month worked prior to the pension effective date will be the average monthly overtime earned during the twelve months prior to the month in which the Employee submits his application for retirement.

(t) "Fund" means the aggregate of the funds held by any Insurance Company under an Insurance Contract, other than those irrevocably committed to the purchase of annuity contracts, or by the Trustee or any other Investment Manager, for the purpose of providing retirement income benefits under the Plan for Participants, surviving spouses and Contingent Annuitants.

(u) "Hour of Service" means:

(i) each hour for which an Employee is paid, or entitled to payment, for the performance of duties for the Employer;

(ii) each hour for which an Employee is paid, or entitled to payment, by the Employer with respect to a period of time during which no duties are performed (irrespective of whether the employment relationship has terminated) due to vacation, holiday, illness, incapacity (including disability), layoff or jury duty; provided that, subject to Section 2.1(nn)(ii), an Employee shall be credited with no more than 501 Hours of Service on account of any single continuous period during which he performs no duties;

(iii) each hour for which back pay, irrespective of mitigation of damages, is either awarded or agreed to by the Employer employing an Employee;

(iv) solely for purposes of determining whether a Break-in-Service has occurred, each hour which would normally have been credited to the individual, or if that number of hours cannot be determined, 8 hours per working day, to a maximum of 501 hours, during any period throughout which the individual is absent from employment because of the individual's pregnancy, the birth of the individual's child, placement of a child with the individual in connection with the adoption of that child by the individual, or the individual's need to provide care for such a child for the period immediately following that child's birth or adoption; and,

(v) each other hour credited under Section 2.1(nn)(ii).

Hours of service shall be credited to the Employee for the applicable 12 month period or periods in which the duties are performed, for which the payment is made, or to which the award, agreement or leave pertains, except that in the case of hours credited under Section 2.1(u)(iv), relating to maternity and paternity leave, such hours shall be credited in the year in which the absence from work begins if necessary to avoid a Break-in-Service in that year, or in any other case, in the following year. Hours of Service under this Section 2.1(u) shall be credited consistent with the provisions of 29 CFR 2530.200b-2, issued by the United States Department of Labor, which provisions are incorporated herein by reference.

(v) "Insurance Company" means any insurance company or companies, from which retirement income benefits payable under the Plan may be purchased for Participants, their surviving spouses and Contingent Annuitants.

(w) "Insurance Contract" means any group deposit administration contract, immediate participation guaranteed contract or other policy of similar type or purpose entered into by the

Company, under which retirement income benefits payable under the Plan may be paid to Participants, their surviving spouses and Contingent Annuitants.

(x) "Investment Manager" means any "investment manager," as that term is defined by section 3(38) of ERISA or any applicable provision of any successor law, which has investment control of any Plan assets pursuant to an agreement with the Company or the Trustee.

(y) "Late Retirement Date" means the actual date of retirement of a Participant who remains employed by the Employer after his Normal Retirement Date.

(z) "Leased Employee" means any person who is not an Employee and who provides services to the Employer if:

(i) such services are provided pursuant to an agreement between the Employer and any other person;

(ii) such Person has performed services for the Employer or for the Employer and related employees on a substantially full-time basis for a period of at least one year; and

(iii) such services are performed under the primary direction or control of the Employer.

(aa) "Limitation Year" means the calendar year.

(bb) "Qualified Military Service" means any service in the "uniformed services" (as defined in Chapter 43 of Title 38 of the United States Code) by any Employee if such Employee is entitled to re-employment rights under such Chapter with respect to such service.

(cc) "Normal Retirement Date" means the first day of the calendar month coinciding with or immediately following the date a Participant reaches age 65.

(dd) "Participant" means an Employee who has met the eligibility requirements of Sections 3.1, 3.2, and 3.3, as applicable. An individual who qualifies as a Participant shall continue to be a Participant until all benefits due him under the Plan have been paid. An individual who is not a U.S. citizen but who is seconded to employment with any U.S. Employer shall not be eligible to participate during any period while such individual is also covered by a pension plan maintained or contributed to by his non-U.S. Employer.

(ee) "Plan" means the Pension Plan for Employees of American Water Works Company, Inc. and its Designated Subsidiaries, as set forth in this document and the related Trust Agreement pursuant to which the Trust is maintained.

(ff) "Plan Year" means the 12 month period ending June 30.

(gg) "Predecessor" means any corporation which was a constituent in a merger, consolidation, liquidation or similar combination of corporations.

(hh) "Scheduled Monthly Earnings" on any date means, in the case of any salaried Employee, his basic rate of monthly earnings at such date (exclusive of overtime payments and bonuses), and, in the case of any hourly-paid Employee, the amount determined by multiplying his average weekly earnings (exclusive of overtime payments and bonuses) at said date by 4 & 1/3. As used in the preceding sentence, "average weekly earnings" on any date means the amount determined by multiplying the hourly-paid Employee's basic straight time hourly rate at said date by the number of hours in his normal work week; provided, however, that the basic straight time hourly rate and the number of hours in a normal work week of any such Employee on a shift schedule shall be averaged over the period covered by the shift cycle.

(ii) "Social Security Average Wage Base" means the average of the amounts considered "wages" under section 3121(a)(1) of the Code, or any applicable provision of any successor laws, for the calendar year including the date as of which a benefit is to be calculated under Section 4.3(c) and the preceding nine calendar years.

(jj) "Social Security Retirement Age" means the age used under section 216(1) of the Social Security Act, except that such section shall be applied without regard to the age increase factor, as if the early retirement age under section 216(1)(2) of such Act were 62.

(kk) "Subsidiary" means any corporation, association or business trust, 50% or more of whose voting stock (not including shares having voting power only upon the happening of an event of default) is or was owned, directly or indirectly, by American Water Works Company, Inc., or by any corporation which was a constituent in a merger, consolidation, liquidation, transfer of substantially all of its assets in exchange for stock, or similar combination of corporations with or into the Company.

(ll) "Trust" means the legal entity created by the Agreement ("Trust Agreement") between the Company and the Trustee, fixing the rights and liabilities with respect to the control and management of those assets of the Fund held in the Trust.

(mm) "Trustee" means the trustee or trustees, and any successor or successors thereto, designated by the Board of Directors and named in the Trust Agreement or any amendment thereto.

(nn) "Year of Service" means:

(i) Service Prior to 1975 Anniversary. For periods prior to the first anniversary after July 1, 1975 of the date on which a Participant became an Employee, each year of Continuous Service included in a period of Continuous Service ending on that date.

(ii) Years of Service for Eligibility and Vesting. Except as otherwise provided under Section 2.1(nn)(iv) below, for purposes of eligibility to participate in the Plan, vesting and for meeting the eligibility requirements for survivor benefits or for a Normal, Late, Early or Disability Retirement Date, Years of Service shall be determined under this Section 2.1(nn)(ii). For periods beginning on or after the first anniversary after July 1, 1975 of the date on which a Participant became an Employee, or in the case of a Participant who first became an Employee on or after July 1, 1975, for periods beginning on or after the date the Participant became an Employee, each 12 month period commencing on his employment date or any anniversary thereof during which he completes at least 1,000 Hours of Service and which is not excluded by the provisions of Sections 9.1 and 9.2. For this purpose, an Employee for whom records of hours actually worked are not maintained, shall be credited with 8 Hours of Service for each day for which he is compensated for his services or for which he otherwise would have been compensated for his services during which he is absent due to (A) layoff not exceeding 12 months, (B) sickness or accident in accordance with the customary personnel practices of the respective Company or Designated Subsidiary, but not exceeding the first 24 months thereof, (C) Qualified Military Service, or (D) leave of absence, or other cause, approved by the Committee pursuant to uniform and nondiscriminatory rules applicable to Employees similarly situated, provided that in each case the Employee returns to employment with the Company or a Designated Subsidiary or, if eligible to do so, retires, on or before the last day of the period for which service credit is granted under (A), (B), or (D), or, in the case of absence under (C), the last day on which the Employee's re-employment rights are protected by law.

Years of Service earned by Employees who are not included in an "Eligible Union Group," as described in Section 3.1(b), and have ceased for any reason to be eligible to accrue additional benefits under the Plan will be credited for purposes of vesting and for meeting the eligibility requirements for survivor benefits and Normal, Late, Early or Disability Retirement, but will not be credited for purposes of determining benefit accrual and computing a Participant's retirement income benefit under the Plan under Section 2.1(nn)(iii) below.

(iii) Years of Service for Benefit Accrual. Except as otherwise provided under Section 2.1(nn)(iv) below, for purposes of determining benefit accrual and computing a Participant's retirement income benefit under the Plan, a Year of Service shall be credited for each full 12 month period during which a Participant is credited with at least 1,000 Hours of Service. In addition, a Participant shall receive a partial Year of Service for a period of less than 12 months provided the Participant is credited with at least 1,000 Hours of Service during such period. Notwithstanding any other provision of this Plan, no period during which an individual was ineligible to be a Participant by reason of Section 3.1, 3.2 or 3.3 shall be a Year of Service for the purpose of computing the retirement income benefit, if any, to which such individual is entitled under this Plan.

A Participant shall receive credit for a partial Year of Service for an employment period of fewer than 12 months. That credit shall be determined as a fraction, the denominator of which shall be 365 and the numerator of which shall be the number of days in the period beginning on the last anniversary date of his employment prior to the termination of his service or his Normal, Late, Early or Disability Retirement Date, and ending on the date of the termination of his service or his Normal, Late, Early or Disability Retirement Date, if his Hours of Service for such period equaled, or when annualized, would equal 1,000 or more.

(iv) Special Rules. For special service rules to be applied in computing Years of Service for purposes of benefit accrual, vesting and for meeting the eligibility requirements for survivor benefits or for a Normal, Late, Early or Disability Retirement Date, for Employees of certain acquired Subsidiaries which have become Designated Subsidiaries, see Appendices 3 and 4.

Union Participants described in Section 5.2(d) shall cease to be credited with Years of Service after December 31, 2005 for purposes of benefit accrual. Years of Service earned by union Participants described in Section 5.2(d) after December 31, 2005 will be credited for purposes of vesting and for meeting the eligibility requirements for survivor benefits and Normal, Late, Early or Disability Retirement.

Notwithstanding any provisions in the Plan to the contrary, any non-union Participant transferred from American Water Works Service Company, Inc. to American Water Enterprises, Inc. effective December 26, 2011 who is listed in Appendix 7, shall continue to be credited with Years of Service on and after December 26, 2011 for purposes of benefit accrual, as well as for vesting and for meeting the eligibility requirements for survivor benefits or for Normal, Late, Early or Disability Retirement Date, until such Participant subsequently terminates employment or is transferred from his or her December 26, 2011 classification to an ineligible employment classification.

Notwithstanding any provisions in the Plan to the contrary, any non-union Participant who, immediately prior to a transfer of employment to American Water Enterprises, Inc., is eligible to accrue additional benefits under the Plan under Section 3.2(b), shall continue to be credited with Years of Service on and after such transfer to American Water Enterprises, Inc. for purposes of benefit accrual, as well as for vesting and for meeting the eligibility requirements for survivor benefits or for Normal, Late, Early or Disability Retirement Date, until such Participant subsequently terminates employment or is transferred to an ineligible employment classification.

Section 2.2 Administration. The Plan shall be administered by the Committee as more fully provided for in Sections 11.1 through 11.3.

Section 2.3 Construction.

(a) The headings and subheadings in the Plan are inserted for convenience of reference only and are not to be considered in the construction of any provision of the Plan.

(b) The masculine pronoun as used in this Plan refers to both sexes.

Section 2.4 Governing Law. Except to the extent such laws are superseded by ERISA or the Code, the laws of the State of New Jersey shall govern.

ARTICLE III.
PARTICIPATION

Section 3.1 New Participants.

(a) Except as specifically provided in Section 3.1(b) below, any Employee who was not a Participant in the Plan on January 1, 2006 shall forever remain ineligible for the Plan.

(b) Subject to the terms of the applicable collective bargaining agreement, a union Employee employed within an Eligible Union Group shall become a Participant on the first day of the calendar month next following his completion of one Year of Service. "Eligible Union Groups" include:

(i) Union Employees employed in the Company's call center at either the Alton, Illinois or Pensacola, Florida facility;

(ii) Union Employees hired or rehired prior to February 1, 2009 at the Company's Sterling, Illinois facility;

(iii) Union Employees employed on January 15, 2002 in the Company's water business acquired from Citizens Utility Company; or

(iv) Local 423 union Employees hired before April 1, 2006 or Local 68 union Employees hired before May 1, 2006, who were participating in the Employees' Retirement Plan of Elizabethtown Water Company as of December 31, 2006.

An Employee who is hired or transferred into an Eligible Union Group shall become a Participant on or after January 1, 2006 only if the collective bargaining agreement applicable to that Eligible Union Group specifically provides for participation in the Plan by all members of that Eligible Union Group.

Section 3.2 Participants as of January 1, 2006.

(a) Except as provided in this Section 3.2, an Employee who was a Participant in this Plan as of January 1, 2006, shall remain eligible to participate in the Plan.

(b) Any Participant who, as of January 1, 2006, was not eligible to accrue benefits under the Plan shall forever remain ineligible to accrue benefits under the Plan without regard to a subsequent transfer to an eligible classification of employment, rehire, recall, or other resumption of employment unless that Participant is subsequently employed within one of the Eligible Union Groups and the collective bargaining agreement applicable to that Eligible Union Group specifically provides for participation in the Plan by all members of that Eligible Union Group.

(c) Any Participant who, on or after January 1, 2006, ceases for any reason to be eligible to accrue benefits under the Plan shall forever remain ineligible to accrue future benefits under the Plan without regard to a subsequent transfer to an eligible classification of employment, rehire, recall, or other resumption of employment unless that Participant is subsequently employed within one of the Eligible Union Groups and the collective bargaining agreement applicable to that Eligible Union Group specifically provides for participation in the Plan by all members of that Eligible Union Group.

(d) Non-union Participants rehired on or after January 1, 2006, shall not be eligible to accrue additional benefits under the Plan.

(e) No union Participants hired or rehired on or after January 1, 2001 shall be eligible to accrue additional benefits, under the Plan on or after January 1, 2006 unless employed within one of the Eligible Union Groups and the collective bargaining agreement applicable to that Eligible Union Group specifically provides for participation in the Plan by all members of that Eligible Union Group.

(f) Union Employees hired or rehired on or after January 1, 2001 who, on or after January 1, 2006, cease to be covered under a collective bargaining agreement between a union and the Company for any reason, including by transfer to non-union status (union Employees hired before January 1, 2001 and transferred to non-union status will, at the time of transfer, be treated as a non-union Employee hired before January 1, 2006) shall not be eligible to accrue additional benefits under the Plan on or after January 1, 2006; provided, however, union Employees hired before January 1, 2001 who are laid off and recalled to employment on or before December 31, 2005 shall be treated as having been hired before January 1, 2001 but subject on and after January 1, 2006 to the provisions in this Section 3.2.

(g) No Employee on whose behalf the Company or a Designated Subsidiary makes contributions to any employee pension benefit plan with respect to a period of current service shall be eligible to accrue benefits in this Plan for the same period of service.

(h) Any Participant who, immediately prior to a transfer of employment to American Water Enterprises, Inc., is eligible to accrue additional benefits under the Plan under this Section 3.2(b) shall continue to accrue benefits under the Plan while employed by American Water Enterprises, Inc. until such Participant subsequently terminates employment or is transferred to an ineligible employment classification.

Section 3.3 Collective Bargaining.

(a) Any other provision of this Plan to the contrary notwithstanding, if any labor organization, which shall be recognized by the Company or a Designated Subsidiary as the representative for purposes of collective bargaining of any unit of Employees, does not enter into an agreement with the Company or a Designated Subsidiary providing for the participation of such Employees in this Plan, or having entered into such an agreement fails or refuses to continue the same in effect, the Employees so represented shall not, except to the extent of such Employees' vested interest under Section 8.1, be Participants in, or eligible to participate in, this Plan, its benefits, or in the funds held by the Insurance Company, the Trustee or any Investment Manager, provided that if the absence of an agreement occurs only during a period of negotiations which culminate in a new agreement providing for the participation of such Employees in this Plan, such Employees shall not lose any of the rights which they would otherwise have had hereunder.

(b) If any Employee becomes a Participant following a period during which he was ineligible to participate by reason of this Section 3.3, his Years of Service under this Plan shall not, for the purpose of computing the retirement income benefit, if any, to which he is entitled under this Plan, include any period during which he was so ineligible.

Section 3.4 Suspension of Benefits. A Participant who continues in employment beyond age 65 shall not be entitled to payment of benefits while so employed, provided that the Plan notifies the Participant by personal delivery or first class mail during the first calendar month following the Participant's Normal Retirement Date that his benefits will not be payable until his actual termination of employment. Such notification shall state that benefit payments are not being paid, in accordance with this Section 3.4, because the Participant is remaining in active employment, and shall include a copy of this Section 3.4 and a statement to the effect that applicable Department of Labor regulations may be found at 29 CFR § 2530.203-3.

ARTICLE IV.
RETIREMENT

Section 4.1 Normal Retirement and Late Retirement.

(a) Upon retirement at his Normal Retirement Date a Participant shall be entitled to receive a monthly retirement income commencing on his Normal Retirement Date in an amount determined under Sections 5.2, 5.6, 5.7 and, if applicable, Section 6.1(a).

(b) A Participant who continues to be employed after his Normal Retirement Date shall be entitled to receive a monthly retirement income commencing on his Late Retirement Date in an amount determined under Sections 5.2, 5.6, 5.7 and, if applicable, Section 6.1(a). Notwithstanding the foregoing, an executive shall have a Late Retirement Date only if he continues in employment with the Employer after his Normal Retirement Date by consent of the Company.

(c) For purposes of this Section 4.1, an “executive” means a Participant:

(i) who is an executive as defined in 29 CFR.541.1 and EEOC Reg. section 1625.12;

(ii) who is (A) in charge of a significant and substantial local or regional operation of the Employer, (B) in charge of a department or division of the Employer, or (C) in a high policy making position with the Employer;

(iii) who has attained age 65;

(iv) who has been in a position described in Sections 4.1(a) and 4.1(b) for the two year period immediately prior to his retirement; and

(v) who is entitled to an immediate nonforfeitable annual retirement income, payable in the form of a single life annuity commencing at age 65 (or retirement, if later), from all employee pension, profit sharing, savings and deferred compensation plans sponsored by the Employer, which equals, in the aggregate, at least $44,000 (or such other amount as may be described pursuant to 29 C.F.R. 541.1). There shall be excluded from the calculation of the retirement income all of the Participant’s contributions to all plans, including amounts rolled over from the plans of previous employers.

Section 4.2 Early Retirement.

(a) A Participant may retire on the first day of any month occurring on or after both attaining his Early Retirement Date and making application in writing therefor to his Employer at least two full calendar months in advance. Notwithstanding the foregoing, in the event a Subsidiary is named as a Designated Subsidiary effective after December 31, 1971, a Participant who is an Employee of such Designated Subsidiary may not retire under this Section 4.2(a) before being credited with five Years of Service under this Plan.

(b) In the event of retirement under the provisions of Section 4.2(a), the date of a Participant's actual retirement shall be his Early Retirement Date and upon retirement at his Early Retirement Date a Participant shall be entitled to receive a monthly retirement income commencing on his Early Retirement Date in an amount determined under Sections 5.4, 5.6, 5.7 and, if applicable, Section 6.1(a).

(c) In the event a Participant who has applied for Social Security disability benefits applies for an Early Retirement benefit under this Section 4.2, commences payment of his Early Retirement benefit as of his elected Annuity Starting Date, and such elected Annuity Starting Date occurs prior to the date that an award of total and permanent disability benefits is made by the United States Social Security Administration (the "Award"), such Participant shall not be permitted to change his Early Retirement benefit to a Disability Retirement benefit payable under Section 4.3 following the date of the Award. The foregoing shall apply regardless of the date of disability that is referenced in the Award. For purposes of clarity, a Participant for whom payment of his Early Retirement benefit has not yet commenced as of his elected Annuity Starting Date due to administrative delay shall be treated as having commenced payment of his Early Retirement benefit as of his elected Annuity Starting Date.

Section 4.3 Disability Retirement.

(a) A Participant who has completed 10 or more Years of Service, and who qualifies for disability retirement under this Section 4.3(a) shall be retired as of the first day of the month following the first month in which the Committee has received both (i) the Participant's written request for disability retirement, and (ii) evidence reasonably satisfactory to the Committee that the Participant has been determined by the United States Social Security Administration to qualify for total and permanent disability benefits under the Social Security Act. A Participant shall be eligible for disability retirement benefits if, as a result of mental or physical illness or injury (other than self-inflicted) while actively employed, he qualifies for disability benefits under the Social Security Act. Disability benefit payments shall commence in either the month in which the disabled Participant is retired, as described above, or in the next following month, as may be administratively practicable. Such payments under the Plan shall be made retroactively to the first day of the month following the date as of which the Participant is deemed to be disabled by the Social Security Administration, or, if later, to the last day of the Participant's eligibility for continuation of the Participant's salary or hourly wages as sick pay under an applicable Employer sick pay plan. The sum of any retroactive payments shall be paid in a lump sum, without interest, as part of the first monthly payment of disability benefits. A Participant shall provide such reasonable evidence of continued Social Security disability as the Committee may require from time to time. Disability benefits shall be discontinued if the Participant ceases to qualify for disability benefits under the Social Security Act. A Participant who becomes disabled, while actively employed, on or after attaining age 65, shall be considered to have retired under Section 4.1 and will be entitled to a monthly retirement income, if any, in an amount determined under Sections 5.2, 5.6, 5.7 and, if applicable, Section 6.1(a).

(b) Notwithstanding the above, if a Participant's disability is determined by the Social Security Administration to qualify under the Social Security Act prior to July 1, 2001, and the Participant's benefit was in pay status, the benefit shall be determined under the provisions of the Plan in effect prior to July 1, 2001.

(c) In the event of retirement under the provisions of Section 4.3, the date specified in Section 4.3 shall be the Participant's Disability Retirement Date, and the Participant shall be entitled to receive for life, or as long as his disability continues to qualify under the Social Security Act, a monthly retirement income commencing on his Disability Retirement Date in an amount determined under Sections 5.5, 5.6, 5.7 and, if applicable, Section 6.1(a); provided that if at his Disability Retirement Date, a Participant would be eligible for Early Retirement but for the two months' notice requirement, he may elect to retire early under the provisions of Section 4.2(a).

(d) A Participant shall not be eligible for a benefit payable under this Section 4.3 if the provisions of Section 4.2(c) apply.

ARTICLE V.
RETIREMENT INCOME LIFE BENEFITS

Section 5.1 For Participants Who Retired Prior to July 1, 2001. Except as otherwise specifically provided in Appendix 1, the monthly retirement income payable to a Participant whose Retirement Date occurred on or before July 1, 2001 shall be continued after June 30, 2001 in the same amount and subject to the same conditions as the monthly retirement income which such Participant was receiving under the Plan beginning on or before July 1, 2001.

Section 5.2 Normal or Late Retirement Income. A Participant's Normal or Late Retirement Income shall be determined as follows:

(a) For Active Non Union Participants Retirement on or after July 1, 2001. An active non union Participant retiring after June 30, 2001, except as modified by the provisions of Section 6.1(a), shall receive a monthly retirement income commencing on his Normal or Late Retirement Date in an amount equal to the following:

(i) For Years of Service prior to July 1, 2001, the sum of the following:

(A) 1.85% of his Final Average Earnings not in excess of the Social Security Average Wage Base, multiplied by his Years of Service up to a maximum of 25 years, plus

(B) 2.1 % of his Final Average Earnings in excess of the Social Security Average Wage Base, multiplied by his Years of Service up to a maximum of 25 years, plus

(C) 0.7% of his Final Average Earnings, multiplied by his Years of Service in excess of 25 years.

plus

(ii) For Years of Service on or after July 1, 2001, the sum of the following:

(A) 1.60% of his Final Average Earnings not in excess of the Social Security Average Wage Base, multiplied by his Years of Service up to a maximum of 25 years, plus

(B) 2.1 % of his Final Average Earnings in excess of the Social Security Average Wage Base, multiplied by his Years of Service up to a maximum of 25 years, plus

(C) 1.60% of his Final Average Earnings, multiplied by his Years of Service in excess of 25 years.

(iii) Years of Service credited before and after July 1, 2001 shall be aggregated in determining the 25 year maximum period.

(b) <u>For Active Union Participants Retiring on or after July 1, 2001</u>. An active union Participant retiring after June 30, 2001, except as modified by the provisions of Section 6.1(a), shall receive a monthly retirement income commencing on his Normal or Late Retirement Date in an amount equal to the following:

(i) For Years of Service prior to July 1, 2001, the sum of the following:

(A) 1.85% of his Final Average Earnings not in excess of the Social Security Average Wage Base, multiplied by his Years of Service up to a maximum of 25 years, plus

(B) 2.1 % of his Final Average Earnings in excess of the Social Security Average Wage Base, multiplied by his Years of Service up to a maximum of 25 years, plus

(C) 0.7% of his Final Average Earnings, multiplied by his Years of Service in excess of 25 years.

plus

(ii) 1.60% of his Final Average Earnings, multiplied by his Years of Service earned on or after July 1, 2001.

(c) For Participants Hired on or after July 1, 2001. Effective for Participants hired on or after July 1, 2001, except as modified by the provisions of Section 6.1(a), a Participant’s monthly retirement income commencing on his Normal or Late Retirement Date shall be an amount equal to 1.60% of his Final Average Earnings multiplied by his Years of Service at Normal or Late Retirement.

(d) For Union Participants Hired On Or After January 1, 2001. Except as provided below in this Section 5.2(d), Section 3.1(b), or Section 3.2, the Accrued Benefit of a union Participant hired or rehired on or after January 1, 2001 shall be frozen as of December 31, 2005 and no further benefits shall accrue for such Participant under the Plan after December 31, 2005. Notwithstanding the foregoing, union Employees who:

(i) are employed at the Company's Sterling, Illinois facility and were hired or re-hired prior to February 1, 2009,

(ii) are employed in the Employer's call center at either the Alton, Illinois or Pensacola, Florida facility,

(iii) were union Employees on January 15, 2002 employed in the water business acquired from Citizens Utility Company, or

(iv) are Local 423 union Employees hired before April 1, 2006 or Local 68 union Employees hired before May 1, 2006, who were participating in the Employees' Retirement Plan of Elizabethtown Water Company as of December 31, 2006,

may continue to accrue benefits under the Plan for Years of Service on and after December 31, 2005.

Section 5.3 1994 Fresh Start Provisions. If the Accrued Benefit, computed as of June 30, 1994, of a Participant who is actively employed on July 1, 1994 was based on Earnings in excess of $150,000, such Accrued Benefit shall be frozen as of June 30, 1994. The Accrued Benefit payable to such a Participant who retires at his Normal Retirement Date shall be the greater of:

(a) the sum of his Accrued Benefit as of June 30, 1994, plus his Accrued Benefit for each Year of Service for benefit accrual after June 30, 1994 computed in accordance with Section

5.2(a) above but based only on Earnings allowable under section 401(a)(17) of the Code as in effect for Plan Years beginning after 1993; or

(b) the Participant's Accrued Benefit computed under Section 5.2(a) using all of the Participant's Years of Service for benefit accrual, but limiting Earnings to the level in effect under section 401(a)(17) of the Code as of the Participant's retirement or other termination of service, as applicable.

Section 5.4 Early Retirement Income. The monthly retirement income commencing on a Participant's Early Retirement Date shall be an amount equal to his normal retirement income under Section 5.2 based on his Years of Service to his Early Retirement Date, multiplied by the appropriate factor, determined by his attained age and Years of Service at his Early Retirement Date, as set forth in the Schedule of Early Retirement Factors attached to this Plan as Table 1.

Section 5.5 Disability Retirement Income. The monthly retirement income commencing on a Participant's Disability Retirement Date shall be an amount equal to the benefit which he would have received pursuant to Section 5.2(a) or (b) or (c) based on his Years of Service and Final Average Earnings as of his Disability Retirement Date, without reduction for early commencement.

Section 5.6 Other Plan Benefits. In the case of a Participant who becomes a Participant by reason of the naming after June 30, 1985 of a Subsidiary as a Designated Subsidiary, his normal, late, early, or disability retirement income shall be adjusted downward to reflect benefits to which he is entitled under any other retirement plan or plans established by such Designated Subsidiary and the Committee, acting under uniform rules of nondiscriminatory application with respect to the Employees of any such Designated Subsidiary, shall have the exclusive and binding discretion to make such adjustment as it determines to be equitable under all of the circumstances to the end that there be no duplication of benefits under this Plan and any other plan or plans. Notwithstanding the preceding sentence, no such adjustment shall be made for such amounts as are attributable to the Participant's contributions to such other plan or plans.

Section 5.7 Benefits Attributable to Merged Plans. In addition to any retirement income benefit payable to a Participant under this Plan, any Participant who was a participant in the California-American Water Company Employee Retirement Plan, the Seymour Water Company Retirement Plan, the West Virginia Water Company Pension Plan, the Brownsville Water Company Non-Bargaining Employees' Retirement Plan, the Brownsville Water Company Bargaining Employees' Retirement Plan and the Retirement Plan for Employees of California Water Company, which were merged into this Plan, shall also receive the amount of any benefit the Participant would have received from that merged plan, but for the merger. The benefit payable to any Participant who was a participant in the Pekin Water Works Company Pension Trust and who is given credit under Appendix 3 of this Plan in computing his Accrued Benefit under this Plan shall receive no additional benefit credit on account of such participation.

Section 5.8 Normal Form of Retirement Income. The normal form of retirement income shall be as follows:

(a) Unmarried Participants. If a Participant is not married on his Annuity Starting Date, his retirement income will be paid to him monthly for life, beginning with the first payment following his retirement and ending with the last payment payable prior to his death.

(b) Married Participants. If a Participant is married on his Annuity Starting Date, his retirement income will be paid to him in the faun of a Qualified Joint and Survivor Annuity as described in Section 6.1(a).

ARTICLE VI.
BENEFIT ELECTIONS, SURVIVOR BENEFITS AND RELATED REDUCTIONS IN BENEFITS

Section 6.1 Automatic Surviving Spouse Benefit.

(a) Qualified Joint and Survivor Annuity. A Participant who is married on his Annuity Starting Date, shall be paid a benefit for his life equal to that percentage determined by his attained age and the attained age of his spouse, set forth in the Table of Contingent Annuitant Percentages attached to the Plan as Table 2, of his normal retirement income under Section 5.2, his early retirement income under Section 5.4 or his disability retirement income under Section 5.5; and his spouse, if such spouse survives him, shall be paid a benefit equal to 50% of his reduced benefit. For any Participant retiring on a Late Retirement Date, Table 2 shall be applied based on the Participant’s attained age and the attained age of the Participant’s spouse as of the Participant’s Late Retirement Date.

If a Participant’s spouse dies within two years of the date payments to the Participant begin under this Section 6.1(a), beginning with the first payment following the death of such spouse, monthly retirement income payments to the Participant will be adjusted to be equal to the monthly amount that would have been paid to the Participant if the Participant’s benefit had been determined solely under Section 5.8(a).

(b) Qualified Preretirement Survivor Annuity.

(i) Death Prior to Early Retirement Eligibility and Prior to Completing Ten Years of Service. In the event of the death of an actively employed married Participant who had competed at least five Years of Service but before he had completed at least ten Years of Service, such Participant’s spouse shall be entitled to a benefit, payable, if such spouse is then surviving, on the first day of the month coincident with, or next following the later of (A) the date of the Participant’s death or (B) the date the Participant would have attained age 55 had he survived, elected the 50% contingent annuity form of benefit, as determined under Table 2 based on his and his spouse's then attained ages, and then died.

(ii) Death Prior to Early Retirement Eligibility but After Ten Years of Service. In the event of a married Participant's death while actively employed, after he has completed ten Years of Service but prior to becoming eligible for Early Retirement, such Participant's spouse shall be entitled to receive the same monthly benefit to which the Participant would have been entitled had the Participant retired on the day before his death and had elected to receive the 100% contingent annuity form of benefit. The amount of such benefit shall be determined under Table 4, based on his attained age and the attained age of his spouse, except that for purposes of applying Table 4, the Participant's attained age, if less than age 55, shall be considered to be age 55 and his spouse's age shall be adjusted so that it bears the same relationship to age 55 as their actual attained ages bear to each other.

(iii) Death After Becoming Eligible for Early Retirement. In the event of a married Participant's death, while actively employed, while he is eligible for Early Retirement but for the applicable notice requirement under Section 4.2(a), such Participant's spouse shall be entitled to receive the same monthly benefit to which the Participant would have been entitled had the Participant retired on the day before his death and had elected to receive the 100% contingent annuitant form of benefit as determined under Table 4, based on his attained age and the attained age of his spouse.

(iv) Death After Becoming Eligible for Normal Retirement. In the event of a married Participant's death while actively employed, after his Normal Retirement Date, such Participant's spouse shall be entitled to receive the same monthly benefit to which the Participant would have been entitled had the Participant retired on his Late Retirement Date and had elected to receive the 100% contingent annuitant form of benefit as determined under Table 4, based on his attained age and the attained age of his spouse.

(v) Death of Vested Terminated Participant. In the event of a married Participant's death after he had completed five Years of Service, but before he had become eligible for Early Retirement, and who was not actively employed at the time of his death, such Participant's spouse shall be entitled to a benefit, payable, if such spouse is then surviving, on the first day of the month coincident with, or next following the later of (A) the date of the Participant's death or (B) the date the Participant would have attained age 55 had he survived, elected the 50% contingent annuity form of benefit, as determined under Table 2 based on his and his spouse's then attained ages, and then died. Notwithstanding the foregoing, in the event a married Participant who is no longer actively employed dies after he has become eligible to elect to receive retirement income benefits under Section 8.1 and before his Normal Retirement Date, such Participant shall be considered to be actively employed on the date of his death, and his spouse, if surviving, will receive a benefit in accordance with Section 6.1(b)(iii) above.

Any benefit payable under this Section 6.1 shall terminate on the surviving spouse's death.

Section 6.2 Notice and Election Procedures.

(a) Initial Notice and Election. Within 180 days (90 days for plan years beginning prior to January 1, 2007) before a Participant's Annuity Starting Date, the Committee shall supply the Participant with a written explanation describing the terms and conditions of the normal form of benefit payable to him under Section 5.8, the financial effect of the other forms of benefit available to him under the Plan and the relative value of the other forms of benefit compared to the normal form of benefit. The explanation shall also describe the Participant's right to waive the normal form of benefit and the effect of such waiver, the rights of the Participant's spouse, the right to revoke a previous waiver of the normal form of benefit, the effect of such a revocation and, if the Participant has not reached his or her Normal Retirement Date, the consequences of failing to defer payment until a later payment date. Finally, the explanation shall advise the Participant that his benefit shall be paid in such normal form, unless within 180 days (90 days for plan years beginning prior to January 1, 2007) before his Annuity Starting Date, he notifies the Committee of an election to receive a different form of benefit, and, if he is married:

(i) his spouse consents to his election in writing,

(ii) such election designates a Contingent Annuitant or Annuitants other than his spouse (or form of benefit) that may not be changed without spousal consent, or the spouse's consent acknowledges the spouse's right to limit consent to a specific Contingent Annuitant or Annuitants (or form of benefit), and expressly and voluntarily permits designations by the Participant without any requirement of further consent by the spouse; and

(iii) the spouse's consent acknowledges the effect of such election and is witnessed by a notary public.

(iv) Spouse shall mean effective June 26, 2013, the individual to whom a Participant is married, including a marriage of same-sex spouses that was validly entered into in a domestic or foreign jurisdiction whose laws authorize the marriage of two individuals of the same sex even if the married couple resides in a domestic or foreign jurisdiction that does not recognize the validity of same-sex marriages. Marriage does not include registered domestic partnerships, civil unions, or other similar formal relationships recognized under state law that are not denominated as a marriage under that state's law, and the term "Spouse" does not include individuals who have entered into such a formal relationship. Spouse means the spouse of a Participant on the date benefits under the Plan commence, however, if the Participant should die prior to the date benefits under the Plan would have commenced to him/her, then the spouse will be the spouse to whom the Participant was married on the date of death. To the extent provided, under a qualified domestic relations order, the "Spouse" means a former Spouse of the Participant.

(b) Election Period; Extension of Election Period. A Participant's election period under this Section 6.2 shall be the 180 day period (90 day period for plan years beginning prior to January 1, 2007) ending on his Annuity Starting Date. If, by not later than the day before his Annuity Starting Date, the Participant notifies the Committee of an election not to receive the normal form of benefit payable to him under Section 5.8, and his spouse (if any) has consented to such election, his benefit shall be paid in the alternate form selected by the Participant.

However, if by not later than the day before his Annuity Starting Date, the Participant requests the Committee to furnish him with additional information relating to the effect of the normal form of benefit payable to him under the Plan, the election period under this Section 6.2 shall be extended and his Annuity Starting Date shall be postponed to a date not later than 180 days (90 days for plan years beginning prior to January 1, 2007) following the date the Committee furnishes him with the additional information.

(c) Change of Election - Optional Form of Benefit. Any Participant electing an optional form of benefit under Section 6.3 or Section 6.4 may revoke such election and file a new election with the Committee at any time prior to the Participant's Annuity Starting Date. Upon the Participant's Annuity Starting Date, his election shall become irrevocable.

(d) Notice and Election Procedures for Qualified Preretirement Survivor Annuity. Within the one year period beginning on the date an Employee becomes a Participant, the Committee shall provide the Participant with a written explanation of the spouse's preretirement death benefit. The written explanation shall notify the Participant that if he is married and he dies before his Annuity Starting Date, his spouse shall receive the spouse's preretirement death benefit determined under Section 6.1(b).

Section 6.3 Monthly Income for Life Election. A Participant who is married on his Annuity Starting Date may, with his spouse's written and notarized consent, elect to have his normal or late retirement income under Section 5.2, his early retirement income under Section 5.4, or his disability retirement income under Section 5.5, in each case as limited by Section 5.6 and 5.7, paid in the form described in Section 5.8(a).

Section 6.4 Survivor Benefits Available by Election.

(a) Participants whose benefits are not subject to an automatic surviving spouse benefit under Section 6.1 or who, with their spouse's written and notarized consent as described in Section 6.2, elect not to accept an automatic surviving spouse benefit may elect to provide benefits for their Contingent Annuitants as described below.

(b) Upon written notice executed by a Participant and filed with his Employer at least 60 days prior to his actual retirement date, a Participant may, subject to the limitations of this Section 6.4, designate any individual as his Contingent Annuitant and at the same time elect:

(i) a reduced benefit for life with the continuation of (A) 50%, (B) 75% (effective for Annuity Starting Dates after June 30, 2008), (C) 66-2/3%, or (D) 100% of such reduced benefit to his surviving Contingent Annuitant for the life of such Contingent Annuitant; or

(ii) a reduced benefit for life with the continuation of 100% of such reduced benefit to his Contingent Annuitant only to the extent required for the total number of monthly payments to the Participant and his Contingent Annuitant to equal either (A) 60, (B) 120, or (C) 180.

(c) In the event of such a designation and election, the reduced retirement income payments will be paid to the Participant, commencing on his Normal, Late, Early or Disability Retirement Date. The first payment, if any, to the Contingent Annuitant shall be made on the first day of the calendar month coincident with or following the death of the Participant, or as soon as administratively possible following the death of the Participant, provided payment is made retroactively to the first day of the month following the Participant's death. Payments to the Participant shall terminate with the last payment payable preceding his death.

(d) Any such election shall become effective upon the Participant's retirement unless otherwise provided by the Participant. The amount of the Participant's reduced retirement benefit shall be determined by multiplying his normal, late, early or disability retirement income by a percentage set forth in Table 2, 3, 4, or 4(a), as appropriate, depending upon his age and the age of his Contingent Annuitant as of the Participant's actual retirement date.

(e) If a Contingent Annuitant dies within two years of the date payments to the Participant begin under this Section 6.4, other than payments in a form described in Section 6.4(b)(ii), monthly retirement income payments to the Participant will be adjusted beginning with the first payment following the death of such Contingent Annuitant, to be equal to the monthly amount that would have been paid to the Participant if the Participant's benefit had been determined solely under Section 5.8(a). No such adjustment will be made to the benefit of a Participant whose benefit is being paid in a form described in Section 6.4(b)(ii).

(f) If a Participant's Contingent Annuitant is anyone other than his spouse, the present value of the payments to be made to the Participant as of the date such payments are to commence, computed by using the same mortality and interest assumptions as are used for purposes of Tables 2, 3, 4, and 4(a) must be more than 50% of the present value, as of such date and similarly computed, of all payments to be made to the Participant and his Contingent Annuitant. Any election of a Contingent Annuitant made in violation of this provision shall be void.

(g) In the event of the death of the Participant's Contingent Annuitant prior to the Participant's actual retirement date, the election of a Contingent Annuitant under Section 6.4 shall be inoperative.

Section 6.5 Death Benefits for Unmarried Participants. An unmarried Participant who is actively employed on or after January 1, 2006 and who has completed at least five Years of Service may designate a Contingent Annuitant. The benefit to be provided to that Contingent Annuitant shall be as specified in (a) through (c) below:

(a) For Active and Terminated Vested Participants: Death Prior to Early Retirement Eligibility and Prior to Completing Ten Years of Service. In the event of an unmarried Participant's death after he had completed five Years of Service, but before he had become eligible for Early Retirement, whether such Participant is then actively employed or not, such Participant's Contingent Annuitant shall be entitled to a benefit, payable, if such Contingent Annuitant is then surviving, on the first day of the month coincident with or next following the later of (i) the date of the Participant's death or (ii) the date the Participant would have attained age 55 had he survived. The amount of such benefit shall be the same amount that such surviving Contingent Annuitant would have received had such Participant terminated his service, survived to age 55, elected the 50% contingent annuity form of benefit, as determined under Table 2 based on his and his Contingent Annuitant's then attained ages, and then died.

(b) For Active Participants: Death Prior to Early Retirement Eligibility but After Ten Years of Service. In the event of an unmarried Participant's death while actively employed, after he has completed ten Years of Service but prior to becoming eligible for Early Retirement, such Participant's Contingent Annuitant shall be entitled to receive the same monthly benefit to which the Participant would have been entitled had the Participant retired on the day before his death and elected to receive the 100% contingent annuity form of benefit. The amount of such benefit shall be determined under Table 4, based on his attained age and the attained age of his Contingent Annuitant, except that for purposes of applying Table 4, the Participant's attained age, if less than age 55, shall be considered to be age 55 and his Contingent Annuitant's age shall be adjusted so that it bears the same relationship to age 55 as their actual attained ages bear to each other.

(c) Death After Becoming Eligible for Early Retirement.

(i) Actively Employed Participants. In the event of an unmarried Participant's death, while actively employed and after becoming eligible for Early Retirement including after the Participant's Normal Retirement Date, such Participant's Contingent Annuitant shall be entitled to receive the same monthly benefit to which the Participant would have been entitled had the Participant retired on the day before death and elected to receive the 100% contingent annuitant form of benefit as determined under Table 4, based on his attained age and the attained age of his Contingent Annuitant.

(ii) Terminated Participants. In the event of an unmarried Participant's death after his employment with the Employer has terminated and after becoming eligible for Early Retirement including after the Participant's Normal Retirement Date, such Participant's Contingent Annuitant shall be entitled to receive the same monthly benefit to which the Participant would have been entitled had the Participant retired on the day before death and elected to receive the 100% contingent annuitant form of benefit as determined under Table 4, based on his attained age and the attained age of his Contingent Annuitant.

(d) Any benefit payable under this Section 6.5 shall terminate on the surviving Contingent Annuitant's death.

Section 6.6 Required Distributions - Code Section 401(a)(9). Distributions under this Section 6.6 shall be made in accordance with section 401(a)(9) of the Code and the regulations thereunder, as generally described in this Section 6.6. The provisions of this Section 6.6 shall supersede any distribution option otherwise provided in the Plan to the extent that it is inconsistent with section 401(a)(9) of the Code, but shall not create or increase any benefit. Notwithstanding anything in the Plan to the contrary, the form and the timing of all distributions under the Plan shall be in accordance with regulations issued by the Department of the Treasury under section 401(a)(9) of the Code, including the incidental death benefit requirements of section 401(a)(9)(G) of the Code. The Plan shall apply the minimum distribution requirements of section 401(a)(9) of the Code in accordance with the final regulations under section 401(a)(9) that were published on April 17, 2002 and June 15, 2004, as set forth in Treas. Reg. § 1.401(a)(9)-2 through 1.401(a)(9)-9. The provisions of this Section 6.6 shall override any provisions of the Plan to the contrary.

(a) Time and Manner of Distribution.

(i) Required Beginning Date. The Participant's entire interest shall be distributed, or begin to be distributed, to the Participant no later than the Participant's Required Beginning Date.

(ii) Death of Participant Before Distributions Begin. If the Participant dies before distributions begin and the Participant's Beneficiary is entitled to receive a death benefit, the Participant's entire interest shall be distributed, or begin to be distributed, no later than as follows:

(A) If the Participant's surviving spouse is the Participant's sole Designated Beneficiary, then distributions to the surviving spouse shall begin by December 31 of the calendar year immediately following the calendar year in which the Participant died, or by December 31 of the calendar year in which the Participant would have reached age 70½, if later.

(B) If the Participant's surviving spouse is not the Participant's sole Designated Beneficiary, then distributions to the Designated Beneficiary shall begin by December 31 of the calendar year immediately following the calendar year in which the Participant died.

(C) If there is no Designated Beneficiary as of September 30 of the year following the year of the Participant's death and benefits are payable in the form of a life and certain annuity under Section 6.4(b), the Participant's entire interest shall be distributed to the Participant's estate by the December 31 of the calendar year containing the fifth anniversary of the Participant's death.

(D) If the Participant's surviving spouse is the Participant's sole Designated Beneficiary and the surviving spouse dies after the Participant but before distributions to the surviving spouse begin, this Section 6.6(a)(ii), other than Section 6.6(a)(ii)(A), shall apply as if the surviving spouse were the Participant.

For purposes of this Section 6.6(a)(ii) and Section 6.6(d), distributions are considered to begin on the Participant's Required Beginning Date (or, if Section 6.6(a)(ii)(D) applies, the date distributions are required to begin to the surviving spouse under Section 6.6(a)(ii)(A)). If annuity payments irrevocably commence to the Participant before the Participant's Required Beginning Date (or to the Participant's surviving spouse before the date distributions are required to begin to the surviving spouse under Section 6.6(a)(ii)(B)), the date distributions are considered to begin is the date distributions actually commence.

(iii) Form of Distribution. Unless the Participant's interest is distributed in the form of an annuity purchased from an insurance company or in a single sum on or before the Required Beginning Date, as of the first Distribution Calendar Year distributions shall be made in accordance with Sections 6.6(b), (c) and (d). If the Participant's interest is distributed in the form of an annuity purchased from an insurance company, distributions thereunder shall be made in accordance with the requirements of section 401(a)(9) of the Code and the regulations thereunder.

(b) Determination of Amount to be Distributed Each Year.

(i) General Annuity Requirements. If the Participant's interest is paid in the form of annuity distributions under the Plan, payments under the annuity shall satisfy the following requirements:

(A) the annuity distributions shall be paid in periodic payments made at intervals not longer than one year;

(B) the distribution period shall be over a life (or lives) or over a period certain not longer than the period described in Sections 6.6(c) and (d);

(C) once payments have begun over a period certain, the period certain shall not be changed even if the period certain is shorter than the maximum permitted;

(D) payments shall either be non-increasing or increase only as follows:

(1) by an annual percentage increase that does not exceed the annual percentage increase in a cost-of-living index that is based on prices of all items and issued by the United States Bureau of Labor Statistics;

(2) to the extent of the reduction in the amount of the Participant's payments to provide for a survivor benefit upon death, but only if the Beneficiary whose life was being used to determine the distribution period described in Section 6.6(c) dies or is no longer the Participant's Beneficiary pursuant to a qualified domestic relations order within the meaning of section 414(p) of the Code;

(3) to provide cash refunds of employee contributions upon the Participant's death; or

(4) to pay increased benefits that result from a Plan amendment.

(ii) Amount Required to be Distributed by Required Beginning Date. The amount that must be distributed on or before the Participant's Required Beginning Date (or, if the Participant dies before distributions begin, the date distributions are required to begin under Section 6.6(b)(i)) is the payment that is required for one payment interval. The second payment need not be made until the end of the next payment interval even if that payment interval ends in the next calendar year. Payment intervals are the periods for which payments are received, e.g., bi-monthly, monthly, semi-annually, or annually. All of the Participant's benefit accruals as of the last day of the first Distribution Calendar Year shall be included in the calculation of the amount of the annuity payments for payment intervals ending on or after the Participant's Required Beginning Date.

(iii) Additional Accruals After First Distribution Calendar Year. Any additional benefits accruing to the Participant in a calendar year after the first Distribution Calendar Year shall be distributed beginning with the first payment interval ending in the calendar year immediately following the calendar year in which such amount accrues.

(c) Requirements for Annuity Distributions that Commence During Participant's Lifetime.

(i) Joint Life Annuities Where the Beneficiary is Not the Participant's Spouse. If the Participant's interest is being distributed in the form of a joint and survivor annuity for the joint lives of the Participant and a non-spouse Beneficiary, annuity payments to be made on or after the Participant's Required Beginning Date to the Designated Beneficiary after the Participant's death must not at any time exceed the applicable percentage of the annuity payment for such period that would have been payable to the Participant using the table set forth in Q&A-2 of Treas. Reg. § 1.401(a)(9)-6. If the Annuity Starting Date precedes the year in which the Participant reaches age 70, the age difference to be used in determining the applicable percentage referred to in the preceding sentence is reduced by the number of years that the Participant is younger than age 70 on his or her birthday in the calendar year that contains the Annuity Starting Date. If the form of distribution combines a joint and survivor annuity for the joint lives of the Participant and a non-spouse Beneficiary and a period certain annuity, the requirement in the preceding two sentences shall apply to annuity payments to be made to the Designated Beneficiary after the expiration of the period certain.

(ii) Period Certain Annuities. Unless the Participant's spouse is the sole Designated Beneficiary and the form of distribution is a period certain and no life annuity, the period certain for an annuity distribution commencing during the Participant's lifetime may not exceed the applicable distribution period for the Participant under the Uniform Lifetime Table set forth in Treas. Reg. § 1.401(a)(9)-9 for the calendar year that contains the Annuity Starting Date. If the Annuity Starting Date precedes the year in which the Participant reaches age 70, the applicable distribution period for the Participant is the distribution period for age 70 under the Uniform Lifetime Table set forth in Treas. Reg. § 1.401(a)(9)-9 plus the excess of 70 over the age of the Participant as of the Participant's birthday in the year that contains the Annuity Starting Date. If the Participant's spouse is the Participant's sole Designated Beneficiary and the form of distribution is a period certain and no life annuity, the period certain may not exceed the longer of the Participant's applicable distribution period, as determined under this Section 6.6(c)(ii), or the joint life and last survivor expectancy of the Participant and the Participant's spouse as determined under the Joint and Last Survivor Table set forth in Treas. Reg. § 1.401(a)(9)-9, using the Participant's and spouse's attained ages as of the Participant's and spouse's birthdays in the calendar year that contains the Annuity Starting Date.

(d) Requirements For Minimum Distributions Where Participant Dies Before Date Distributions Begin.

(i) Participant Survived by Designated Beneficiary. If the Participant dies before the date distribution of his or her interest begins and there is a Designated Beneficiary entitled to a death benefit under the Plan, the Participant's entire interest will be distributed, beginning no later than the time described in Section 6.6(a)(ii)(A) or (B) over the life of the Designated Beneficiary or over a period certain not exceeding:

(A) unless the Annuity Starting Date is before the first Distribution Calendar Year, the life expectancy of the Designated Beneficiary determined using the Designated Beneficiary's age as of the Designated Beneficiary's birthday in the calendar year immediately following the calendar year of the Participant's death; or

(B) if the Annuity Starting Date is before the first Distribution Calendar Year, the life expectancy of the Designated Beneficiary determined using the Designated Beneficiary's age as of the Designated Beneficiary's birthday in the calendar year that contains the Annuity Starting Date.

(ii) No Designated Beneficiary. If the Participant dies before the date the distribution of his or her interest begins, the Participant's surviving spouse is the Participant's sole Designated Beneficiary, and the surviving spouse dies before distributions to the surviving spouse begin, this Section 6.6(d) will apply as if the surviving spouse were the Participant, except that the time by which distributions must begin will be determined without regard to Section 6.6(a)(ii)(A).

(e) Definitions.

(i) Designated Beneficiary. The individual who is designated as the Contingent Annuitant under Section 2.1(i) of the Plan and is the designated beneficiary under section 401(a)(9) of the Code and section 1.401(a)(9)-1, Q&A-4 of the Treasury regulations.

(ii) Distribution Calendar Year. A calendar year for which a minimum distribution is required. The first Distribution Calendar Year is the calendar year immediately preceding the calendar year that contains the Participant's Required Beginning Date.

(iii) Life Expectancy. Life expectancy as computed by use of the Single Life Table in Treas. Reg. § 1.401(a)(9)-9.

(iv) Required Beginning Date. April 1 of the calendar year following the year in which a Participant reaches age 70½.

Section 6.7 Distributions Pursuant to a Qualified Domestic Relations Order ("QDRO"). Any benefit payable to an Alternate Payee pursuant to a Qualified Domestic Relations Order ("QDRO"), as those terms are defined in section 414(p) of the Code, shall be paid in accordance with the terms of the QDRO. If permitted under the terms of the QDRO, an Alternate Payee may elect payment of benefits pursuant to a QDRO in the form of an Actuarially Equivalent lump sum distribution; provided, however that the Alternate Payee must exercise this election within the 90 day period following the notice to the Alternate Payee that the domestic relations order issued is a

QDRO. Notwithstanding the foregoing, an Alternate Payee may not elect a lump sum form of distribution if payment of the Participant's benefit has commenced prior to the Alternate Payee's benefit election.

Section 76.8 Limited Lump Sum Election.

(a) Eligibility. A Participant who has terminated employment with a vested Accrued Benefit, who is entitled to benefits as of June 30, 2014, may elect to receive his benefit in a single lump sum payment, if the Participant satisfies the following criteria:

(i) the Participant has neither been reemployed by the Employer nor commenced benefits under the Plan prior to the date of distribution is made under this Section;

(ii) the Participant's benefit is not subject to payment pursuant to Section 6.6 as a required minimum distribution or Section 6.7 according to a Qualified Domestic Relations Order; and

(iii) the Participant effectively returns a properly completed application for distribution under this Section, in such form and manner as required by the Committee, during the period that begins September 10, 2014 and ends October 24, 2014, or such other dates established by the Committee to provide an election period of no fewer than 30 days and applied in a uniform and nondiscriminatory manner.

(b) Distribution to Beneficiary. If a Participant described in subsection (a) is deceased, and if such Participant's surviving spouse or Contingent Annuitant is entitled to a future benefit under the Plan that has not yet commenced under the Plan prior to the date of distribution under this Section, such surviving spouse or Contingent Annuitant may elect to receive a distribution in the form of a single lump sum payment, if the surviving spouse or Contingent Annuitant effectively returns a properly completed application for distribution under this Section no later than October 24, 2014, in such form and manner as required by the Committee.

(c) Amount. The amount of the single lump sum payment under this Section shall be an amount equal to the Actuarial Equivalent present value of the Participant's vested Accrued Benefit which would otherwise be payable at the Participant's Normal Retirement Date, as of November 1, 2014, including the value of any early retirement subsidy if the Participant is eligible for an Early Retirement Date.

(d) Early Commencement of Benefits and Additional Forms of Distribution for Certain Participants.

(i) A Participant who satisfies the requirements of subsection (a) who is not yet eligible for a Normal Retirement Date or an Early Retirement Date shall be eligible for a single lump sum payment under this Section.

(ii) A Participant described in subsection (d)(i) shall also be eligible for the normal form of payment under Section 5.8, which for a married Participant shall be an annuity providing a reduced benefit for life with the continuation of either 50% or 75%, as elected, of such reduced benefit to his surviving spouse. The Actuarial Equivalent of such Accrued Benefit shall be reduced in accordance with the factors set forth in Section 5.4 assuming the Participant would have otherwise begun to receive his benefit upon attainment of age 55 or current age, if older, then further reduced using the "applicable mortality table" under section 417(e)(3) of the Code and the "applicable interest rate" under section 417(e)(3) of the Code for the third calendar month preceding the calendar year during which the Annuity Starting Date occurs to the extent his Annuity Starting Date precedes his Early Retirement Date.

(e) Spousal Consent. Notwithstanding anything in this Section to the contrary, any election under this Section by a married Participant of any form of distribution, other than the normal form of benefit payable to him under Section 5.8, shall be subject to the spousal consent and notification requirements described in Sections 6.2.

(f) Time of Distribution. Any single lump sum distributions elected under this Section must commence on November 1, 2014 or as soon as administratively feasible thereafter to cause all single lump sum distributions under this Section to occur during 2014.

(g) Closure of Limited Election Period. Notwithstanding anything to the contrary, nothing under this Section shall provide any Participant, spouse, surviving spouse or Contingent Annuitant the right to distribution in the form of a single lump sum payment that does not, for any reason whatsoever, satisfy all of the terms and conditions set forth in this Section.

ARTICLE VII.
BENEFIT PAYMENTS

Section 7.1 Purchase of Annuities. All retirement income will be provided either through (i) the purchase of annuities from, or other contractual arrangements with, an Insurance Company; or (ii) by direct payment from the Trust, as determined from time to time by the Committee.

(a) In the event that a Participant, his surviving spouse, or his Contingent Annuitant is entitled to a retirement income of less than $10 monthly, that retirement income may be paid quarterly, semi-annually, or annually, in amounts equal to 3, 6 or 12 times the monthly payment otherwise payable, respectively.

(b) Notwithstanding anything herein to the contrary, if the Actuarial Equivalent lump sum present value of a Participant’s vested retirement income is $5,000 or less on the date his distribution commences, such amount shall be paid to the Participant in a single cash lump sum without the Participant's consent as soon as administratively feasible in accordance with the following:

(i) If the Actuarial Equivalent present value of a Participant's vested retirement income is $1,000 or less and the Participant does not elect to have such distribution paid directly to an "eligible retirement plan" in accordance with Section 7.2 of the Plan, the Participant's retirement income shall be paid directly to the Participant in a cash lump sum.

(ii) If the Actuarial Equivalent present value of a Participant's vested retirement income is more than $1,000 but does not exceed $5,000 and the Participant does not affirmatively elect to have such distribution paid directly to him or to an "eligible retirement plan" in accordance with Section 7.2 of the Plan, the Participant's retirement income shall be paid directly to an individual retirement account or annuity (an "IRA") established for the Participant pursuant to a written agreement between the Committee and the provider of the IRA that meets the requirements of section 401(a)(31) of the Code and the regulations thereunder. The Committee shall establish and maintain procedures to inform each Participant to whom this Section 7.1(b)(ii) applies of the nature and operation of the IRA and the Participant's investments therein, the fees and expenses associated with the operation of the IRA, and the terms of the written agreement establishing such IRA on behalf of the Participant.

Section 7.2 Direct Rollovers.

(a) Eligibility. If one or more distributions from the Plan constitutes an "eligible rollover distribution" within the meaning of sections 402(c)(2) and (4) of the Code, a distributee may elect to have all or a portion (but not less than $500) of the distribution paid directly to an "eligible retirement plan." As used herein, "eligible retirement plan" means an individual retirement account described in section 408(a) of the Code, an individual retirement annuity described in section 408(b) of the Code, an annuity plan described in Section 403(a) of the Code, an annuity contract described in section 403(b) of the Code, or a qualified trust described in section 401(a) of the Code that accepts the distributee's eligible rollover distribution. An eligible retirement plan also includes an eligible plan under section 457(b) of the Code that is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state and that agrees to account separately for amounts transferred into such plan from this Plan. For any portion of an eligible rollover distribution consisting of after-tax contributions that are not includable in gross income, an eligible retirement plan must agree to separately account for such portion. With respect to a distributee who is a non-spouse beneficiary, "eligible retirement plan" means an individual retirement account or annuity described in section 408(a) or 408(b) of the Code that is established on behalf of the designated beneficiary and that will be treated as an inherited individual retirement annuity pursuant to the provisions of section 402(c)(11) of the Code. Effective for distributions made on or after January 1, 2008, a “qualified rollover contribution” as described in section 408A(e) of the Code may be made from the Plan to a Roth IRA in a direct rollover subject to the rules and provisions set forth in section 408A(e) of the Code and any regulations issued thereunder. The recipient may not elect to have portions of an eligible rollover distribution paid directly to more than one eligible retirement plan. In addition, the recipient will not be permitted to elect a direct rollover with respect to eligible rollover distributions that are reasonably expected to total less than $200 during the year.

(b) Procedures. The Committee shall make such payment upon receipt from the recipient of the name of the eligible retirement plan to which such payment is to be made, a representation that the receiving plan is an “eligible retirement plan” as defined above, and such other information and/or documentation as the Committee may reasonably require to make such payment.

(c) Failure to Elect. Except as otherwise provided under Section 7.1(b)(ii), if the recipient fails to elect whether or not a distribution is to be paid in a direct rollover, the recipient will be deemed to have elected not to have any portion of the distribution paid in a direct rollover.

(d) Application. For purposes of this Section 7.2, “distributee” means a Participant or former Participant. In addition, the Participant’s or former Participant’s surviving spouse or former spouse who is the alternate payee under a qualified domestic relations order, as defined in section 414(p) of the Code, are distributees with regard to the interest of the spouse or former spouse. For distributions after June 30, 2008, the term distributee also shall include a beneficiary who is not the spouse or former spouse of the Participant or former Participant.

ARTICLE VIII.
VESTED BENEFITS IN THE EVENT OF TERMINATION OF EMPLOYMENT

Section 8.1 Vesting. A Participant whose employment is terminated for any reason other than death or retirement, and who has completed five or more Years of Service at the date of his termination of employment shall be entitled to receive a monthly retirement income beginning on his Normal Retirement Date equal to his normal retirement income under the Plan as in effect as of the date of his termination of employment, based on his full and partial Years of Service at such date of termination of employment. However, if he makes written application to his Employer at least two months in advance, such a Participant shall be entitled to receive his benefit, reduced as provided in Section 5.4, beginning with the first day of any calendar month following the month in which the sum of the years of his attained age and his completed Years of Service is at least 70, provided he has then attained at least age 55. Notwithstanding the foregoing, a Participant shall automatically become 100% vested on the date he reaches age 65.

Section 8.2 Payment of Vested Termination Benefit.

(a) Forms of Payment. A Participant entitled to benefits under Section 8.1, shall, for purposes of Section 6.1(a) and Section 6.3, be treated as though the date on which his benefits under Section 8.1 are to begin were his actual retirement date. Such a Participant may elect any of the elective survivor benefits provided by Section 6.4.

(b) Termination Benefit For Certain Union Employees. A union Participant hired on or after January 1, 2001 but before January 1, 2006 who terminates employment with a vested Accrued Benefit on or after January 1, 2006, may elect to receive his benefit at any time in one of the following payment forms:

(i) a single lump sum payment in an amount equal to the Actuarial Equivalent present value of the Participant's vested Accrued Benefit which would otherwise be payable at the Participant's Normal Retirement Date, however, if the Participant is eligible for an Early Retirement Date at the time he terminates employment, the lump sum payment will reflect the value of the early retirement subsidy; or

(ii) a single life annuity which shall be the Actuarial Equivalent value of the single lump sum described in (i) above.

Notwithstanding the foregoing, if payment to the Participant occurred later than the close of the second Plan Year following the Plan Year in which such Termination of Employment occurred and such Participant is reemployed by the Employer, the Participant's Accrued Benefit shall be restored upon reemployment without the requirement that he make restoration contributions, provided, however his subsequent Accrued Benefit, if any, payable upon his subsequent Termination of Employment shall be offset by the Accrued Benefit attributable to the prior distribution.

Section 8.3 Failure to Vest. A Participant whose employment is terminated for any reason other than death or retirement and who has not completed at least five Years of Service at the time of his termination of employment for any reason other than death or retirement shall not be entitled to any benefits under the Plan. Amounts forfeited under this provision shall be applied to reduce the obligation of the Company and its Designated Subsidiaries to contribute under the Plan.

ARTICLE IX.
RE-EMPLOYMENT AND BREAKS-IN-SERVICE

Section 9.1 Re-employment before July 1, 1976. If a Participant who terminated employment with the Employer is re-employed before July 1, 1976, he shall be considered a new Employee for purposes of this Plan. In determining the amount of his retirement income as a new Employee, however, if the Participant has vested retirement income benefits under Section 8.1 due to prior service, his benefit shall be computed under Section 5.2 as if his service was continuous. The benefit payable to such Participant as a new Employee shall be the excess of the benefit so computed over the benefit payable on account of that prior service, without regard to any actuarial reductions to which that prior service benefit may have been subject.

Section 9.2 Re-employment after June 30, 1976 and before July 1, 1985. If a Participant terminates employment with the Employer and is re-employed after June 30, 1976 and before July 1, 1985, all of his Years of Service shall be recognized for all purposes of the Plan unless, at the time of his return to employment, the period of his absence was at least a one year Break-in-Service, in which event:

(a) Years of Service occurring before the Break-in-Service shall not thereafter be recognized for any purpose of the Plan unless, immediately following the Break-in-Service, he completed one Year of Service; and,

(b) if, before the Break-in-Service, the Participant had no vested retirement income benefit under Section 8.1, Years of Service before the Break-in-Service shall not thereafter be recognized for any purpose of the Plan unless the number of Years of Service before the Break-in-Service exceeds the number of consecutive years of Break-in-Service.

Section 9.3 Re-employment after June 30, 1985. If a Participant terminates employment with the Employer and is re-employed after June 30, 1985, all of his Years of Service shall be recognized for all purposes of the Plan unless, at the time of his return to employment, the period of his absence was at least five consecutive Breaks-in-Service, in which event:

(a) Years of Service occurring before those Breaks-in-Service shall not thereafter be recognized for any purpose of the Plan unless, immediately following those Breaks-in-Service, he has completed one Year of Service; and,

(b) if, before those Breaks-in-Service, the Participant had no vested retirement income benefit under Section 8.1, Years of Service before those Breaks-in-Service shall not thereafter be recognized for any purpose of the Plan unless the number of Years of Service before those Breaks-in-Service exceeds the greater of five or the number of consecutive Breaks-in-Service.

Section 10.4 General. Anything herein to the contrary notwithstanding, a Break-in-Service shall not reduce any Participant's vested retirement income benefit, determined immediately before the Break-in-Service, nor shall Section 9.2 or Sections 9.3 or 9.4 be interpreted to restore credit for Years of Service disregarded by reason of some earlier Breaks(s)-in-Service.

ARTICLE X.
VETERANS' RE-EMPLOYMENT RIGHTS

Section 10.1 Qualified Military Service. Notwithstanding any provision of the Plan to the contrary, contributions, benefits and service credit with respect to Qualified Military Service will be provided in accordance with section 414(u) of the Code as summarized below:

(a) Crediting Service.

(i) An Employee re-employed by the Employer in accordance with Chapter 43 of Title 38 of the United States Code shall be treated as not having incurred a Break-in-Service with the Employer by reason of such Employee's period of Qualified Military Service.

(ii) Upon re-employment by the Employer in accordance with Chapter 43 of Title 38 of the United States Code, an Employee's period of Qualified Military Service shall be deemed service with the Employer for purposes of determining the vested percentage of the Employee's account.

(b) Earnings. An Employee who is in Qualified Military Service shall be treated as receiving Earnings from the Employer during such period of Qualified Military Service equal to:

(i) the Earnings the Employee would have received during such period if the Employee were not in Qualified Military Service, determined based on the rate of pay the Employee would have received from the Employer but for absence during the period of Qualified Military Service; or

(ii) if the Earnings the Employee would have received during such period was not reasonably certain, the Employee's average Earnings from the Employer during the 12-month period immediately preceding the Qualified Military Service (or, if shorter, the period of employment immediately preceding the Qualified Military Service).

Section 10.2 Death While In Qualified Military Service. Effective for deaths occurring on or after January 1, 2007, to the extent required by section 401(a)(37) of the Code and regulations or other guidance issued thereunder, the survivors of a Participant who dies while performing qualified military service (as defined in section 414(u) of the Code) shall be eligible for any additional benefits (other than benefit accruals relating to the period of qualified military service) that would have been provided under the Plan if the Participant had resumed employment and immediately thereafter terminated employment due to death.

ARTICLE XI.
PLAN ADMINISTRATION

Section 11.1 Fiduciary Responsibility. The Plan shall be administered by the Committee, which shall be the Plan's "named fiduciary" and "administrator," as those terms are defined by ERISA, and its agent designated to receive service of process. All matters relating to the administration of the Plan, including the duties imposed upon the Plan administrator by law, except those duties relating to the control or management of Plan assets, shall be the responsibility of the Committee. All matters relating to the control and management of Plan assets shall, except to the extent delegated in accordance with the trust agreement, be the sole and exclusive responsibility of the Trustee. The Committee shall administer the Plan for the exclusive benefit of Participants and their Beneficiaries.

Section 11.2 Appointment and Removal of Committee. The Committee shall consist of at least three persons who shall be appointed and may be removed by the Board of Directors. Persons appointed to the Committee may be, but need not be, employees of the Employer. Any Committee member may resign by giving written notice to the Board of Directors, which notice shall be effective 30 days after delivery. Notwithstanding the foregoing, any Committee member who is an Employee of the Employer shall be deemed to have resigned from the Committee effective upon his termination of employment. A Committee member may be removed by the Board of Directors by written notice to such Committee member, which notice shall be effective upon delivery. The Board of Directors shall promptly select a successor following the resignation or removal of the Committee member, if necessary to maintain a Committee of at least three members.

Section 11.3 Compensation and Expenses of Committee. Members of the Committee who are Employees shall serve without compensation. Members of the Committee who are not Employees may be paid reasonable compensation for services rendered to the Plan. Such compensation, if any, and all ordinary and necessary expenses of the Committee shall be paid by the Employer.

Section 11.4 Committee Procedures. The Committee may enact such rules and regulations for the conduct of its business and for the administration of the Plan as it may deem desirable. The Committee may act either at meetings at which a majority of its members are present or by a writing signed by a majority of its members without the holding of a meeting. Records shall be kept of the actions of the Committee. No member of the Committee shall act on any matter in which he alone is personally interested under the Plan. Except as may otherwise be provided by the Plan, the Committee shall have all powers necessary to accomplish the purposes of the Plan including, but not by way of limitation, the following:

(a) To interpret the provisions of the Plan and to decide any dispute that may arise regarding the rights of Participants thereunder. Any such determinations shall apply uniformly to all persons similarly situated and shall be binding and conclusive upon all interested persons.

(b) To determine all questions affecting the eligibility of any Employee to participate in the Plan, including, without limitation, to determine whether any individual performing services as an independent contractor is an Employee eligible to participate in the Plan and, if so, for what period.

(c) To compute the amount of benefits payable hereunder to any Participant.

(d) To authorize the application of funds to provide the retirement income benefits of Participants, surviving spouses and Contingent Annuitants.

(e) To appoint an actuary who shall make all actuarial computations required in the administration of the Plan, including those necessary to enable the Company and its Designated subsidiaries to comply with the provisions of Section 12.1.

(f) To employ such accountants, attorneys, consultants and other advisors as may be necessary or appropriate to the administration of the Plan and to delegate authority to such one or more members of the Committee or such other Employee of an appropriate Employer as the Committee shall determine.

(g) To prescribe from time to time, with the advice of an actuary, such actuarial assumptions as are necessary for the operation of the Plan. The factors and assumptions embodied in Tables 1 through 5 may be changed only by Plan amendment pursuant to Section 16.1(a).

(h) To authorize an amendment to the Plan extending the Plan to a group or groups of acquired employees in accordance with the terms and conditions set forth in any acquisition agreement previously approved by the Board of Directors, provided that no service shall be credited for benefit accrual purposes prior to the date on which the Plan is extended by the Company to the group or groups of acquired employees, except as specifically provided in the agreement approved by the Board.

Section 11.5 Delegation and Allocation of Responsibility. The Committee, by unanimous action in writing, may delegate any Plan administrative responsibility to any employee of the Employer and may allocate any of its responsibilities to one or more members of the Committee. In the event of any such delegation or allocation the Committee shall establish procedures for the thorough and frequent review of the performance of such duties. Persons to whom responsibilities have been delegated may not delegate to others any discretionary authority or discretionary control with respect to the management or administration of the Plan.

Section 11.6 Indemnification. The Company and Designated Subsidiaries shall, to the full extent permitted by law, indemnify and hold harmless each member of the Committee and each other director, officer or employee of the Company or of a Designated Subsidiary acting as a “fiduciary” of the Plan, as defined in section 3(21) of ERISA or any corresponding provisions of successor laws, against any liability or loss, including, without limitation, attorneys' fees and other expenses, excise taxes, judgments, fines and amounts paid in settlement, reasonably incurred by such "fiduciary" in connection with any claim (or actions or proceedings in respect thereof) arising out of or based upon an alleged breach of fiduciary duty, provided that he acted in good faith and in a manner he reasonably believed to be in, or not opposed to, the best interests of the Plan and, with respect to any criminal proceeding, had no reasonable cause to believe his conduct was unlawful, and further provided that the "fiduciary" shall have taken the steps required under any applicable insurance policy to preserve the coverage afforded by such insurance with respect to such liability or loss. If any action is brought against a "fiduciary" in respect of which indemnity may be sought against the Company or a Designated Subsidiary he shall promptly notify the Company in writing of the institution of such action, and the Company shall assume the defense of such action, including the employment of counsel and payment of expenses, to the extent that the same is not assumed by the insurance company. The "fiduciary" shall bear the fees and expenses of any additional counsel retained by him.

Section 11.7 Claims Procedure. The Committee shall administer a claims procedure as follows:

(a) Initial Claim. A Participant, surviving spouse or Contingent Annuitant (a "Claimant"), or the Claimant's authorized representative, who believes himself entitled to benefits under the Plan and who does not begin to receive those benefits within 120 days after the claimed benefit date may claim those benefits by submitting to his Employer within 90 days after the expiration of that 120 day period, a written notification of his claim of right to such benefits. A claim for benefits must be made in accordance with the procedures established by the Committee. Except for benefits paid pursuant to the small benefit cash out provisions of Section 7.1, no benefit shall be paid under the Plan until a proper claim for benefits has been submitted to the Committee. The Participant's Employer shall forward that claim to the Committee within five business days after it is filed.

(b) Procedure for Review. The Committee shall establish administrative processes and safeguards designed to ensure and to verify that benefit claim determinations are made in accordance with the Plan document and that, where appropriate, the Plan provisions have been applied consistently with respect to similarly situated claimants.

(c) Claim Denial Procedure. In the event that the initial claim is wholly or partially denied, the Committee shall, within 90 days (or in special cases, and upon prior written notice to the claimant, 180 days) of the receipt of the claim, provide written notice informing the Claimant of: (i) the reason or reasons for the denial, (ii) the specific reference to the Plan provisions on which the denial was based, (iii) any additional information which may be necessary to perfect the claim, with reasons therefor, and (iv) the procedure for reviewing the denial of the claim, including a description of the time limits applicable to the Plan's review procedures and a statement of the Claimant's right to bring a legal action following an adverse benefit determination on review.

(d) Appeal Procedure. In the case of an adverse benefit determination, the Claimant or his representative shall have the opportunity to appeal to the Committee for review provided the Claimant submits a proper written application for appeal within 90 days of receipt of the notification of the adverse benefit determination. Failure to submit a proper application for appeal within such 90 day period will cause such claim to be permanently denied. The Claimant shall have a right to: (i) review all pertinent documents and submit comments in writing, and (ii) receive, upon request and free of charge, reasonable access to, and copies of, all documents, records and other information relevant to the claim for benefits. The Committee's review shall take into account all comments, documents, records and other information submitted by the Claimant relating to the claim, without regard to whether such information was submitted or considered in the initial benefit determination.

(e) Decision on Appeal. No later than 60 days after its receipt of the request for review, the Committee shall render a decision in writing. If special circumstances require extension, and upon prior written notice to the claimant, the Committee's decision may be given within 120 days after receipt of the request for review. In the case of an adverse benefit determination on appeal, the written notice shall include: (i) the specific reason or reasons for the adverse determination, (ii) the specific reference to the Plan provision(s) on which the denial is based, (iii) a statement that the Claimant is entitled to receive, upon request and free of charge, reasonable access to and copies of all documents, records and other information relevant to the claim, and (iv) a statement of the Claimant's right to bring a legal action.

(f) Litigation. In order to operate and administer the claims procedure in a timely and efficient manner, any Claimant whose appeal with respect to a claim for benefits has been denied, and who desires to commence a legal action with respect to such claim, must commence such action in a court of competent jurisdiction within 90 days of receipt of notification of such denial. Failure to file such action by the prescribed time will forever bar the commencement of such actions.

Section 11.8 Plan Expenses. All fees of actuaries, accountants, attorneys, consultants or other advisors, and other expenses of the Plan, shall, as determined by the Committee, be paid from the Fund or allocated among the Company and its Designated Subsidiaries.

ARTICLE XII.
CONTRIBUTIONS

Section 12.1 Contributions.

(a) Contributions to Meet Funding Standards. The Company and its Designated Subsidiaries, shall each contribute to the Plan, by deposit with the Insurance Company or with the

Trustee or other fiduciary of any trust or other fund which may be established by the Company to hold, manage and invest amounts contributed under the Plan by the Company or its Designated Subsidiaries, an amount which shall not be less than the amount necessary to prevent an accumulated funding deficiency, as defined in section 412 of the Code, section 302 of ERISA, or corresponding provisions of successor laws, with respect to those of its Employees who are Participants in the Plan.

(b) Quarterly Installments. The Company and its Designated Subsidiaries shall endeavor to make four equal payments to the Fund on October 15, January 15 and April 15 of the Plan Year for which such payment is due and on July 15 of the next Plan Year. The amount of each payment shall equal the “applicable percentage” of the lesser of:

(i) 90 percent of the amount necessary to prevent an accumulated funding deficiency for the Plan Year, as defined in section 412 of the Code, or

(ii) 100 percent of the amount necessary to prevent an accumulated funding deficiency for the immediately preceding Plan Year.

(iii) The amount of each quarterly installment determined under this Section 12.1 shall be increased to the extent required under section 412(m) of the Code, if the Plan has any liabilities for “unpredictable contingent event benefits,” within the meaning of section 412(I)(7)(B)(ii), during the Plan Year.

(c) Additional Contributions. Payment of any difference between the amount of the Company’s and Designated Subsidiary’s contribution to the Fund as determined under Section 12.1(a) and the amount paid into the Fund under Section 12.1(b) shall be made within the time prescribed by the Code as the time within which contributions must be made in order to constitute (A) a credit to the Plan’s minimum funding standard account (or alternative funding standard account) for the Plan Year to which the contribution relates, and (B) an allowable Federal income tax deduction for the taxable year for which the contribution is made.

(d) Special Rule; Return of Contributions. It is intended that the Plan and the Fund shall continue to qualify under section 401(a) of the Code and that contributions are conditioned upon their deductibility under section 404 of the Code. Therefore, Section 12.1 shall be subject to the following provisions:

(i) The entire contribution attributable to any Plan Year as to which deductibility is disallowed shall be returned to the Employer, to the extent of the amount of the disallowance, within one year after the disallowance. Nondeductible contributions that are treated as *de minimis* pursuant to Revenue Procedure 90-49 shall be returned to the Employer within one year of the date of the Plan actuary’s certification of such non-deductibility.

(ii) In the case of a contribution which is made in whole or in part by reason of a mistake of fact, so much of such contribution as is attributable to the mistake of fact shall be returnable to the Employer upon demand by the Committee, upon presentation of evidence of the mistake of fact to the Insurance Company and of calculations as to the impact of such mistake. Demand and repayment must be effectuated within one year after the payment of the contribution to which the mistake applies.

Income and gains attributable to the excess contributions may not be recovered by the Employer. Losses attributable to such contribution shall reduce the amount the Employer may recover.

Section 12.2 Management of Funds. All funds to provide the benefits of the Plan shall be deposited with the Insurance Company or the Trustee to be held, managed and disposed of in accordance with the terms of the Insurance Contract, the Trust Agreement or any agreement with any Investment Manager. At no time and under no circumstances may the funds or any part thereof or income therefrom prior to the satisfaction of all liabilities for benefits under the Plan be used for or diverted to purposes other than the exclusive benefit of Participants, surviving spouses or Contingent Annuitants under the Plan. No one shall have any interest in or right to any part of the assets or the earnings of the funds, except as and to the extent expressly provided in the Plan.

ARTICLE XIII.
MISCELLANEOUS

Section 13.1 Liability of the Company. The Company and its Designated Subsidiaries shall have no liability for the payment of benefits under the Plan, except to make the contributions required under Section 12.1, nor shall the Company or any Designated Subsidiary have any liability for the administration of the funds or assets paid over to the Insurance Company, the Trustee or any Investment Manager, and each Participant, surviving spouse and Contingent Annuitant shall look solely to the Insurance Company, or Trustee for any payments or benefits under the Plan.

Section 13.2 Non-Alienation of Benefits. No benefits payable under the Plan shall be subject in any manner to anticipation, assignment or pledge and any attempt to anticipate, assign or pledge the same shall be void; and no such benefit shall be in any manner liable for or subject to the debts, contracts, liabilities, engagements or torts of any Participant, surviving spouse or Contingent Annuitant. This Section 13.2 shall not preclude the Insurance Company or the Trustee from complying with the terms of a qualified domestic relations order as defined in section 414(p) of the Code, or applicable provisions of successor laws.

Section 13.3 Facility of Payment. If any Participant, surviving spouse or Contingent Annuitant is, in the judgment of either the Insurance Company or the Trustee, legally, physically or mentally incapable of personally receiving or receipting for any benefit due hereunder, the

Insurance Company or the Trustee may make payment thereof to such other person, persons or institutions who, in the opinion of the Insurance Company or Trustee, are then maintaining or have custody of such Participant, surviving spouse or Contingent Annuitant until claim is made by the duly appointed guardian or other legal representative of such Participant, surviving spouse or Contingent Annuitant. Such payment shall constitute a full discharge of the liability of the Insurance Company or Trustee, to the extent thereof. Upon notice to the Insurance Company or Trustee of the appointment of a guardian or other legal representative of such Participant, surviving spouse or Contingent Annuitant, the Insurance Company or Trustee shall thereafter pay only to said guardian or other legal representative.

Section 13.4 Limitation on Benefits. Notwithstanding any other provisions of this Plan, the annual benefit, derived from Company, Designated Subsidiary or former Designated Subsidiary contributions, payable to any Participant under this Plan and any other defined benefit pension plan maintained by the Company or any Designated Subsidiary may not exceed the lesser of the amount determined under the primary limit or, effective until January 1, 2000, the combined limit provisions of Article C of Appendix 2, provided that in applying the combined limit any necessary reduction shall first be made in computing the benefit to be provided under this Plan.

Section 13.5 Right to Terminate Employment. The establishment or continuance of the Plan and of any Insurance Contract, Trust, or any contract with any Investment Manager, shall not confer upon any Participant the right to be continued in the employ of the Company or of any Designated Subsidiary and this Plan shall in no way restrict the right of the Company or of a Designated Subsidiary to terminate the employment of any employee, whether or not a Participant.

ARTICLE XIV.
TERMINATION OF THE PLAN - DISTRIBUTION OF ASSETS

Section 14.1 Order of Priorities. The Plan as a whole may be terminated at any time by the Board of Directors. In the event of such complete termination, or if for any reason the Plan is partially terminated the Accrued Benefits of all Participants affected by such complete or partial termination shall, to the extent then funded, become 100% vested. In the event of a complete or partial termination of the Plan, or upon a complete discontinuance of contributions required by Section 12.1, funds then held under the Plan for the benefit of affected Participants, surviving spouse and Contingent Annuitants shall be allocated to or for the benefit of the affected Participants, surviving spouse and Contingent Annuitants in the order set forth below and in the manner and amount provided in Sections 14.2 through 14.3.

(a) There shall first be credited to each Participant the amount, if any, necessary to provide that portion of his benefit derived from his own contributions.

(b) There shall then be credited to each Participant, surviving spouse and Contingent Annuitant whose benefit has been in pay status for at least three years as of the Plan's termination date, or whose benefit would have been in pay status during such period if the Participant had retired, and his benefit had begun immediately prior thereto, the amount, if any, necessary to provide the lowest level of benefit to which he was, or would have been, entitled under the provisions of the Plan in effect during the five year period ending on the Plan's termination date.

(c) There shall then be credited to each Participant, surviving spouse and Contingent Annuitant whose vested Accrued Benefit has not been fully provided under (a) or (b) above, the amount, if any, necessary to provide that portion of his vested Accrued Benefit, determined immediately prior to the Plan's termination, which does not exceed the lesser of:

(i) a monthly annuity equal to the Participant's average monthly gross income during the five consecutive calendar years during which his gross income received from the Company was highest; or

(ii) $750 multiplied by a percentage computed by dividing the Social Security Act contribution and benefit base at the time the Plan terminates by that base as in effect during 1974.

The amount allocated under this Section 14.1(c) shall be determined without regard to whether the Participant would be considered a "substantial owner" within the meaning of section 4022(b)(6) of ERISA, or any corresponding provisions of successor laws.

(d) There shall then be credited to each Participant, surviving spouse and Contingent Annuitant whose benefit has not been provided under (a) or (b) above, the amount, if any, necessary to provide the portion of his vested Accrued Benefit, determined immediately prior to the Plan's termination, not provided under (c) above. If the Plan has been amended during that five year period, the allocation of assets to benefits described in (d) which are attributable to such amendments shall be made on the basis of such amendments in the order in which they became effective.

(e) Finally, there shall be credited to each Participant, surviving spouse and Contingent Annuitant the amount, if any, necessary to provide any benefit to which he is entitled under the Plan to the extent such benefit has not been provided above.

(f) If the assets of the Plan are insufficient to provide in full the benefits described in (a), (b) or (c) above, the assets shall be allocated pro rata among all Participants, surviving spouses and Contingent Annuitants in the affected group on the basis of the present value, as of the Plan's termination date, of their respective benefits. If the assets of the Plan are insufficient to provide all benefits described in (d) (after all benefits described in (a) through (c) have been provided) those assets will first be allocated to any nonforfeitable benefits described in (d) under the Plan as in effect five years prior to the termination date, and thereafter to other benefits described in (d).

Section 14.2   Method of Allocation. The allocation of funds held under the Plan shall, with the advice of the actuary, be calculated by the Committee on the foregoing basis as of the date on which the Plan is discontinued or contributions are completely discontinued. When the calculations have been completed, and the Company shall have obtained such governmental approvals of the allocation of Plan assets, including approval by the Pension Benefit Guaranty Corporation, as the Committee may determine to be necessary, such funds shall be allocated to or for the benefit of the respective Participants, surviving spouses and Contingent Annuitants of each class in the order, and to the extent, stated in Section 14.1 above, except that (a) no Participant, surviving spouse or Contingent Annuitant shall be entitled to a share of any such funds greater than the actuarial value, at the date of such discontinuance of the Plan or contributions, of the total retirement income to which such Participant, surviving spouse or Contingent Annuitant would have been entitled under the Plan at the Participant's Normal Retirement Date pursuant to Sections 5.2, 5.6, and 5.7 had the Plan or contributions not been discontinued and had such Participant continued in employment until his Normal Retirement Date without change in Final Average Earnings, and (b) except to the extent required to comply with Title IV of ERISA, or any corresponding provisions of any successor laws, no assets previously allocated to the benefit of any Participant, surviving spouse or Contingent Annuitant shall be reallocated. The Committee shall have the right to determine whether the distribution shall be applied to purchase retirement income under any Insurance Contract or paid in cash. Any assets remaining after the distributions described in this Section 14.2 have been completed shall be allocated among, and returned to, the Company and its Designated Subsidiaries on the basis determined by the Committee, with the advice of the actuary.

Section 14.3   Restricted Benefits.

(a)   In the event of termination of the Plan, the benefit due any Participant or former Participant who is one of the 25 highest paid Participants shall be restricted in the manner set forth in this Section 14.3(a).

(i)   Benefit Restriction. The annual payments to a Participant described above in this Section 14.3(a) shall be restricted to an amount equal to the payments that would be made on behalf of such Participant under a single life annuity that is the Actuarial Equivalent of the sum of the Participant's Accrued Benefit and the Participant's other benefits, as described below.

(ii)   Definition of "Benefits". For purposes of this Section 14.3(a), the term "benefits" shall include loans in excess of the amounts set forth in section 72(p)(2)(A) of the Code, any periodic income, any withdrawal values payable to a living Participant, and any death benefits not provided for by insurance on the Participant's life.

(iii)   Restrictions Not Applicable. The restrictions described in this Section 14.3(a) shall not apply if:

(A) after payment to a Participant described in Section 14.3(a) of all benefits described in Section 14.3(a)(ii), the value of the Plan assets equals or exceeds 110% of the value of the current liabilities as defined in section 412(1)(7) of the Code for Plan Years beginning prior to January 1, 2008, and for Plan Years beginning on or after January 1, 2008, the funding target (as defined under section 430 of the Code), or

(B) the value of the benefits described in Section 14.3(a)(ii) for a Participant described in this Section 14.3(a) is less than 1% of the value of current liabilities.

(b) Any excess reserves arising by application of the provisions of Section 14.3(a), shall be used for the benefit of the other Participants, surviving spouses and Contingent Annuitants in accordance with Section 14.1.

(c) The provisions of Section 14.3(a) shall not restrict the purchase in full of retirement income benefits, including vested deferred benefits, called for by the Plan for any retired Participant, surviving spouse or Contingent Annuitant while the Plan is in full effect and its full current costs have been met; nor shall it restrict the purchase of any retirement income benefits withheld for a prior year (under the foregoing provisions) after all deficits for all prior years and full current costs have been met.

Section 14.4 Severance of a Subsidiary. If at any time any Designated Subsidiary ceases to be a Subsidiary or a Designated Subsidiary prior to termination of the Plan, the Employees of that Subsidiary shall then cease to be Participants in the Plan, and shall accrue no further benefits hereunder.

ARTICLE XV.
GOVERNMENTAL APPROVAL

Anything in this Plan to the contrary notwithstanding, the adoption of the Plan and any amendment thereto shall be conditioned upon the receipt of (A) a determination from the Commissioner of Internal Revenue to the effect that the Plan qualifies under the applicable provisions of the Code and (B) any required approval or authorization under any other applicable statute or regulation. Effective February 1, 2017, the Internal Revenue Service has discontinued the determination letter application program such that (A) shall no longer apply.

ARTICLE XVI.
AMENDMENTS

Section 16.1 Amendment.

(a) The Company and its Designated Subsidiaries hope and expect to continue the Plan indefinitely, but reserve the right to suspend or discontinue the Plan, or to reduce or discontinue contributions hereunder. The Plan may be amended at any time and from time to time by the Board of Directors or its properly authorized delegate. In addition, the Committee shall have the right to amend this Plan in whole or in part at any time and from time to time, provided that any such amendment is either required by law or does not materially increase the cost of the Plan. No amendment shall divest any vested interest of any Participant or beneficiary, and no amendment shall be effective unless the Plan continues to be for the exclusive benefit of the Participants and their beneficiaries. In addition, no amendment shall decrease a Participant’s vested interest, eliminate or reduce any benefit subsidy or early retirement benefit, or eliminate any optional form of benefit except in accordance with sections 411(d)(6) and 412(d)(2) (section 412(c)(8) for Plan Years beginning before July 1, 2008) of the Code.

(b) Notwithstanding the foregoing Section 16.1(a), any modification or amendment of the Plan, the Insurance Contract, any trust or other fund established under the Plan, or any provision thereof, may be made, retroactively if necessary, which the Company by action of the Board of Directors or its designee shall deem necessary or appropriate in order to comply with any applicable statute or regulations, including but not limited to the Code and the regulations thereunder.

Section 16.2 Merger, Consolidation or Transfer of Assets or Liabilities. The Company and its Designated Subsidiaries also reserve the right to merge or consolidate this Plan with any other pension plan qualified under applicable provisions of the Code, or to transfer any or all Plan assets or liabilities to any other pension plan qualified under applicable provisions of the Code, provided that, notwithstanding this Section 16.2, no such merger, consolidation or transfer of Plan assets or liabilities shall occur unless the benefit to which each affected Participant, surviving spouse or Contingent Annuitant would be entitled in the event of a plan termination immediately after such merger, consolidation or transfer will be at least equal to the benefit to which such Participant, surviving spouse or Contingent Annuitant would be entitled under this Plan if it terminated immediately prior to such merger, consolidation or transfer.

ARTICLE XVII.
LIMITATIONS APPLICABLE IF THE PLAN'S ADJUSTED FUNDING TARGET ATTAINMENT PERCENTAGE IS LESS THAN 80% OR IF THE PLAN SPONSOR IS IN BANKRUPTCY

Section 17.1 Limitations Applicable If the Plan's Adjusted Funding Target Attainment Percentage Is Less Than 80%, But Not Less Than 60%. Notwithstanding any other provisions of the Plan, if the Plan's adjusted funding target attainment percentage for a Plan Year is less than 80% (or would be less than 80% to the extent described in Section 17.1(b) below) but is not less than 60%, then the limitations set forth in this Section 17.1 apply.

(a) 50% Limitation on Single Sum Payments, Other Accelerated Forms of Distribution, and Other Prohibited Payments. A Participant or beneficiary is not permitted to elect, and the Plan shall not pay, a single sum payment or other optional form of benefit that includes a prohibited payment with an annuity starting date on or after the applicable section 436 measurement date, and the Plan shall not make any payment for the purchase of an irrevocable commitment from an insurer to pay benefits or any other payment or transfer that is a prohibited payment, unless the present value of the portion of the benefit that is being paid in a prohibited payment does not exceed the lesser of:

(i) 50% of the present value of the benefit payable in the optional form of benefit that includes the prohibited payment; or

(ii) 100% of the PBGC maximum benefit guarantee amount (as defined in section 1.436-1(d)(3)(iii)(C) of the Treasury Regulations).

The limitation set forth in this Section 17.1(a) does not apply to any payment of a benefit which under section 411(a)(11) of the Code may be immediately distributed without the consent of the Participant. If an optional form of benefit that is otherwise available under the terms of the Plan is not available to a Participant or beneficiary as of the annuity starting date because of the application of the requirements of this Section 17.1(a), the Participant or beneficiary is permitted to elect to bifurcate the benefit into unrestricted and restricted portions (as described in section 1.436-1(d)(3)(iii)(D) of the Treasury Regulations). The Participant or beneficiary may also elect any other optional form of benefit otherwise available under the Plan at that annuity starting date that would satisfy the 50%/PBGC maximum benefit guarantee amount limitation described in this Section 17.1(a), or may elect to defer the benefit in accordance with any general right to defer commencement of benefits under the Plan.

During a period when Section 17.1(a) applies to the Plan, Participants and beneficiaries are permitted to elect payment in any optional form of benefit otherwise available under the Plan that provides for the current payment of the unrestricted portion of the benefit (as described in section 1.436-1(d)(3)(iii)(D) of the Treasury Regulations), with a delayed commencement for the restricted portion of the benefit (subject to other applicable qualification requirements, such as sections 411(a)(11) and 401(a)(9) of the Code).

(b) Plan Amendments Increasing Liability for Benefits. No amendment to the Plan that has the effect of increasing liabilities of the Plan by reason of increases in benefits, establishment of new benefits, changing the rate of benefit accrual, or changing the rate at which benefits become nonforfeitable shall take effect in a Plan Year if the adjusted funding target attainment percentage for the Plan Year is:

(i) Less than 80%; or

(ii) 80% or more, but would be less than 80% if the benefits attributable to the amendment were taken into account in determining the adjusted funding target attainment percentage.

The limitation set forth in this Section 17.1(b) does not apply to any amendment to the Plan that provides a benefit increase under a Plan formula that is not based on compensation, provided that the rate of such increase does not exceed the contemporaneous rate of increase in the average wages of Participants covered by the amendment.

Section 17.2 Limitations Applicable If the Plan's Adjusted Funding Target Attainment Percentage Is Less Than 60%. Notwithstanding any other provisions of the Plan, if the Plan's adjusted funding target attainment percentage for a Plan Year is less than 60% (or would be less than 60% to the extent described in Section 17.2(b) below), then the limitations in this Section 17.2 apply.

(a) Single Sums, Other Accelerated Forms of Distribution, and Other Prohibited Payments Not Permitted. A Participant or beneficiary is not permitted to elect, and the Plan shall not pay, a single sum payment or other optional form of benefit that includes a prohibited payment with an annuity starting date on or after the applicable section 436 measurement date, and the Plan shall not make any payment for the purchase of an irrevocable commitment from an insurer to pay benefits or any other payment or transfer that is a prohibited payment. The limitation set forth in this Section 17.2(a) does not apply to any payment of a benefit which under Section 411(a)(11) of the Code may be immediately distributed without the consent of the Participant.

(b) Shutdown Benefits and Other Unpredictable Contingent Event Benefits Not Permitted to Be Paid. An unpredictable contingent event benefit with respect to an unpredictable contingent event occurring during a Plan Year shall not be paid if the adjusted funding target attainment percentage for the Plan Year is:

(i) Less than 60%; or

(ii) 60% or more, but would be less than 60% if the adjusted funding target attainment percentage were redetermined applying an actuarial assumption that the likelihood of occurrence of the unpredictable contingent event during the Plan Year is 100%.

(c) Benefit Accruals Frozen. Benefit accruals under the Plan shall cease as of the applicable section 436 measurement date. In addition, if the Plan is required to cease benefit accruals under this Section 17.2(c), then the Plan is not permitted to be amended in a manner that would increase the liabilities of the Plan by reason of an increase in benefits or establishment of new benefits.

Section 17.3 Limitations Applicable If the Plan Sponsor Is In Bankruptcy. Notwithstanding any other provisions of the Plan, a Participant or beneficiary is not permitted to elect, and the Plan shall not pay, a single sum payment or other optional form of benefit that includes a prohibited payment with an annuity starting date that occurs during any period in which the Plan sponsor is a debtor in a case under title 11, United States Code, or similar Federal or State law, except for payments made within a Plan Year with an annuity starting date that occurs on or after the date on which the Plan's enrolled actuary certifies that the Plan's adjusted funding target attainment percentage for that Plan Year is not less than 100%. In addition, during such period in which the Plan sponsor is a debtor, the Plan shall not make any payment for the purchase of an irrevocable commitment from an insurer to pay benefits or any other payment or transfer that is a prohibited payment, except for payments that occur on a date within a Plan Year that is on or after the date on which the Plan's enrolled actuary certifies that the Plan's adjusted funding target attainment percentage for that Plan Year is not less than 100%. The limitation set forth in this Section 17.3 does not apply to any payment of a benefit which under section 411(a)(11) of the Code may be immediately distributed without the consent of the Participant.

Section 17.4 Provisions Applicable After Limitations Cease to Apply.

(a) Resumption of Prohibited Payments. If a limitation on prohibited payments under Section 17.1(a), Section 17.2(a), or Section 17.3 applied to the Plan as of a section 436 measurement date, but that limit no longer applies to the Plan as of a later section 436 measurement date, then that limitation does not apply to benefits with annuity starting dates that are on or after that later section 436 measurement date.

In addition, after the section 436 measurement date on which the limitation on prohibited payments under Section 17.1(a) or 17.2(a) ceases to apply to the Plan, any Participant or beneficiary who had an annuity starting date within the period during which that limitation applied to the Plan is permitted to make a new election (within 90 days after the section 436 measurement date on which the limit ceases to apply or, if later, 30 days after receiving notice of the right to make such election) under which the form of benefit previously elected is modified at a new annuity starting date to be changed to a single sum payment for the remaining value of the Participant or beneficiary's benefit under the Plan, subject to the other rules in this Article XVII and applicable requirements of section 401(a) the Code, including spousal consent.

(b) Resumption of Benefit Accruals. If a limitation on benefit accruals under Section 17.2(c) applied to the Plan as of a section 436 measurement date, but that limitation no longer applies to the Plan as of a later section 436 measurement date, then benefit accruals shall resume prospectively and that limitation does not apply to benefit accruals that are based on service on or after that later section 436 measurement date, except as otherwise provided under the Plan. The Plan shall comply with the rules relating to partial years of participation and the prohibition on double proration under Department of Labor regulation 29 CFR section 2530.204-2(c) and (d).

In addition, benefit accruals that were not permitted to accrue because of the application of Section 17.2(c) shall be restored when that limitation ceases to apply if the continuous period of the limitation was 12 months or less and the Plan's enrolled actuary certifies that the adjusted funding target attainment percentage for the Plan Year would not be less than 60% taking into account any restored benefit accruals for the prior Plan Year.

(c) Shutdown and Other Unpredictable Contingent Event Benefits. If an unpredictable contingent event benefit with respect to an unpredictable contingent event that occurs during the Plan Year is not permitted to be paid after the occurrence of the event because of the limitation of Section 17.2(b), but is permitted to be paid later in the same Plan Year (as a result of additional contributions or pursuant to the enrolled actuary's certification of the adjusted funding target attainment percentage for the Plan Year that meets the requirements of section 1.436-1(g)(5)(ii)(B) of the Treasury Regulations), then that unpredictable contingent event benefit shall be paid, retroactive to the period that benefit would have been payable under the terms of the Plan (determined without regard to Section 17.2(b)). If the unpredictable contingent event benefit does not become payable during the Plan Year in accordance with the preceding sentence, then the Plan is treated as if it does not provide for that benefit.

(d) Treatment of Plan Amendments That Do Not Take Effect. If a Plan amendment does not take effect as of the effective date of the amendment because of the limitation of Section 17.1(b) or Section 17.2(c), but is permitted to take effect later in the same Plan Year (as a result of additional contributions or pursuant to the enrolled actuary's certification of the adjusted funding target attainment percentage for the Plan Year that meets the requirements of section 1.436-1(g)(5)(ii)(C) of the Treasury Regulations), then the Plan amendment must automatically take effect as of the first day of the Plan Year (or, if later, the original effective date of the amendment). If the Plan amendment cannot take effect during the same Plan Year, then it shall be treated as if it were never adopted, unless the Plan amendment provides otherwise.

Section 17.5 Notice Requirement. See section 101(j) of ERISA for rules requiring the plan administrator of a single employer defined benefit pension plan to provide a written notice to participants and beneficiaries within 30 days after certain specified dates if the plan has become subject to a limitation described in Section 17.1(a), Section 17.2, or Section 17.3.

Section 17.6 Methods to Avoid or Terminate Benefit Limitations. See section 436(b)(2), (c)(2), (e)(2), and (f) of the Code and section 1.436-1(f) of the Treasury Regulations for rules relating to employer contributions and other - methods- to avoid or-terminate- the -application of -the- -limitations -set -forth in- - Sections 17.1 through 17.3 for a Plan Year. In general, the methods a plan sponsor may use to avoid or terminate one or more of the benefit limitations under Sections 17.1 through 17.3 for a Plan Year include employer contributions and elections to increase the amount of plan assets which are taken into account in determining the adjusted funding target attainment percentage, making an employer contribution that is specifically designated as a current year contribution that is made to avoid or terminate application of certain of the benefit limitations, or providing security to the plan.

Section 17.7 Special Rules.

(a) Rules of Operation for Periods Prior to and After Certification of Plan's Adjusted Funding Target Attainment Percentage.

(i) In General. Section 436(h) of the Code and section 1.436-1(h) of the Treasury Regulations set forth a series of presumptions that apply (1) before the Plan's enrolled actuary issues a certification of the Plan's adjusted funding target attainment percentage for the Plan Year and (2) if the Plan's enrolled actuary does not issue a certification of the Plan's adjusted funding target attainment percentage for the Plan Year before the first day of the tenth month of the Plan Year (or if the Plan's enrolled actuary issues a range certification for the Plan Year pursuant to section 1.436-1(h)(4)(ii) of the Treasury Regulations but does not issue a certification of the specific adjusted funding target attainment percentage for the Plan by the last day of the Plan Year). For any period during which a presumption under section 436(h) of the Code and section 1.436¬1(h) of the Treasury Regulations applies to the Plan, the limitations under Sections 17.1 through 17.3 are applied to the Plan as if the adjusted funding target attainment percentage for the Plan Year were the presumed adjusted funding target attainment percentage determined under the rules of section 436(h) of the Code and section 1.436-1(h)(1), (2), or (3) of the Treasury Regulations. These presumptions are set forth in Section 17.7(a)(ii) though (iv).

(ii) Presumption of Continued Underfunding Beginning First Day of Plan Year. If a limitation under Section 17.1, 17.2, or 17.3 applied to the Plan on the last day of the preceding Plan Year, then, commencing on the first day of the current Plan Year and continuing until the Plan's enrolled actuary issues a certification of the adjusted funding target attainment percentage for the Plan for the current Plan Year, or, if earlier, the date Section 17.7(a)(iii) or Section 17.7(a)(iv) applies to the Plan:

(A) The adjusted funding target attainment percentage of the Plan for the current Plan Year is presumed to be the adjusted funding target attainment percentage in effect on the last day of the preceding Plan Year; and

(B) The first day of the current Plan Year is a section 436 measurement date.

(iii) Presumption of Underfunding Beginning First Day of Fourth Month. If the Plan's enrolled actuary has not issued a certification of the adjusted funding target attainment percentage for the Plan Year before the first day of the fourth month of the Plan Year and the Plan's adjusted funding target attainment percentage for the preceding Plan Year was either at least 60% but less than 70% or at least 80% but less than 90%, or is described in section 1.436-1(h)(2)(ii) of the Treasury Regulations, then, commencing on the first day of the fourth month of the current Plan Year and continuing until the Plan's enrolled actuary issues a certification of the adjusted funding target attainment percentage for the Plan for the current Plan Year, or, if earlier, the date Section 17.7(a)(iv) applies to the Plan:

(A) The adjusted funding target attainment percentage of the Plan for the current Plan Year is presumed to be the Plan's adjusted funding target attainment percentage for the preceding Plan Year reduced by 10 percentage points; and

(B) The first day of the fourth month of the current Plan Year is a section 436 measurement date.

(iv) Presumption of Underfunding On and After First Day of Tenth Month. If the Plan's enrolled actuary has not issued a certification of the adjusted funding target attainment percentage for the Plan Year before the first day of the tenth month of the Plan Year (or if the Plan's enrolled actuary has issued a range certification for the Plan Year pursuant to section 1.436-1(h)(4)(ii) of the Treasury Regulations but has not issued a certification of the specific adjusted funding target attainment percentage for the Plan by the last day of the Plan Year), then, commencing on the first day of the tenth month of the current Plan Year and continuing through the end of the Plan Year:

(A) The adjusted funding target attainment percentage of the Plan for the current Plan Year is presumed to be less than 60%; and

(B) The first day of the tenth month of the current Plan Year is a section 436 measurement date.

(b) New Plans, Plan Termination, Certain Frozen Plans, and Other Special Rules.

(i) First 5 Plan Years. The limitations in Section 17.1(b), Section 17.2(b), and Section 17.2(c) do not apply to a new plan for the first 5 plan years of the plan, determined under the rules of section 436(i) of the Code and section 1.436-1(a)(3)(i) of the Treasury Regulations.

(ii) Plan Termination. The limitations on prohibited payments in Section 17.1(a), Section 17.2(a), and Section 17.3 do not apply to prohibited payments that are made to carry out the termination of the Plan in accordance with applicable law. Any other limitations under this Section of the Plan do not cease to apply as a result of termination of the Plan.

(iii) Exception to Limitations on Prohibited Payments Under Certain Frozen Plans. The limitations on prohibited payments set forth in Sections 17.1(a), 17.2(a), and 17.3 do not apply for a Plan Year if the terms of the Plan, as in effect for the period beginning on September 1, 2005, and continuing through the end of the Plan Year, provide for no benefit accruals with respect to any Participants. This Section 17.7(b)(iii) shall cease to apply as of the date any benefits accrue under the Plan or the date on which a Plan amendment that increases benefits takes effect.

(iv) Special Rules Relating to Unpredictable Contingent Event Benefits and Plan Amendments Increasing Benefit Liability. During any period in which none of the presumptions under Section 17.7(a) apply to the Plan and the Plan's enrolled actuary has not yet issued a certification of the Plan's adjusted funding target attainment percentage for the Plan year, the limitations under Section 17.1(b) and Section 17.2(b) shall be based on the inclusive presumed adjusted funding target attainment percentage for the Plan, calculated in accordance with the rules of section 1.436-1(g)(2)(iii) of the Treasury Regulations.

(c) Special Rules Under PRA 2010.

(i) Payments Under Social Security Leveling Options. For purposes of determining whether the limitations under Section 17.1(a) or 17.2(a) apply to payments under a social security leveling option, within the meaning of section 436(j)(3)(C)(i) of the Code, the adjusted funding target attainment percentage for a Plan Year shall be determined in accordance with the "Special Rule for Certain Years" under section 436(j)(3) of the Code and any Treasury Regulations or other published guidance thereunder issued by the Internal Revenue Service.

(ii) Limitation on Benefit Accruals. For purposes of determining whether the accrual limitation under Section 17.2(c) applies to the Plan the adjusted funding target attainment percentage for a Plan Year shall be determined in accordance with the "Special Rule for Certain Years" under section 436(j)(3) of the Code (except as provided under section 203(b) of the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010, if applicable).

(d) Interpretation of Provisions. The limitations imposed by this Section of the Plan shall be interpreted and administered in accordance with section 436 of the Code and section 1.436-1 of the Treasury Regulations.

Section 17.8 Definitions. The definitions in the following Treasury Regulations apply for purposes of Sections 17.1 through 17.7: section 1.436¬1(j)(1) defining adjusted funding target attainment percentage; section 1.436¬1(j)(2) defining annuity starting date; section 1A36-1(j)(6) defining prohibited payment; section 1.436-1(j)(8) defining section 436 measurement date; and section 1.436-1(j)(9) defining an unpredictable contingent event and an unpredictable contingent event benefit.

Section 17.9 Effective Date. The rules in Sections 17.1 through 17.8 are effective for Plan Years beginning after December 31, 2007.

To record the adoption of the amendment and restatement of the Plan, American Water Works Company, Inc. has caused its authorized officer to execute the Plan on its behalf and to affix its corporate name and seal this 24th day of January, 2017.

[CORPORATE SEAL]	AMERICAN WATER WORKS COMPANY, INC.
	By: /s/ Brenda J. Holdnak

EXHIBIT A

LIST OF DESIGNATED SUBSIDIARIES

- American Water Works Company, Inc.
- American Water Enterprises, Inc. (participating only with respect to certain grandfathered employees)
  - ❿ AAET, L.P.
  - EA2 Systems L.C.
  - American Water Operations and Maintenance, Inc.
  - American Water Services CDM, Inc.
- American Water Resources, Inc. (participating only with respect to certain grandfathered employees)
- American Water Works Service Company, Inc.
- Arizona-American Water Company (prior to July 1, 2011)
- California-American Water Company
- Hawaii American Water Company
- Illinois-American Water Company
- Indiana-American Water Company, Inc.
- Iowa-American Water Company
- Kentucky-American Water Company
- Maryland-American Water Company
- Michigan American Water Company
- Missouri-American Water Company
- New Jersey-American Water Company, Inc.
- New Mexico-American Water Company (prior to July 1, 2011)
- New York American Water Company, Inc. (participating only with respect to the component of the, company formerly known as Long Island Water Corporation)
- Ohio-American Water Company (prior to May 1, 2012)
- Pennsylvania-American Water Company
- Tennessee-American Water Company
- Virginia-American Water Company
- West Virginia-American Water Company
  - Bluefield Valley Water Works Company

APPENDIX 1

INCREASE IN RETIREMENT INCOME FOR CERTAIN RETIRED PARTICIPANTS

Increase Effective October 1, 1980.

(1) Effective October 1, 1980, the monthly benefits of Participants who retired prior to January 1, 1978, and of surviving spouses and Contingent Annuitants of any such Participants who were receiving benefits under the Plan shall be increased in accordance with the provisions of Paragraph 2 of this Appendix 1.

(2) The amount of monthly benefit payable to a former or retired Participant or to his surviving spouse or Contingent Annuitant under the Plan shall be increased by 4% for each full calendar year, or fraction thereof, between the effective date of the Participant's commencement of monthly benefits and December 31, 1977, up to a maximum of 32% of such monthly benefit.

(3) Any potential benefit which may become payable to the surviving spouse or Contingent Annuitant of a Participant whose benefit is adjusted under Paragraph 2 of this Appendix 1 shall be adjusted by the same percentage as is applied in adjusting the Participant's benefit.

Increase Effective October 1, 1985.

(4) Effective October 1, 1985, the monthly benefits of Participants who retired prior to January 1, 1984 and of any surviving spouses and Contingent Annuitants who were receiving benefits under the Plan shall be increased in accordance with the provisions of Paragraph (5) of this Appendix 1. That increase shall be in addition to any increase provided under Paragraphs (1) through (3) above, but shall not apply to any benefit attributable to any plan merged into this Plan.

(5) The amount of monthly benefit payable to a former or retired Participant or to his surviving spouse or Contingent Annuitant under the Plan shall be increased by 3% for each full calendar year, or fraction thereof, between the effective date of the Participant's commencement of monthly benefits and December 31, 1983, up to a maximum of 18% of such monthly benefit.

(6) Any potential benefit which may become payable to the surviving spouse or Contingent Annuitant of a Participant whose benefit is adjusted under Paragraph (4) of this Appendix 1 shall be adjusted by the same percentage as is applied in adjusting the Participant's benefit.

APPENDIX 2

TOP-HEAVY PROVISIONS AND BENEFIT LIMITS

A. Top-Heavy Plan Definitions.

The following words and phrases as used herein have the following meanings unless a different meaning is plainly required by the context:

A.1 "Account Balance" means the sum of:

A.1.1 the present value, as of the Top-Heavy Valuation Date, of a Participant's Accrued Benefit under the Plan, determined in the same manner as Actuarial Equivalent forms of benefit are determined under the Plan;

A.1.2 the balance, as of the Top-Heavy Valuation Date, standing to the credit of a Participant (including a surviving spouse or Contingent Annuitant of such Participant) in any Defined Contribution Plan maintained by the Employer, including contributions that would be allocated as of the Top-Heavy Valuation Date, even though these amounts are not yet required to be contributed, and any contribution attributable (A) to a plan-to-plan transfer or rollover contribution from another qualified employee pension benefit plan or a rollover individual retirement account, accepted before January 1, 1984, or (B) a related plan-to-plan transfer or rollover individual retirement account; and

A.1.3 the aggregate distributions made with respect to such Participant (including a surviving spouse or Contingent Annuitant of such Participant) under the Plan during the five year period ending on the Determination Date. If a distribution is made in the form of an annuity contract, the amount of such distribution shall be equal to the actuarial value of the contract, determined on the date of the distribution. Benefits paid on account of death shall only be included to the extent of the present value of the decedent's Accrued Benefit immediately prior to death.

The term "Account Balance" shall not include any amount held or distributed on behalf of any Participant who is a Former Key Employee, or who has performed no service for the Employer (other than benefits under qualified plans maintained by the Employer) at any time during the five year period ending on the Determination Date or any amount attributable to qualified voluntary employee contributions (within the meaning of section 219(e)(2) of the Code).

A.2 "Aggregation Group" means:

A.2.1 a Required Aggregation Group, or

A.2.2 a Permissive Aggregation Group.

A.3 "Compensation" shall include all amounts that are treated as wages for Federal income tax withholding under section 3401(a) of the Code (determined without regard to any rules that limit the remuneration included in wages based on the nature or location of the employment or the services performed) and actually paid to the Participant during the Limitation Year. Notwithstanding the foregoing, for Limitation Years beginning on and after July 1, 2007, Compensation includes regular pay as described in Treas. Reg. § 1.415(c)-(2)(e)(3) if paid by the end of the Limitation Year that includes the Employee's termination of employment, or if later, 2½ months after the Employee's termination of employment. Any payments not described in the foregoing sentence shall not be considered Compensation if paid after separation from service, even if they are paid by the later of 2½ months after the date of separation from service or the end of the Limitation Year that includes the date of severance from employment. Effective for distributions made on and after January 1, 2009, Compensation shall include the amount of any military differential wage payments made by the Employer to a Participant in accordance with section 3401(h) and section 414(u)(12) of the Code.

A.4 "Defined Benefit Plan" means any employee pension plan maintained by the Employer that is qualified under section 401(a) of the Code and is not a Defined Contribution Plan.

A.5 "Defined Contribution Plan" means an employee pension plan maintained by the Employer that is qualified under section 401(a) of the Code and provides for an individual account for each Participant and for benefits based solely on the amount contributed to the Participant's account, and any income, expenses, gains and losses, and any forfeitures of accounts of other Participants that may be allocated to such Participant's account.

A.6 "Determination Date" means:

A.6.1 if the Plan is not included in an Aggregation Group, the last day of the preceding Plan Year; or

A.6.2 if the Plan is included in an Aggregation Group, the Determination Date as determined under Section A.6.1 that falls within the same calendar year of each other plan included in such Aggregation Group.

A.7 "Employee" means the Employer as defined in Section 2.1(q) of the Plan.

A.8 "Former Key Employee" means an Employee or former Employee who is a Non-Key Employee with respect to the Plan for the Plan Year if such individual was a Key Employee with respect to the Plan for any prior Plan Year.

A.9 "Key Employee" means any Employee or former Employee (including any deceased Employee) who at any time during the Plan Year that includes the Determination Date was an officer of the Employer having annual Compensation greater than the dollar amount specified in section 416(i)(1) of the Code as in effect for the Plan Year ($175,000 for 2017), adjusted for cost-of-living, a five-percent owner of the Employer, or a one-percent owner of the Employer having annual Compensation of more than $150,000. For this purpose, annual Compensation means Compensation within the meaning of section 415(c)(3) of the Code. The determination of who is a Key Employee will be made in accordance with section 416(i)(1) of the Code and the applicable regulations and other guidance of general applicability issued thereunder.

A.10 "Non-Key Employee" means any Participant in the Plan (including a surviving spouse or Contingent Annuitant of such Participant) who is not a Key Employee with respect to the Plan for the Plan Year.

A.11 "Permissive Aggregation Group" means:

A.11.1 each plan of the Employer included in a Required Aggregation Group; and

A.11.2 each other plan of the Employer if the group of plans consisting of such plan or plans included in the Required Aggregation Group, when considered as a single plan, meets the requirements of section 401(a)(4) and section 410 of the Code.

A.12 "Required Aggregation Group" means:

A.12.1 each plan of the Employer in which a Key Employee participated (regardless of whether such plan has been terminated) during the Plan Year ending on the Determination Date; and

A.12.2 each other plan of the Employer which enables any plan described in Section A.12.1 to meet the requirements of section 401(a)(4) or section 410 of the Code, including any such plan terminated within the one-year period ending on the Determination Date.

A.13 "Top-Heavy Group" means an Aggregation Group in which, as of the Determination Date, the sum of:

A.13.1 the aggregate of the Account Balances of Key Employees under all Defined Contribution Plans included in such Aggregation Group, and

A.13.2 the aggregate of the present value of cumulative accrued benefits for Key Employees under all Defined Benefit Plans included in such Aggregation Group, exceeds 60% of the sum of such aggregates determined for all Employees included in the Aggregation Group.

A.14 "Top-Heavy Plan" means the Plan, if as of the Determination Date:

A.14.1 the aggregate of the Account Balances of Key Employees exceeds 60% of the aggregate of the Account Balances of all Employees; or

A.14.2 the Plan is part of a Required Aggregation Group which is a Top-Heavy Group.

Notwithstanding Section A.14.1 and Section A.14.2, the Plan shall not be considered a Top-Heavy Plan for any Plan Year in which the Plan is a part of a Required Aggregation Group or a Permissive Aggregation Group which is not a Top-Heavy Group.

A.15 "Top-Heavy Valuation Date" means the Determination Date.

B. Top-Heavy Plan Provisions.

Notwithstanding anything in the Plan to the contrary, if the Plan is a Top-Heavy Plan within the meaning of Section A.14 and section 416(g) of the Code for any Plan Year beginning after December 31, 1983, then the Plan shall meet the requirements of Section B.1, Section B.2 and Section B.3 for each such Plan Year.

B.1 Minimum Vesting Requirement. The vested interest of a Participant who is credited with an Hour of Service after the Plan becomes a Top-Heavy Plan will be determined under a schedule which is not less favorable to the Participant than the following:

Years of Service As Defined in Section 2.1(nn)(ii)	Vested Interest
Less than one	0%
One but less than two	20%
Two but less than three	40%
Three but less than four	60%
Four but less than five	80%
Five or more	100%

B.2 Minimum Benefit or Contribution Requirement.

B.2.1. This Plan shall provide a minimum annual retirement benefit for each such Plan Year for each Participant who is a Non-Key Employee in an amount equal to 2% of such Participant's average Compensation for the period of consecutive years (not exceeding five) during which the Participant had the greatest aggregate Compensation from the Employer, multiplied by the Participant's Years of Service, not to exceed 10.

B.2.2 The minimum benefit or contribution shall be made for each Non-Key Employee who is employed at the end of the Plan Year in question, regardless of whether such Non-Key Employee has been credited with 1,000 Hours of Service in such Plan Year and regardless of such Non-Key Employee's level of Compensation.

B.3 Change in Top-Heavy Status. If the Plan becomes a Top-Heavy Plan and subsequently ceases to be a Top-Heavy Plan, the vesting schedule in Section B.1 shall continue to apply in determining the vested percentage of the Accrued Benefit of any Participant who had at least five Years of Service as of the last day of the last Plan Year in which the Plan was a Top-Heavy Plan. For all other Participants, the vesting schedule in Section B.1 shall apply only to their Accrued Benefit as of such last day.

B.4 Determination of Present Values and Amounts. Effective for Plan Years beginning after December 31, 2001, this Paragraph shall apply for purposes of determining the present values of Accrued Benefits and the amounts of Account Balances of Employees as of the Determination Date.

B.4.1 The present values of Accrued Benefits and the amounts of Account Balances of an Employee as of the Determination Date shall be increased by the distributions made with respect to the Employee under the Plan and any plan aggregated with the Plan under section 416(g)(2) of the Code during the one-year period ending on the Determination Date. The preceding sentence shall also apply to distributions under a terminated plan which, had it not been terminated, would have been aggregated with the Plan under section 416(g)(2)(A)(i) of the Code. In the case of a distribution made for a reason other than severance from employment, death, or disability, this provision shall be applied by substituting "five-year period" for "one-year period."

B.4.2 The Accrued Benefits and Account Balances of any individual who has not performed services for the Employer during the one-year period ending on the Determination Date shall not be taken into account.

B.5 Minimum Benefits. Effective for Plan Years beginning after December 31, 2001, for purposes of satisfying the minimum benefit requirements of section 416(c)(1) of the Code and the Plan, in determining Years of Service with the Employer, any service with the Employer shall be disregarded to the extent that such service occurs during a Plan Year when the Plan benefits (within the meaning of section 410(b) of the Code) no Key Employee or former Key Employee.

C. Limitations on Benefits - Code Section 415 Limit.

C.1 Effective for Limitation Years ending after December 31, 2001, in no case shall the annual benefit with respect to any Participant payable under the Plan and all other Defined Benefit Plans, when expressed in the form of an annual single life annuity (with no ancillary benefits), exceed the “maximum permissible benefit” which shall be the lesser of the amount determined under Paragraph C.1.1 or C.1.2 (both adjusted where required, as provided in Paragraph C.1.3, and, if applicable, in Paragraph C.1.4 or Paragraph C.1.5):

C.1.1 the dollar limitation specified in section 415(b)(1)(A) of the Code, as in effect for the Limitation Year ($215,000 for 2017), as adjusted, effective January 1 of each year under section 415(d) of the Code in such manner as the Secretary of the Treasury shall prescribe (the “Defined Benefit Dollar Limitation”)); or

C.1.2 the greater of $10,000 or 100% of the Participant’s average annual Compensation received during the three consecutive years of Continuous Service (years of participation in the Plan for Limitation Years beginning before January 1, 2006) with the Employer and all 50% related employers during which he receives the greatest aggregate annual Compensation. The $10,000 restriction shall not apply if the Participant participates in any defined contribution plan maintained by the Employer, a 50% related employer or a predecessor employer. For purposes of determining the $10,000 amount, the benefit payable to the Participant under the Plan for a Limitation Year reflects all amounts payable under the Plan for the Limitation Year (except as otherwise provided in Treas. Reg. § 1.415(d)-1) and are not adjusted for faun of benefit or commencement date.

C.1.3 If the Participant has fewer than 10 years of participation in the Plan, the Defined Benefit Dollar Limitation shall be multiplied by a fraction, (i) the numerator of which is the number of years (or part thereof) of participation in the Plan and (ii) the denominator of which is 10. In the case of a Participant who has fewer than 10 Years of Service with the Employer, the Defined Benefit Dollar Limitation shall be multiplied by a fraction (i) the numerator of which is the number of years (or part thereof) of service with the Employer and (ii) the denominator of which is 10.

C.1.4 If the benefit of a Participant begins prior to age 62, the Defined Benefit Dollar Limitation applicable to the Participant at such earlier age is an annual benefit payable in the form of a straight life annuity beginning at the earlier age that is the Actuarial Equivalent of the Defined Benefit Dollar Limitation applicable to the Participant at age 62 (adjusted under Paragraph C.1.3 above, if required). The Defined Benefit Dollar Limitation applicable at an age prior to age 62 is determined as the lesser of (i) the Actuarial Equivalent (at such age) of the Defined Benefit Dollar Limitation computed using the interest rate provided under Section 2.1(b), or (ii) the Actuarial Equivalent (at such age) of the Defined Benefit Dollar Limitation computed using a 5 percent interest rate. Any decrease in the Defined Benefit Dollar Limitation determined in accordance with this Paragraph C.1.4 shall not reflect a mortality decrement if benefits are not forfeited upon the death of the Participant. If any benefits are forfeited upon death, the full mortality decrement is taken into account.

Effective for Limitation Years beginning on and after July 1, 2007, the defined benefit dollar limitation applicable at an age prior to age 62 is determined as the lesser of (1) the actuarial equivalent at such age of the defined benefit dollar limitation computed using a 5% interest rate and the applicable mortality table under section 417(e)(3) of the Code, or (2) the amount determined by multiplying the defined benefit dollar limitation by the ratio of the annual amount of the single life annuity beginning at such earlier age (computed using the interest rate and mortality table as applicable under Section 2.1(b)) to the annual amount of the single life annuity under the Plan commencing at age 62 (with both such amounts determined without application of the rules of section 415 of the Code).

C.1.5 If the benefit of a Participant begins after the Participant attains age 65, the Defined Benefit Dollar Limitation applicable to the Participant at the later age is the annual benefit payable in the form of a straight life annuity beginning at the later age that is Actuarially Equivalent to the Defined Benefit Dollar Limitation applicable to the Participant at age 65 (adjusted under Paragraph C.1.3 above, if required). The Actuarial Equivalent of the Defined Benefit Dollar Limitation applicable at an age after age 65 is determined as the lesser of (i) the Actuarial Equivalent (at such age) of the Defined Benefit Dollar Limitation computed using the interest rate provided under Section 2.1(b), or (ii) the Actuarial Equivalent (at such age) of the Defined Benefit Dollar Limitation computed using a 5 percent interest rate. For these purposes, mortality between age 65 and the age at which benefits commence shall be ignored.

Effective for Limitation Years beginning on and after July 1, 2007, for benefits commencing after age 65, the dollar limitation shall be determined as the lesser of (1) the actuarial equivalent at such age of the defined benefit dollar limitation computed using an interest rate of 5% and the applicable mortality table described under section 417(e)(3) of the Code, or (2) the amount determined by multiplying the defined benefit dollar limitation by the ratio of (A) the annual amount of the single life annuity beginning at such later age (computed using the interest rate and mortality assumptions for delayed retirement benefits under the Plan, if applicable) to (B) the annual amount of the single life annuity under the Plan commencing at age 65 (computed without using the interest rate and mortality assumptions for delayed retirement benefits under the Plan, if applicable) (with both such amounts in (A) and (B) determined without application of the rules of section 415 of the Code). The amount of the annual benefit commencing at such later age is the annual amount of the benefit (determined without regard to section 415 of the Code) computed by disregarding the Participant's accruals after age 65, but including actuarial adjustments even if such adjustments are applied to offset benefit accrual.

C.1.6 Benefit increases resulting from the increase in the limitations of section 415(b) of the Code shall be provided to all Participants with benefits limited by section 415(b) of the Code who, (i) as of January 1, 2002 have commenced receipt of their benefit under the Plan; or (ii) are credited with at least one Hour of Service on or after January 1, 2002.

C.1.7 If a Participant's benefit is payable in any form other than a straight life annuity, the determination as to whether the limitation of this Paragraph C.1 has been satisfied shall be made by adjusting such benefit to the form of a straight life annuity using an interest rate equal to the greater of 5% or the interest rate provided under Section 2.1(b). However, for purposes of such adjustment, any ancillary benefit that is not directly related to retirement income benefits and that portion of any joint and survivor annuity that constitutes a Qualified Joint and Survivor Annuity shall not be taken into account. Notwithstanding the foregoing, for purposes of adjusting any form of benefit subject to the requirements of section 417(e)(3) of the Code, the interest rate used shall not be less than the greater of (i) the applicable interest rate under section 417(e)(3) of the Code for the October immediately preceding the calendar year during which the Annuity Starting Date occurs, provided that the lump sum present value for distributions made on or before October 1, 2007, shall not be less than the lump sum present value based on the applicable interest rate under section 417(e)(3) of the Code for the third calendar month preceding the calendar month in which the Annuity Starting Date occurs, or (ii) the interest rate specified in Section 2.1(b).

Notwithstanding anything herein to the contrary, for purposes of adjusting any form of benefit subject to section 417(e)(3) of the Code for Plan Years beginning in 2004 or 2005, the interest rate used shall not be less than the greater of (i) 5.5%, or (ii) the interest rate specified in Section 2.1(b).

Notwithstanding the foregoing, effective for Limitation Years beginning on and after July 1, 2007, for purposes of applying the limitations under this Article C, if a Participant's benefits are payable in a form of benefit other than a single life annuity or a qualified joint and survivor annuity, the benefit shall be limited as follows. The benefit shall be converted to a single life annuity using the interest rate and mortality assumptions specified in the Plan for the Actuarial Equivalent of the particular form of benefit payable. The single life annuity, which has been so determined, shall be compared to the single life annuity computed using a 5% interest rate assumption (or for any form of benefit subject to section 417(e)(3) of the Code, the applicable interest rate as defined in section 417(e)(3) of the Code) and the IRS mortality table prescribed in section 415(b)(2)(E)(v) of the Code). The greater of these two amounts shall be the applicable limit for the benefit payable in a form other than a single life annuity or a qualified joint and survivor annuity.

Effective as of January 1, 2006, if a Participant's benefit is payable in a form subject to section 417(e)(3) of the Code, such benefit shall be adjusted, for purposes of applying the limitations under this Article C, so that it is the greater of (1) a straight life annuity determined using the interest rate and mortality table as applicable under Section 2.1(b), (2) a straight life annuity determined using an interest rate of 5.5% and the applicable mortality table described under section 417(e)(3) of the Code, or (3) a straight life annuity determined using the interest rate that produces a benefit of not more than 105% of the benefit that would be produced using the applicable interest rate and applicable mortality table described under section 417(e)(3) of the Code.

C.2 Applicable Mortality Table for Distributions With Annuity Starting Dates on or after December 31, 2002. Notwithstanding any other Plan provisions to the contrary, the applicable mortality table used for purposes of adjusting any benefit or limitation under section 415(b)(2)(B), (C), or (D) of the Code as set forth in this Article C (unless another mortality table is either required under section 415(b) of the Code or otherwise referenced in this Article C) is the table prescribed in Rev. Rul. 2007-67 for Plan Years beginning after December 31, 2007 (Rev. Rul. 2001-62 for Plan Years beginning before January 1, 2008), or such other table as the Secretary of the Treasury may prescribe.

C.3 Definition of Compensation. For purposes of this Article C, Compensation shall include all amounts that are treated as wages for Federal income tax withholding under section 3401(a) of the Code (determined without regard to any rules that limit the remuneration included in wages based on the nature or location of the employment or the services performed) and actually paid to the Participant during the Limitation Year, plus amounts that would be paid to the Employee during the year but for the Employee's election under a cash or deferred arrangement described in section 401(k) of the Code, a cafeteria plan described in section 125 of the Code, a qualified transportation fringe benefit program described in section 132(f)(4) of the Code, a simplified employee pension described in section 402(h) of the Code or an annuity program described in section 403(b) of the Code.

Notwithstanding the foregoing, for Limitation Years beginning on and after July 1, 2007, Compensation includes regular pay as described in Treas. Reg. § 1.415(c)-(2)(e)(3) if paid by the end of the Limitation Year that includes the Employee's termination of employment, or if later, 2½ months after the Employee's termination of employment Any payments not described in the foregoing sentence shall not be considered Compensation if paid after separation from service, even if they are paid by the later of 2½ months after the date of separation from service or the end of the Limitation Year that includes the date of severance from employment.

C.4 Application of the provisions of this Section C of this Appendix 2 in effect for Limitation Years beginning on and after July 1, 2007, shall not cause the maximum permissible benefit for any Participant to be less than the Participant's accrued benefit under all the defined benefit plans of the Employer or a predecessor employer as of the end of the last Limitation Year beginning before July 1, 2007 under provisions of the plans that were both adopted and in effect before April 5, 2007 determined in accordance with the requirements of section 415 of the Code in effect on that date.

C.5 Notwithstanding the foregoing, the Plan hereby incorporates by reference section 415 of the Code and the regulations promulgated thereunder.

APPENDIX 3

SPECIAL SERVICE CREDITING RULES

A. General Rules.

A.1 Vesting and Benefit Accrual. The following special service crediting rules shall be applied in determining the earliest commencement date for service credit, for benefit accrual and vesting for employees of the following named subsidiaries which have, either by designation in accordance with Section 2.1(k) or by merger into a Designated Subsidiary become Designated Subsidiaries.

A.2 Eligibility for Early Retirement. For purposes of computing eligibility for Early Retirement in accordance with Section 4.2, Years of Service with a Subsidiary which has, after December 31, 1971, become a Designated Subsidiary, whether by designation in accordance with Section 2.1(k) or by merger into a Designated Subsidiary, shall be taken into account, but only after the Participant in question has completed 5 Years of Service after the first date upon which he was employed by a Designated Subsidiary.

A.3 Early Retirement Reduction Factors. Unless otherwise specified below, Years of Service for determining the applicable Early Retirement Reduction Factor under Table 1 shall be determined in the same manner as Years of Service for benefit accrual.

A.4 Break-in-Service Rules. These rules are subject to the Break-in-Service rules of Sections 9.1 through 9.4 and are not to be construed to require the crediting of Years of Service for any purpose if those Years of Service are disregarded under the provisions of those Sections or under the applicable provisions in effect when the Participant in question sustained his first Break-in-Service.

B. Special Rules.

B.1 California-American Water Co. Service for all Employees who first became Employees by reason of the acquisition of California-American Water Co. shall begin no earlier than December 28, 1970 for purposes of vesting and benefit accrual. However, in determining eligibility for Early Retirement and in applying the Early Retirement Reduction Factors of Table 1, Years of Service with California-American Water Company before December 28, 1970 shall be taken into account. See Table 5 for Special Option Factors.

B.2 Hershey Water Company. Service for all purposes for Dale Grinder and Ralph Light, who are entitled to a nonforfeitable benefit under a pension plan maintained by HERCO, Inc. and its subsidiaries, shall begin April 19, 1977. For all other Employees who became Employees by reason of the acquisition of Hershey Water Company, service for all purposes shall begin on their date of hire by HERCO, Inc., nearest April 19, 1977, the date of acquisition of Hershey Water Company.

B.3 Norristown Water Company. Service for all purposes shall begin on such Employee's date of hire nearest January 11, 1962, the date Norristown Water Company was acquired.

B.4 Paradise Valley Water Co. Service for all purposes shall begin on such Employee's date of hire nearest December 3, 1969, the date Paradise Valley Water Co. was acquired.

B.5 Village Water Company. Service for all purposes for Donald M. Ross shall begin on July 10, 1967. Service for all purposes for all others shall begin December 28, 1970.

B.6 West Virginia Water Company. Service for all Employees who first became Employees by reason of the acquisition of West Virginia Water Company shall begin, for purposes of vesting and benefit accrual, no earlier than December 1, 1970. However, in determining eligibility for Early Retirement, and in applying the Early Retirement reduction factors of Table 1, Years of Service with West Virginia Water Company shall be taken into account. See Table 5 for Special Option Factors.

B.7 Yardley Water Company. Service for all purposes for Employees who became Employees by reason of the acquisition of Yardley Water Company shall begin on December 1, 1970.

B.8 Pekin Water Works Company. Service for all purposes for D. Brown, R.O. Ivey and H. J. Schiszio shall begin on January 1, 1982. Service for all purposes for A. L. Calvin, Sr., J.W. Lockhart and K. L. Price will begin on their date of hire by Pekin Water Works Company nearest the date Pekin Water Works Company was acquired. Their accrued benefits under the Pekin Water Works Company Pension Trust shall be frozen as of May 1, 1982, and the retirement income benefits earned by those Employees under this Plan reduced by the amount of that frozen benefit. Service for all purposes for Employees covered by a collective bargaining agreement entered into by Pekin Water Works Company and in effect on January 1, 1982 will commence on April 1, 1982.

B.9 Seymour Water Co. Service for benefit accrual for Employees who became Employees by reason of the acquisition of Seymour Water Co. will commence on March 16, 1982. For vesting purposes, such Employees will be given credit for service with Seymour Water Co. from their date of hire nearest March 16, 1982. See Table 5 for Special Option Factors.

B.10 New Mexico-American Water Company. Service for all Employees who first became Employees pursuant to the terms of the Asset Acquisition Agreement between Clovis Water Company and New Mexico-American Water Company shall include Years of Service with

Southwestern Public Service Company for purposes of determining eligibility to participate, vesting, benefit accrual, eligibility for Early Retirement under Section 4.2, including, for purposes of satisfying the minimum service requirement thereof, eligibility for Disability Retirement under Section 4.3 and eligibility for Surviving Spouse Benefits under Section 6.1(b), and in applying the Early Retirement Reduction Factors of Table 1.

B.11 Indiana-American Water Company, Inc. Service for benefit accrual for employees previously covered by the Indiana-American Water Company, Inc. - Plumbers and Steam-Fitters Local 157 Pension Plan (Terre Haute Bargaining Unit) (the “Terre Haute Pension Plan”), shall begin on May 11, 1987. For purposes of vesting under Section 8.1 and disability retirement under Section 4.3, service for all such employees shall include service taken into account under the Terre Haute Pension Plan. Service for all such employees for purposes of eligibility for early retirement shall include all service credited under the Terre Haute Pension Plan for purposes of determining whether any such employee’s age and Years of Service total at least 70, provided that no such employee shall be entitled to early retirement under the Plan before May 11, 1992.

B.12 Brownsville Water Company. Service for all purposes under the Plan other than for benefit accrual shall begin on such Employee’s date of hire by Brownsville Water Company nearest the date that that company was acquired, which was July 1, 1990. Service for benefit accrual under the Plan for such Employee shall begin July 1, 1990.

B.13 California Water Company. Service for all purposes under the Plan other than for benefit accrual shall begin on such Employee’s date of hire by California Water Company nearest the date that that company was acquired, which was July 1, 1990. Service for benefit accrual under the Plan for such Employee shall begin July 1, 1990.

B.14 Certain Transferred Employees. For purposes of computing the monthly normal or late retirement income under Section 5.2 of any Employee of California-American Water Company, West Virginia Water Company, Yardley Water Company, New Mexico-American Water Company or any other Subsidiary, who had been employed by the Company or a Designated Subsidiary and who was transferred to a Subsidiary that, at the time of such transfer was not, but subsequently became, a Designated Subsidiary, that Employee’s service with such Subsidiary during the period before it became a Designated Subsidiary shall be credited to the same extent as if it had been performed for the Company or a Designated Subsidiary. In addition, during that interval, such Employee shall be considered a Participant for purposes of eligibility for Early Retirement under Sections 4.2 and 5.4, eligibility for Disability Retirement under Sections 4.3 and 5.5, and eligibility for Survivor Benefits under Sections 6.1 and 6.3.

B.15 Northern Michigan Water Company. Service for benefit accrual for Employees who first became Employees by reason of the acquisition of Northern Michigan Water Company will commence on August 31, 1993, the Closing Date under the Stock Purchase Agreement dated as of January 30, 1993. For eligibility to participate, vesting and eligibility for early retirement under the Plan, service with Northern Michigan Water Company shall be counted.

B.16 Ohio Suburban Water Company. Service for benefit accrual for Employees who first became Employees by reason of the acquisition of Ohio Suburban Water Company will commence on August 31, 1993, the Closing Date under the Stock Purchase Agreement dated as of January 30, 1993. For eligibility to participate, vesting and eligibility for early retirement under the Plan, service with Ohio Suburban Water Company shall be counted.

B.17 Missouri Cities Water Company. Service for benefit accrual for Employees who first became Employees by reason of the acquisition of Missouri Cities Water Company will commence on August 31, 1993, the Closing Date under the Stock Purchase Agreement dated as of January 30, 1993. For eligibility to participate, vesting and eligibility for early retirement under the Plan, service with Missouri Cities Water Company shall be counted.

B.18 Indiana Cities Water Corporation. Service for benefit accrual for Employees who first became Employees by reason of the acquisition of Indiana Cities Water Corporation will commence on August 31, 1993, the Closing Date under the Stock Purchase Agreement dated as of January 30, 1993. For eligibility to participate, vesting and eligibility for early retirement under the Plan, service with Indiana Cities Water Corporation shall be counted.

B.19 Country Place Water Co., Inc. and Country Place Water Treatment Co., Inc. (Monroe County), PA. Service for all purposes under the Plan for non-union Employees who first became Employees by reason of the acquisition of Country Place Water Co., Inc. or Country Place Water Treatment Co., Inc. will commence on June 30, 1995.

B.20 Pennsylvania Gas and Water Company. Service for all purposes under the Plan other than for benefit accrual shall begin on such Employee’s date of hire by Pennsylvania Gas and Water Company nearest February 16, 1996, the closing date under the Asset Purchase Agreement by and among Pennsylvania Enterprises, Inc., Pennsylvania Gas and Water Company, American Water Works Company, Inc. and Pennsylvania-American Water Company. Service for benefit accrual under the Plan for such Employee shall begin February 16, 1996.

B.21 Hawaii American Water. Service for benefit accrual for Employees who first became Employees by reason of the acquisition of Hawaii American Water will commence on July 1, 1998. For eligibility to participate, vesting and eligibility for early retirement under the Plan, service with Hawaii American Water shall be counted.

B.22 United Water Resources, Inc.

(a) Service for benefit accrual for employees previously covered under the United Water Resources, Inc. Retirement Plan (the "United Plan"), shall begin on the following dates:

Location	Date
United Water of Indiana	February 1, 2000
United Water of West Lafayette	February 1, 2000
United Water of Virginia	February 29, 2000
United Water of Missouri	May 1, 2000
United Water of Illinois	May 31, 2000

For eligibility to participate and vesting under the Plan, service with United Water Resources, Inc. shall be counted.

(b) Service for all purposes for Employees previously covered under the United Waterworks Inc. Employees' Retirement Plan (the "United Waterworks Plan") whose terms and conditions of employment are covered by a union contract shall include all service taken into account under the United Waterworks Plan. Accrued Benefits under the Plan shall be determined on the basis of the United Waterworks Plan formula in effect on the date(s) specified in (a) above, as applicable.

B.23 City of Coatesville Authority. Service for benefit accrual purposes for Employees who first became Employees by reason of the Asset Purchase Agreement by and between the City of Coatesville Authority and American Water Works Company, Inc. will commence on March 23, 2001, the Closing Date under the Asset Purchase Agreement dated February 15, 2000 and amended on October 5, 2000. For eligibility to participate, vesting and eligibility for early retirement under the Plan, service with the City of Coatesville Authority shall be counted.

B.24 City of Florissant, MO. Service for benefit accrual for non-union Employees who first became Employees by reason of the acquisition of City of Florissant, MO will commence on November 1, 2001. For eligibility to participate, vesting and eligibility for early retirement under the Plan, service with City of Florissant, MO shall be counted.

B.25 Texas American Water Company. Service for all purposes under the Plan for Employees who first became Employees by reason of the acquisition of Texas American Water Company on November 1, 2001, will commence on July 1, 2002.

B.26 Citizens Utilities Companies. Service for benefit accrual purposes for Employees who first became Employees by reason of the Asset Purchase Agreement by and among Citizens Utilities Company and Certain of Its Affiliates and American Water Works Company, Inc. and Arizona-American Water Company will commence on January 15, 2002, the Closing Date under the Asset Purchase Agreement dated October 15, 1999. For eligibility to participate, vesting and eligibility for early retirement under the Plan, service with Citizens Utilities Companies shall be counted.

B.27 City of Webster Groves, MO. Service for benefit accrual for Employees who first became Employees by reason of the acquisition of City of Webster Groves, MO will commence on February 8, 2002. For eligibility to participate, vesting and eligibility for early retirement under the Plan, service with City of Webster Groves, MO shall be counted.

B.28 LP Water & Sewer Company (Monroe and Pike Counties), PA. Service for benefit accrual for non-union Employees who first became Employees by reason of the acquisition of LP Water & Sewer Company (Monroe and Pike Counties), PA will commence on April 3, 2002. For eligibility to participate, vesting and eligibility for early retirement under the Plan, service with LP Water & Sewer Company (Monroe and Pike Counties), PA shall be counted.

APPENDIX 4

SPECIAL SERVICE CREDITING RULES AND BENEFIT PROVISIONS RELATING TO NEI ACQUISITION

NON-UNION EMPLOYEES.

Effective July 1, 2001, eligible non-union employees of Northwest Indiana Water Company, Northern Illinois Water Corporation, Long Island Water Corporation and St. Louis Water Company (collectively with their subsidiaries referred to as "NEI") began participation in the Plan. The following special rules apply only to the non-union employees of NEI who were hired prior to July 1, 2001.

I. NORTHWEST INDIANA WATER COMPANY

A. "Service Crediting" means all service including service with Northwest Indiana Water Company for purposes of vesting and for purposes of determining entitlement to Early Retirement.

For purposes of benefit accrual service, effective June 30, 2001, non-union employees shall cease to be credited with Years of Service under the Employees' Pension Plan of Northwest Indiana Water Company ("Northwest Indiana Plan") and will commence benefit accrual service under the Pension Plan for Employees of American Water Works Company, Inc. and Its Designated Subsidiaries.

B. "Early Retirement Date" means the first of the month following a Participant's 55th birthday and completion of 5 or more Years of Service.

C. "Early Retirement Income" means the monthly retirement income commencing on a Participant's Early Retirement Date in an amount equal to the sum of:

(i) his normal retirement benefit as determined under Section D(i) reduced to reflect the early commencement of benefits by multiplying such benefit by the fraction from the following schedule:

Lesser of: Years Until Age 65, or Years of Vesting Service less than 30	Applicable Fraction
10	15/30
9	16/30
8	17/30
7	18/30
6	19/30
5	20/30
4	22/30
3	24/30
2	26/30
1	28/30
0	30/30

plus

(ii) his normal retirement benefit as determined under Section D(ii) multiplied by the appropriate factor, determined by his attained age and Years of Service at his Early Retirement Date, as set forth in the Schedule of Early Retirement Factors attached to this Plan as Table 1.

D. "Normal Retirement Income"

Effective for any Participant retiring after June 30, 2001, except as modified by the provisions of Section 6.1(a) of the Plan, a Participant's monthly retirement income commencing on his Normal or Late Retirement Date shall be an amount equal to the sum of the following:

(i) 1.667% of Final Average Earnings at retirement multiplied by Years of Service prior to July 1, 2001 as determined under the provisions of the Northwest Indiana Plan, up to a maximum of 30 years, plus

(ii) 1.60% of Final Average Earnings at retirement multiplied by Years of Service after July 1, 2001 to Normal or Late Retirement Date.

E. "Vested Benefits in the Event of Termination of Employment"

The benefit of any vested active Employee who terminates employment on or after July 1, 2001 and who is not yet eligible for Early Retirement, shall be determined in accordance with Section 1.C above.

II. LONG ISLAND WATER CORPORATION

A. "Service Crediting" means all service including service with Long Island Water Corporation (which became part of New York American Water Company, Inc. on October 4, 2012) for purposes of vesting and for purposes of determining entitlement to Early Retirement.

For purposes of benefit accrual service, effective June 30, 2001, non-union employees shall cease to be credited with Years of Service under the Long Island Water Corporation Employees Retirement Plan ("Long Island Plan") and will commence benefit accrual service under the Pension Plan for Employees of American Water Works Company, Inc. and Its Designated Subsidiaries.

B. "Early Retirement Income" means the monthly retirement income commencing on a Participant's Early Retirement Date in an amount equal to the sum of:

(i) his normal retirement benefit as determined under Section D(i) reduced 2% for each year (1/6% for each month) subsequent to age 62, and reduced 4% for each year (1/3% for each month) prior to age 62, by which the Participant's Early Retirement Date precedes his Normal Retirement Date, in accordance with the following table:

Age at Early Retirement	Early Retirement Fraction
65	1.00
64	.98
63	.96
62	.94
61	.90
60	.86
59	.82
58	.78
57	.74
56	.70
55	.66

plus

(ii) his normal retirement benefit as determined under Section D(ii) multiplied by the appropriate factor, determined by his attained age and Years of Service at his Early Retirement Date, as set forth in the Schedule of Early Retirement Factors attached to this Plan as Table 1.

C. “Supplemental Early Retirement Income”

In addition to the Early Retirement Income, a Supplemental Early Retirement Benefit, in the yearly amount of $1,200 ($100 per month) will be payable to the Participant, commencing on his Early Retirement Date and ceasing with the earlier of his death or his attainment of age 65, provided that:

(i) the Participant is an Employee on the date he elects an Early Retirement Date, and

(ii) the sum of the Participant’s age and Years of Service equals 90 units.

The yearly amount of the Supplemental Early Retirement Benefit will be reduced by 5% for each unit by which the sum of the Participant’s age and Years of Service is less than 90.

D. “Normal Retirement Income”

Effective for any Participant retiring after June 30, 2001, except as modified by the provisions of Section 6.1(a) of the Plan, a Participant’s monthly retirement income commencing on his Normal or Late Retirement Date shall be an amount equal to the sum of the following:

(i) 1.75% of Final Average Earnings at retirement multiplied by Years of Service prior to July 1, 2001, as determined under the Long Island Plan, plus

(ii) 1.60% of Final Average Earnings at retirement multiplied by Years of Service after July 1, 2001 to Normal or Late Retirement Date.

In no event shall a Participant’s Accrued Benefit be less than his Accrued Benefit earned under the terms of the Long Island Water Corporation Pension Plan as of June 30, 2001.

E. “Vested Benefits in the Event of Termination of Employment”

The benefit of any vested active Employee who terminates employment on or after July 1, 2001 and who is not yet eligible for Early Retirement, shall be determined in accordance with Section II.B above.

III. ST. LOUIS COUNTY WATER COMPANY

A. “Service Crediting” means all service including service with St. Louis County Water Company for purposes of vesting and for purposes of determining entitlement to Early Retirement.

For purposes of benefit accrual service, effective June 30, 2001, non-union employees shall cease to be credited with Years of Service under The St. Louis County Water Company Pension

Plan ("St Louis Plan") and will commence benefit accrual service effective as of July 1, 2001 under the Pension Plan for Employees of American Water Works Company, Inc. and Its Designated Subsidiaries.

B. "Early Retirement Income" means the monthly retirement income commencing on a Participant's Early Retirement Date in an amount equal to the sum of:

(i) his normal retirement benefit as determined under Section C(i) reduced to reflect the early commencement of benefits by multiplying such benefit by the applicable factor from Table 4(b); plus

(ii) his normal retirement benefit as determined under Section C(ii) multiplied by the appropriate factor, determined by his attained age and Years of Service at his Early Retirement Date, as set forth in the Schedule of Early Retirement Factors attached to this Plan as Table 1.

C. "Normal Retirement Income"

Effective for any Participant retiring after June 30, 2001, except as modified by the provisions of Section 6.1(a) of the Plan, a Participant's monthly retirement income commencing on his Normal or Late Retirement Date shall be an amount equal to the sum of the following:

(i) 1.50% of Final Average Earnings at retirement multiplied by Years of Service prior to July 1, 2001, as determined under the St. Louis Plan, plus

(ii) 1.60% of Final Average Earnings at retirement multiplied by Years of Service after July 1, 2001 to Normal or Late Retirement Date.

D. "Vested Benefits in the Event of Termination of Employment"

The benefit of any vested active Employee who terminates employment on or after July 1, 2001 and who is not yet eligible for Early Retirement, shall be determined in accordance with Section III.B above.

IV. NORTHERN ILLINOIS WATER CORPORATION

A. "Service Crediting" means all service including service with Northern Illinois Water Corporation for purposes of vesting and for purposes of determining entitlement to Early Retirement.

For purposes of benefit accrual service, effective June 30, 2001, non-union employees shall cease to be credited with Years of Service under the Northern Illinois Water Corporation Retirement Income Plan ("Northern Illinois Plan") and will commence benefit accrual service effective as of

July 1, 2001 under the Pension Plan for Employees of American Water Works Company, Inc. and Its Designated Subsidiaries.

B. "Early Retirement Date" means the first of the month following a Participant's attainment of age 55.

C. "Early Retirement Income" means the monthly retirement income commencing on a Participant's Early Retirement Date in an amount equal to the sum of:

(i) his normal retirement benefit as determined under Section D(i) reduced to reflect the early commencement of benefits by multiplying such benefit by the factor from the following schedule:

Number of Years Early Retirement Date Precedes Normal Retirement Date	Applicable Factor
1	.97
2	.94
3	.91
4	.88
5	.85
6	.82
7	.79
8	.76
9	.73
10	.70

plus

(ii) his normal retirement benefit as determined under Section D(ii) multiplied by the appropriate factor, determined by his attained age and Years of Service at his Early Retirement Date, as set forth in the Schedule of Early Retirement Factors attached to this Plan as Table 1.

D. "Normal Retirement Income"

Effective for any Participant retiring after June 30, 2001, except as modified by the provisions of Section 6.1(a) of the Plan, a Participant's monthly retirement income commencing on his Normal or Late Retirement Date shall be an amount equal to the sum of the following:

(i) 1.33% of Final Average Earnings at retirement multiplied by Years of Service prior to July 1, 2001, as determined under the Northern Illinois Plan, plus

(ii) 1.60% of Final Average Earnings at retirement multiplied by Years of Service after July 1, 2001 to Normal or Late Retirement Date.

E. "Vested Benefits in the Event of Termination of Employment"

The benefit of any vested active Employee who terminates employment on or after July 1, 2001 and who is not yet eligible for Early Retirement, shall be determined in accordance with Section IV.C above.

UNION EMPLOYEES.

V. INDIANA-AMERICAN WATER COMPANY, INC. (formerly Northwest Indiana Water Corporation) - UNION EMPLOYEES AT THE NORTHWEST OPERATIONS FACILITY

Effective December 31, 2002, or as soon as administratively practicable thereafter, the Northwest Indiana Water Company Retirement Plan (the "Indiana Plan"), consisting of two different groups of union employees, was merged with and into the Plan. Effective January 1, 2003, all eligible union employees of Indiana-American Water Company, Inc. began participation in the Plan.

The following special rules apply only to each active Employee of Indiana-American Water Company, Inc. who, as of December 31, 2002, is both: (1) a member of the USWA, Local 13584 (including Local 13584-01) at the Company's northwest operations facility, and (2) a participant in the Indiana Plan (a "Local 13584 Participant"):

A. Service Crediting. All service with the Company, including service with Northwest Indiana Water Corporation and Indiana-American Water Company, Inc. shall be credited to a Local 13584 Participant for purposes of vesting and for purposes of determining entitlement to Early Retirement.

For purposes of benefit accrual service, effective December 31, 2002, a Local 13584 Participant will cease to be credited with years of service under the Indiana Plan. Thereafter, a Local 13584 Participant's benefit accrual service shall consist of benefit accrual service credited under the terms of the Indiana Plan through December 31, 2002, plus, beginning January 1, 2003, any additional benefit service credited under the terms of the Plan.

B. Early Retirement Date. A Local 13584 Participant's Early Retirement Date shall be the first of any month following the date he attains at least age 55 (but before age 65) and is credited with 5 Years of Service for vesting purposes.

C. Early Retirement Income. The benefit payable to a Local 13584 Participant commencing on his Early Retirement Date shall be a monthly amount equal to the sum of:

(i) his normal retirement benefit as determined under Section D(i) reduced to reflect the early commencement of benefits by multiplying such benefit by the factor from the following table:

Lesser of: Years Until Age 65, or Years of Service for Vesting Purposes Less than 30	Applicable Fraction
10	15/30
9	16/30
8	17/30
7	18/30
6	19/30
5	20/30
4	22/30
3	24/30
2	26/30
1	28/30
0	30/30

plus

(ii) his normal retirement benefit as determined under Section D(ii) multiplied by the appropriate factor, determined by his attained age and Years of Service at his Early Retirement Date, as set forth in the Schedule of Early Retirement Factors attached to this Plan as Table 1.

D. Normal Retirement Income. Effective for any Local 13584 Participant retiring on and after January 1, 2003, except as modified by the provisions of Section 6.1(a) of the Plan, the benefit payable to a Local 13584 Participant commencing on his Normal or Late Retirement Date shall be a monthly amount equal to the sum of:

(i) 1.667% of Final Average Earnings at retirement multiplied by Years of Service prior to January 1, 2003, as determined under the provisions of the Indiana Plan, up to a maximum of 30 years, plus;

(ii) 1.60% multiplied by Years of Service credited to the Local 13584 Participant under the terms of the Plan on and after January 1, 2003, multiplied by his Final Average Earnings as defined by the Plan.

In no event shall a Local 13584 Participant's Accrued Benefit be less than his Accrued Benefit earned under the terms of the Indiana Plan as of December 31, 2002.

E. Vested Benefits in the Event of Termination of Employment. The benefit of any vested active Local 13584 Participant who terminates employment on or after January 1, 2003, and who is not yet eligible for Early Retirement, shall be determined in accordance with Section C above.

VI. MISSOURI-AMERICAN WATER COMPANY (formerly St. Louis County Water Company) - UNION EMPLOYEES

Effective June 30, 2003, the St. Louis County Water Company Pension Plan (the "St. Louis Plan"), consisting entirely of union Employees, was merged with and into the Plan. These union Employees continued to participate under the terms of the St. Louis Plan until January 1, 2004, at which time all eligible union employees of Missouri-American Water Company began participation in the Plan.

The following special rules apply only to each active Employee of Missouri-American Water Company who, as of December 31, 2003, is both: (1) a member of the Utility Workers Union of America Affiliated with the AFL-CIO, Local 335, and (2) a participant in the St. Louis Plan (a "Local 335 Participant"):

A. Service Crediting. All service with the Company, including service with St. Louis Water Company and Missouri-American Water Company, shall be credited to a Local 335 Participant for purposes of vesting and determining eligibility for early retirement, preretirement death benefits and disability benefits.

For purposes of benefit accrual service, effective December 31, 2003, a Local 335 Participant will cease to be credited with years of service under the St. Louis Plan. Thereafter, a Local 335 Participant's benefit accrual service shall consist of benefit accrual service credited under the terms of the St. Louis Plan through December 31, 2003, plus, beginning January 1, 2004, any additional benefit service credited under the terms of the Plan.

B. Early Retirement Income. The benefit payable to a Local 335 Participant commencing on his Early Retirement Date shall be a monthly amount equal to the sum of:

(i) his normal retirement benefit as determined under Section C(i) reduced to reflect the early commencement of benefits by multiplying such benefit by the factor from the following table:

Age	Applicable Factor
64	.970
63	.941
62	.913
61	.885
60	.859
59	.833
58	.808
57	.784
56	.760
55	.737

plus

(ii) his normal retirement benefit as determined under Section C(ii) multiplied by the appropriate factor, determined by his attained age and Years of Service at his Early Retirement Date, as set forth in the Schedule of Early Retirement Factors attached to this Plan as Table 1.

C. Normal Retirement Income. Effective for any Local 335 Participant retiring on and after January 1, 2004, except as modified by the provisions of Section 6.1(a) of the Plan, the benefit payable to a Local 335 Participant payable on his Normal or Late Retirement Date shall be a monthly amount equal to the sum of:

(i) 1.50% multiplied by years of service credited to the Local 335 Participant under the terms of the St. Louis Plan through December 31, 2003, multiplied by his Final Average Earnings as defined by the Plan;

plus

(ii) 1.60% multiplied by Years of Service credited to the Local 335 Participant under the terms of the Plan on and after January 1, 2004, multiplied by his Final Average Earnings as defined by the Plan.

In no event shall a Local 335 Participant's Accrued Benefit be less than his Accrued Benefit earned under the terms of the St. Louis Plan as of December 31, 2003.

D. Vested Benefits in the Event of Termination of Employment. The benefit of any vested active Local 335 Participant who terminates employment on or after January 1, 2004, and who is not yet eligible for Early Retirement, shall be determined in accordance with Section B above.

VII. LONG ISLAND WATER CORPORATION - UNION EMPLOYEES

Effective June 30, 2004, the Long Island Water Corporation Employees Retirement Plan (the "Long Island Plan"), consisting entirely of union Employees, was merged with and into the Plan. Effective July 1, 2004, all eligible union Employees of Long Island Water Company began participation in the Plan. Effective October 4, 2012, Long Island Water Corporation merged with New York Water Services Corporation, Aqua New York, Inc. and Aqua New York of Sea Cliff, Inc. to form New York American Water Company, Inc.

A. Special Rules for Union Employees Hired Prior to July 1, 2004. The following special rules apply only to each active Employee of New York American Water Company, Inc. (formerly Long Island Water Corporation) who, as of June 30, 2004 was both: (1) a member of the Utility Workers Union of America Local 365 at the Company's Long Island, New York facility, and (2) participating in the Long Island Plan (a "Local 365 Participant"):

(i) Service Crediting. All service with the Company, including service with Long Island Water Corporation and New York American Water Company, Inc., shall be credited to a Local 365 Participant for purposes of vesting, determining eligibility for early retirement, preretirement death benefits and disability benefits.

For purposes of benefit accrual service, effective June 30, 2004, a Local 365 Participant will cease to be credited with years of service under the Long Island Plan. Thereafter, a Local 365 Participant's benefit accrual service shall consist of benefit accrual service credited under the terms of the Long Island Plan through June 30, 2004, plus, beginning July 1, 2004, any additional benefit service credited under the terms of the Plan.

(ii) Early Retirement Income. The benefit payable to a Local 365 Participant on his Early Retirement Date shall be his normal retirement benefit as determined under Section C multiplied by the appropriate factor, determined by his attained age and Years of Service at his Early Retirement Date, as set forth in the Schedule of Early Retirement Factors attached to this Plan as Table 1.

(iii) Normal Retirement Income. Effective for any Local 365 Participant retiring on or after July 1, 2004, except as modified by the provisions of Section 6.1(a) of the Plan, the benefit payable to a Local 365 Participant on his Normal or Late Retirement Date shall be a monthly amount equal to the sum of the following:

(a) 1.75% multiplied by years of service credited to the Local 365 Participant under the terms of the Long Island Plan through June 30, 2004, multiplied by his Final Average Earnings, as defined by the Plan, as of the earlier of July 31, 2010 or his actual termination of employment; plus

(b) 1.60% multiplied by Years of Service credited to the Local 365 Participant under the terms of the Plan on and after July 1, 2004 but before January 1, 2008, multiplied by his Final Average Earnings, as defined by the Plan, as of the earlier of July 31, 2010 or his actual termination of employment; plus

(c) the greater of:

(1) 1.60% multiplied by Years of Service credited to the Local 365 Participant under the terms of the Plan on and after August 1, 2010 through his* date of retirement or other termination employment, multiplied by his Final Average Earnings, as defined by the Plan, as of his actual termination of employment; or

(2) 1.60% multiplied by Earnings, as defined by the Plan, for each Year of Service credited under the terms of the Plan on and after August 1, 2010 but before January 1, 2013.

In no event shall a Local 365 Participant's Accrued Benefit be less than his Accrued Benefit earned under the terms of the Long Island Plan as of June 30, 2004.

(iv) Vested Benefits in the Event of Termination of Employment. The benefit of any vested active Local 365 Participant who terminates employment on or after July 1, 2004 and who is not yet eligible for Early Retirement, shall be determined in accordance with Section B above.

B. Normal Retirement Income - Special Rules for Union Employees Hired On and After July 1, 2004. The following special rules apply only to an Employee of New York American Water Company, Inc. (formerly Long Island Water Corporation) who was hired on or after July 1, 2004, and is a member of the Utility Workers Union of America Local 365 at the Company's Long Island, New York facility ("New Local 365 Participant"). A New Local 365 Participant shall, upon meeting the eligibility requirements of Section 3.1 of the Plan, commence participation under the terms of the Plan except as otherwise provided in this Section E.

Effective for any New Local 365 Participant hired before January 1, 2006, except as modified by the provisions of Section 6.1(a) of the Plan, a New Local 365 Participant's monthly retirement income commencing on his Normal or Late Retirement Date shall be an amount equal to the sum of the following:

(i) 1.60% multiplied by Years of Service credited to the New Local 365 Participant on and after July 1, 2004 but before January 1, 2006, multiplied by his of Final Average Earnings as of the earlier of December 31, 2005 or his actual termination of employment; plus

(ii) the greater of:

(a) 1.60% multiplied by Years of Service credited to the New Local 365 Participant under the terms of the Plan on and after January 1, 2006 through his date of retirement or other termination employment, multiplied by his Final Average Earnings, as defined by the Plan, as of his actual termination of employment; or

(b) 1.60% multiplied by Earnings for each Year of Service credited to the New Local 365 Participant on and after January 1, 2006 but before January 1, 2013.

VIII. ILLINOIS-AMERICAN WATER COMPANY (formerly Northern Illinois Water Corporation) - UNION EMPLOYEES AT CHAMPAIGN, ILLINOIS

Effective June 30, 2004, the Northern Illinois Water Corporation Retirement Income Plan (the "Northern Illinois Plan"), consisting of two different groups of union employees, was merged with and into the Plan. Effective July 1, 2004, all eligible union employees of Illinois-American Water Company began participation in the Plan.

Employees of Illinois-American Water Company who are members of the IBEW Local 51 at the Company's Sterling, Illinois facility continue to participate under the terms of the former Northern Illinois Plan, as described in Article IX of this Appendix 4.

The following special rules apply only to each active Employee of Illinois-American Water Company who, as of June 30, 2004, is both: (1) a member of the Utility Workers Union of America, Local 500 at the Company's Champaign, Illinois facility, and (2) a participant in the Northern Illinois Plan (a "Local 500 Participant"):

A. Service Crediting. All service with the Company, including service with Northern Illinois Water Corporation and Illinois-American Water Company, shall be credited to a Local 500 Participant for purposes of vesting and for purposes of determining entitlement to Early Retirement.

For purposes of benefit accrual service, effective June 30, 2004, a Local 500 Participant will cease to be credited with years of service under the Northern Illinois Plan. Thereafter, a Local 500 Participant's benefit accrual service shall consist of benefit accrual service credited under the terms of the Northern Illinois Plan through June 30, 2004, plus, beginning July 1, 2004, any additional benefit service credited under the terms of the Plan.

B. Early Retirement Date. A Local 500 Participant's Early Retirement Date shall be the first of any month following his attainment of age 55 but before age 65.

C. Early Retirement Income. The benefit payable to a Local 500 Participant commencing on his Early Retirement Date shall be a monthly amount equal to the sum of:

(i) his normal retirement benefit as determined under Section D(i) reduced to reflect the early commencement of benefits by multiplying such benefit by the factor from the following table:

Number of Years Early Retirement Date Precedes Normal Retirement Date	Applicable Factor
1	.97
2	.94
3	.91
4	.88
5	.85
6	.82
7	.79
8	.76
9	.73
10	.70

plus

(ii) his normal retirement benefit as determined under Section D(ii) multiplied by the appropriate factor, determined by his attained age and Years of Service at his Early Retirement Date, as set forth in the Schedule of Early Retirement Factors attached to this Plan as Table 1.

D. Normal Retirement Income. Effective for any Local 500 Participant retiring on and after July 1, 2004, except as modified by the provisions of Section 6.1(a) of the Plan, the benefit payable to a Local 500 Participant commencing on his Normal or Late Retirement Date shall be a monthly amount equal to the sum of:

(i) 1.33% multiplied by years of service credited to the Local 500 Participant under the terms of the Northern Illinois Plan through June 30, 2004, multiplied by his Final Average Earnings as defined by the Plan; plus

(ii) 1.60% multiplied by Years of Service credited to the Local 500 Participant under the terms of the Plan on and after July 1, 2004, multiplied by his Final Average Earnings as defined by the Plan.

In no event shall a Local 500 Participant's Accrued Benefit be less than his Accrued Benefit earned under the terms of the Northern Illinois Plan as of June 30, 2004.

E. Vested Benefits in the Event of Termination of Employment. The benefit of any vested active Local 500 Participant who terminates employment on or after July 1, 2004 and who is not yet eligible for Early Retirement, shall be determined in accordance with Section C above.

IX. ILLINOIS-AMERICAN WATER COMPANY (formerly Northern Illinois Water Corporation) - UNION EMPLOYEES AT STERLING, ILLINOIS

Effective June 30, 2004, the Northern Illinois Water Corporation Retirement Income Plan (the "Northern Illinois Plan"), consisting of two different groups of union employees, was merged with and into the Plan. Employees of Illinois-American Water Company who were members of the IBEW Local 51 at the Company's Sterling, Illinois facility continued to participate under the terms of the former Northern Illinois Plan, as described in this Article IX prior to July 1, 2012. This Article IX is updated effective July 1, 2012, in accordance with the most recent collective bargaining agreement.

The following special rules apply only to each active Employee of Illinois-American Water Company who was: (1) as of June 30, 2004, both: (a) a member of the IBEW Local 51 at the Company's Sterling, Illinois facility, and (b) a participant in the Northern Illinois Plan; or (2) hired on or after July 1, 2004, but prior to February 1, 2009, as a member of the IBEW Local 51 at the Company's Sterling, Illinois facility (collectively "Local 51 Participants"). Except as otherwise provided under this Article IX, a Local 51 Participant shall participate in and be subject to all provisions of the Plan.

A. Definitions. All capitalized terms which are not defined below shall have the meaning given to them under Section 2.1 of the Plan.

(i) "Actuarial Equivalent" means, effective July 1, 2012, a benefit of equivalent value determine in accordance with Section 2.1(b) of the Plan; provided, however, notwithstanding any other Plan provision to the contrary, the value of an optional form of benefit (other than for benefit determinations subject to the requirements of section 417(e)(3) of the Code) elected by a Local 51 Participant with an Annuity Starting Date on or after July 1, 2012, will not be less than the value of that optional form of benefit based on his accrued benefit as of June 30, 2012, an interest rate of 7.5 percent and the mortality table as set forth in Revenue Ruling 95-6.

(ii) "Compensation" means, for purposes other than the limitations under Appendix 2, the total earnings paid or made available to an Employee by the Employer plus contributed by the Employer pursuant to a salary reduction agreement and which are not includible in the gross income of the employee under sections 125, 132(f)(4), 402(e), 402(h), or 403(b) of the Code. Compensation shall exclude overtime pay, shift or Sunday premiums and special compensation.

(iii) "Average Compensation" means, on any April 1, the average of a Local 51 Participant's monthly Compensation for those five consecutive Plan Years (all Plan Years if less than five) which give the highest average out of the final ten Plan Years (all Plan Years if less than ten) of employment with the Employer.

(iv) "Early Retirement Age" means age 55.

(v) "Early Retirement Date" means the first day of any month on or after a Local 51 Participant reaches his Early Retirement Age but before his Normal Retirement Date, and on which he commences his benefit. A Local 51 Participant who has terminated employment with the Employer with a vested benefit before reaching his Early Retirement Age may elect an early retirement benefit upon reaching his Early Retirement Age.

(vi) "Qualified Joint and Survivor Annuity" means a joint and survivor annuity that is the Actuarial Equivalent of the normal form of benefit for an unmarried Local 51 Participant that provides a monthly annuity for the life of the Local 51 Participant's surviving spouse equal to 50% of the monthly annuity payable during the joint lives of the Local 51 Participant and his spouse.

(vii) "Required Beginning Date" means, solely for purposes of this Article IX, the April 1 of the calendar year following the calendar year in which the Local 51 Participant attains age 70'/2.

(viii) "Required Contribution Account" means, on any date, the total of a Local 51 Participant's Required Contributions with interest. Contributions previously paid to the Local 51 Participant or applied for him, and any interest that would have been credited on those contributions, shall be excluded. On and after April 1, 1988, interest shall be credited in each Plan Year at the rate of 120% of the Federal mid-term rate (as in effect under section 1274 of the Code for the first month of the Plan Year) per annum compounded annually. Before April 1, 1988, interest was credited at the rate specified in the Plan as in effect on the day immediately before April 1, 1988. Interest shall be credited on each Required Contribution from the end of the Plan Year for which it was made until the month prior to the date of determination.

(ix) "Required Contributions" means nondeductible contributions required from a Local 51 Participant prior to. January 1, 1967 (August 1, 1966 for any Employee of the Champion Division.)

(x) "Required Contribution. Accrued Benefit" means the amount of monthly retirement benefit payable in the form of a Single Life Annuity accrued by a Local 51 Participant which is derived from his Required Contributions.

(xi) "Single Life Annuity" means a monthly benefit payable for the life of the Local 51 Participant with a modified cash refund of his Required Contribution Account, if any.

B. Participation. An eligible Employee who is a member of the IBEW Local 51 at the Company's Sterling, Illinois facility (other than an Employee hired or rehired on or after February 1, 2009) shall commence participation under this Article IX on the first day of the month coincident with or next following the date on which he: (1) attains age 21; and (2) completes one Year of Service for eligibility purposes.

C. Early Retirement Income. The benefit payable to a Local 51 Participant commencing on his Early Retirement Date shall be determined as follows:

(i) Terminated or Retired Prior to July 1, 2012. If the Local 51 Participant terminates employment or retires prior to July 1_ 2012, his benefit commencing on his Early Retirement Date shall be his normal retirement benefit as determined under Section D reduced to reflect the early commencement of benefits by multiplying such benefit by the factor from the following table:

Number of Years Early Retirement Date Precedes Normal Retirement Date	Applicable Factor
1	.97
2	.94
3	.91
4	.88
5	.85
6	.82
7	.79
8	.76
9	.73
10	.70

(ii) Terminated or Retired on or after July 1, 2012. If the Local 51 Participant terminates employment or retires on or after July 1, 2012, his benefit commencing on his Early Retirement Date shall be the sum of

(a) his normal retirement benefit as determined under Sections D(ii)(a) and D(ii)(c) reduced to reflect the early commencement of benefits by multiplying such benefit by the factor from the following table

Number of Years Early Retirement Date Precedes Normal Retirement Date	Applicable Factor
1	.97
2	.94
3	.91
4	.88
5	.85
6	.82
7	.79
8	.76
9	.73
10	.70

and

(b) his normal retirement benefit as determined under Section D(ii)(b) as of his Early Retirement Date multiplied by the appropriate factor, determined by his attained age and Years of Service at his Early Retirement Date, as set forth in the Schedule of Early Retirement Factors attached to the Plan as Table 1.

D. Normal Retirement Income. Effective for any Local 51 Participant retiring on and after July 1, 2004, except as modified by the provisions of Section 6.1(a) of the Plan, the benefit payable to a Local 51 Participant commencing on his Normal Retirement Date shall be determined as follows:

(i) Terminated or Retired Prior to July 1, 2012. If the Local 51 Participant terminates employment or retires prior to July 1, 2012, his benefit shall be a monthly amount equal to the sum of:

(a) 1.33% of his Average Compensation multiplied by his Years of Service; plus

b) $1 for each $144 of his Required Contribution Account, if any.

(ii) Terminated or Retired on or after July 1, 2012. For any Local 51 Participant who continues to be actively employed on or after July 1, 2012, his benefit shall be a monthly amount equal to the sum of:

(a) 1.33% times Years of Service prior to July 1, 2012 times Final Average Earnings; plus

(b) 1.60% times Years of Service on or after July 1, 2012 times Final Average Earnings; plus

(c) $1 for each $144 of his Required Contribution Account, if any.

(iii) A Local 51 Participant may commence receipt of his normal retirement benefit on his Normal Retirement Date regardless of whether he is still employed by the Employer on such date.

E. Late Retirement Income. The benefit payable to a Local 51 Participant commencing on his Late Retirement Date shall be the greatest of:

(i) his normal retirement benefit as determined under Section D on his Late Retirement Date; or

(ii) his normal retirement benefit determined as of June 30, 2012 under Section D multiplied by the factor shown below corresponding to the number of years his Late Retirement Date follows his Normal Retirement Date

Number of Years Late Retirement Date Follows Normal Retirement Date	Applicable Factor
1	1.0600
2	1.1200
3	1.1900
4	1.2600
5	1.3400
6	1.4200
7	1.5000
8	1.5900
9	1.6900
10	1.7900

The above factors shall be prorated for a partial year (counting a partial month as a complete month). Factors for numbers of years beyond 10 shall be determined using a consistently applied reasonable actuarially equivalent method; or

(iii) with respect to a Local 51 Participant whose Late Retirement Date occurs after his Required Beginning Date, his normal retirement benefit as determined under Section D (determined as of June 30, 2012) multiplied by the factor in Section E(ii) for I year past Normal Retirement Date, prorated for a partial year based on the number of months in the period (counting a partial month as a complete month).

The amount in this Section E(iii) shall be redetermined after each subsequent April 1 based on the retirement benefit that would have been paid on his Required Beginning Date (determined as if his Late Retirement Date had occurred on his Required Beginning Date) multiplied by the factor in Section E(ii) for 1 year past Normal Retirement Date, prorated for a partial year based on the number of months since such Yearly Date (counting a partial month as a complete month).

Such greatest amount so determined applies to an active Local 51 Participant, who (1) is not a five-percent owner, (2) has attained age 70%2, and (3) makes an election to defer commencement of his retirement benefit until the calendar year following the calendar year in which he retires.

F. Minimum Benefit. An active Local 51 Participant's benefit payable as a Single Life Annuity shall not be less than the greatest amount of benefit that would have been provided for him had he retired on any earlier retirement date. In any event, an active Local 51 Participant's retirement benefit payable as a Single Life Annuity on his retirement date will not be less than the greater of his Required Contribution Account Accrued Benefit on his retirement date, multiplied by the appropriate factor if his retirement date is an Early Retirement Date, or the monthly benefit payable as a Single Life Annuity which is the Actuarial Equivalent of his Required Contribution Account on such date.

G. Vesting. A Local 51 Participant shall have no vested interest in his Accrued Benefit until he has been credited with five Years of Service for vesting purposes, at which time he shall have a 100% vested interest in his Accrued Benefit determined under this Article IX. Notwithstanding the foregoing, a Local 51 Participant who is actively employed by the Employer shall have a 100% vested interest in his Accrued Benefit upon reaching his Early Retirement Age or Normal Retirement Age.

A Local 51 Participant's Required Contribution Account is fully 100% vested and nonforfeitable at all times.

H. Vested Benefits in the Event of Termination of Employment. The benefit of any vested active Local 51 Participant who terminates employment on or after July 1, 2004 shall be:

(i) in the case of a Local 51 Participant who elects to commence his deferred vested benefit on his Early Retirement Date, an amount determined in accordance with Section H(ii) below multiplied by the applicable early retirement factor in Section C above.

(ii) in the case of a Local 51 Participant who elects to commence his deferred vested benefit on his Normal Retirement Date, an amount equal to the sum of (a) and (b):

(a) the Local 51 Participant's Required Contribution Accrued Benefit as of the date of determination (or the date the Required Contribution Account is paid in a single sum, if earlier);

(b) the excess of the Local 51 Participant's Accrued Benefit on the day before he terminated employment over the amount determined under (a) above but not less than $0.

(iii) in the case of a Local 51 Participant who elects to commence his deferred vested benefit on his Late Retirement Date, an amount equal to:

(a) if he terminated on or before his Normal Retirement Date, an amount equal to the amount under Section H(ii) above multiplied by the late retirement factor in Section E(ii) which corresponds to the number of years his Late Retirement Date follows his Normal Retirement Date; or

(b) if he terminated after his Normal Retirement Date, an amount equal to the greater of:

(1) his Accrued Benefit on the day before he terminated employment with the Employer; or

(2) his Accrued Benefit on his Normal Retirement Date multiplied by the late retirement factor in Section E(ii) which corresponds to the number of years his Late Retirement Date follows his Normal Retirement Date.

Provided, however, for a terminated Local 51 Participant whose Late Retirement Date occurs after his Required Beginning Date, his deferred monthly retirement benefit determined in Section H(iii)(a) or (b) of this Article IX, whichever applies, shall be adjusted as provided in Section E(iii) of this Article IX.

I. Forms of Distribution.

(i) Normal Form for Unmarried Local 51 Participants. The normal form of distribution for an unmarried Local 51 Participant shall be a Single Life Annuity as defined in Section A(xii) of this Article IX.

(ii) Normal Form for Married Participants. If a Participant is married on his Annuity Starting Date, his retirement income will be paid to him in the form of a Qualified Joint and Survivor Annuity.

(iii) Required Contribution Account. A Local 51 Participant may elect, subject to the notice and election procedures of Section 6.2 of the Plan, as applicable, to receive his Required Contribution Account in a single-sum payment at any time after he ceases to be an Employee and before his retirement date, provided he is not reemployed by the Employer.

(iv) Survivor Benefits Available by Election. A Local 51 Participant who is actively employed on or after July 1, 2012 may elect, subject to the notice and election provisions of Section 62 of the Plan, as applicable, to provide benefits for his Contingent Annuitant as described in Section 6.4.

J. Preretirement Survivor Annuity.

(i) Eligibility for Preretirement Survivor Annuity. If a married Local 51 Participant or an unmarried Local 51 Participant who has designated a Contingent Annuitant dies on or after July 1, 2012 but before his Annuity Starting Date, his surviving spouse or Contingent Annuitant, as applicable, shall receive a Preretirement Survivor Annuity as provided in this Section J. If a Local 51 Participant dies prior to July 1, 2012, the benefit, if any, payable to his spouse or Contingent Annuitant shall be determined under the provisions of the Plan in effect prior to July 1, 2012.

(ii) Death Prior to Early Retirement Eligibility, After Completing Five, But Not Yet Ten Years of Service. In the event of the death of a married Local 51 Participant or an unmarried Local 51 Participant who has designated a Contingent Annuitant on or after the date he had competed at least five Years of Service but before he had completed at least ten Years of Service or become eligible for Early Retirement, whether such Local 51 Participant is then actively employed or not, such Local 51 Participant's spouse or Contingent Annuitant, as applicable, shall be entitled to a benefit, payable, if such spouse or Contingent Annuitant is then surviving, on the first day of the month coincident with, or next following the later of (A) the date of the Local 51 Participant's death or (B) the date the Local 51 Participant would have attained age 55 had he survived. The amount of such benefit shall be the same amount that such surviving spouse or Contingent Annuitant would have received had such Local 51 Participant terminated his service, survived to age 55, elected the 50% contingent annuity form of benefit, as determined under Table 2 based on his and his spouse's or Contingent Annuitant's then attained ages, and then died.

(iii) Death Prior to Early Retirement Eligibility but After Completing Ten Years of Service. In the event of the death of a married Local 51 Participant or an unmarried Local 51 Participant who has designated a Contingent Annuitant on or after the date he has completed at least ten Years of Service but prior to becoming eligible for Early Retirement, whether such Local 51 Participant is then actively employed or not, such Local 51 Participant's spouse or Contingent Annuitant, as applicable, shall be entitled to a benefit, payable, if such spouse or Contingent Annuitant is then surviving, on the first day of the month coincident with, or next following the later of (A) the date of the Local 51 Participant's death or (B) the date the Local 51 Participant would have attained age 55 had he survived. The amount of such benefit shall be the same amount that such surviving spouse or Contingent Annuitant would have received had such Local 51 Participant retired on the day before his death, or at age 55 if the date of death is prior to the date the Local 51 Participant attains age 55, elected to receive the 100% contingent annuity form of benefit and then died. The amount of such benefit shall be determined under Table 4, based on his attained age and the attained age of his spouse or Contingent Annuitant, except that for purposes of applying Table 4, the Local 51 Participant's attained age, if less than age 55, shall be considered to be age 55 and his spouse's or Contingent Annuitant's age shall be adjusted so that it bears the same relationship to age 55 as their actual attained ages bear to each other.

(iv) Death After Becoming Eligible for Early Retirement. In the event of the death of a married Local 51 Participant or an unmarried Local 51 Participant who has designated a Contingent Annuitant while he is eligible for Early Retirement, whether such Local 51 Participant is then actively employed or not, such Local 51 Participant's spouse or Contingent Annuitant, as applicable, shall be entitled to a benefit, payable, if such spouse or Contingent Annuitant is then surviving, on the first day of the month coincident with, or next following the date of the Local 51 Participant's death. The amount of such benefit shall be the same amount that such surviving spouse or Contingent Annuitant would have received had such Local 51 Participant retired on the day before his death, elected to receive the 100% contingent annuitant form of benefit as determined under Table 4, based on his attained age and the attained age of his spouse or Contingent Annuitant, and then died.

(v) Death After Becoming Eligible for Normal Retirement. In the event of the death of a married Local 51 Participant or an unmarried Local 51 Participant who has designated a Contingent Annuitant while actively employed after his Normal Retirement Date, such Local 51 Participant's spouse or Contingent Annuitant, as applicable, shall be entitled to a benefit, payable, if such spouse or Contingent Annuitant is then surviving, on the first day of the month coincident with, or next following the date of the Local 51

Participant's death. The amount of such benefit shall be the same amount that such surviving spouse or Contingent Annuitant would have received had such Local 51 Participant retired on his Late Retirement Date, elected to receive the 100% contingent annuitant form of benefit as determined under Table 4, based on his attained age and the attained age of his spouse or Contingent. Annuitant, and then died.

(vi) Any benefit payable under this Section J shall terminate on the surviving spouse's or Contingent Annuitant's death.

(vii) Notwithstanding anything in this Section J to the contrary, if a single-sum death benefit would otherwise be payable under Section K below, the monthly benefit payable to the spouse or Contingent Annuitant, as applicable, under this Section J shall not be less than the monthly benefit which is the Actuarial Equivalent of the single-sum death benefit at the date benefits start.

K. Single-Sum Death Benefit. If the requirements of Section J above have not been met on the date a Local 51 Participant dies, a single-sum death benefit equal to his Required Contribution Account on the date he died, if any, shall be payable to the Local 51 Participant's spouse, if any, or to the Local 51 Participant's estate. If the requirements of Section J above have been met on the date such Local 51 Participant dies, but the Local 51 Participant's spouse or Contingent Annuitant dies before the preretirement survivor annuity starts, this single-sum death benefit, determined as of the date of the spouse's or Contingent Annuitant's death, shall be paid to the Local 51 Participant's estate.

L. Disability Retirement Income.

(i) A Local 51 Participant who has completed 10 or more Years of Service, and who qualifies for disability retirement under this Section L shall be retired as of the first day of the month following the first month in which the Committee has received both (i) the Local 51 Participant's written request for disability retirement, and (ii) evidence reasonably satisfactory to the Committee that the Local 51 Participant has been determined by the United States Social Security Administration to qualify for total and permanent disability benefits under the Social Security Act. A Local 51 Participant shall be eligible for disability retirement benefits if, as a result of mental or physical illness or injury (other than self-inflicted) while actively employed, he qualifies for disability benefits under the Social Security Act. Disability benefit payments shall commence in either the month in which the disabled Local 51 Participant is retired, as described above, or in the next following month, as may be administratively practicable. Such payments under the Plan shall be made retroactively to the first day of the month following the date as of which the Local 51 Participant is deemed to be disabled by the Social Security Administration, or, if later, to the last day of the Local 51 Participant's eligibility for continuation of the Local 51 Participant's salary or hourly wages as sick pay under an applicable Employer sick pay plan. The sum of any retroactive payments shall be paid in a lump sum, without interest, as part of the first monthly payment of disability benefits. A Local 51 Participant shall provide such reasonable evidence of continued Social Security disability as the Committee may require from time to time. Disability benefits shall be discontinued if the Local 51 Participant ceases to qualify for disability benefits under the Social Security Act.

(ii) "Disability Retirement Date" means the date a Participant retires before his Normal Retirement Date in accordance with the provisions of Section L(i).

(iii) A Local 51 Participant who retires under the provisions of Section L(i) before his Normal Retirement Date shall be entitled to receive for life, or as long as his disability continues to qualify under the Social Security Act, a monthly retirement income commencing on his Disability Retirement Date in an amount equal to the benefit which he would have received pursuant to Section D based on his Years of Service and Final Average Earnings as of his Disability Retirement Date, without reduction for early commencement. Notwithstanding the above, if a Local 51 Participant is not actively employed (meaning engaged in work duties for the Employer) on or after July 1, 2012, his benefit shall be determined under the provisions of the Plan in effect prior to July 1, 2012.

(iv) A Local 51 Participant who becomes disabled, while actively employed, on or after attaining age 65, shall be considered to have retired under Section D or Section E, as applicable, and will be entitled to a monthly retirement income, if any, in an amount determined under Section D or E and Section 6.1(a), as applicable.

APPENDIX 5

SPECIAL SERVICE CREDITING RULES AND BENEFIT PROVISIONS RELATING TO MERGER OF EMPLOYEES' RETIREMENT PLAN OF ELIZABETHTOWN WATER COMPANY

Effective January 1, 2006, the Employees' Retirement Plan of Elizabethtown Water Company (the "Elizabethtown Plan") was amended to provide that the benefit of all non-union participants would continue to be paid from the Elizabethtown Plan trust, however all benefits would become payable in accordance with the terms of the Pension Plan for Employees of American Water Works Company, Inc. And Its Designated Subsidiaries provided that certain protected benefits and features would continue to apply. The Elizabethtown Plan was also amended to provide that all Local 423 union employees hired or rehired on or after April 1, 2006 and all Local 68 union employees hired or rehired on or after May 1, 2006 were not eligible to commence or recommence participation in the Elizabethtown Plan.

Effective December 31, 2006, the Elizabethtown Plan was merged with and into the Plan, assets were transferred from the Elizabethtown Plan trust to the Trust for the Plan, and eligible employees of Elizabethtown Water Company began participation in the Plan. The following special rules apply only to the non-union and union employees who had accrued a benefit under the Elizabethtown Plan as of December 31, 2006.

<u>NON-UNION EMPLOYEES.</u>

The following special rules apply only to non-union employees who had accrued a benefit under the Elizabethtown Plan as of December 31, 2006 (the "Non-union Participants").

A. <u>Definitions</u>. All capitalized terms which are not defined below shall have the meaning given to them under Article 2 of the Plan.

(i) "<u>Compensation</u>" means regular earnings paid to an Employee, including contributions made by an Employee to a Code section 125 or 401(k) plan, but excluding bonuses, overtime pay, special pay and all other Employer contributions to benefit plans.

(ii) "<u>Early Retirement Date</u>" means the first of the month following a Non-union Participant's 55th birthday and completion of 10 or more Years of Service.

(iii) "<u>Final Average Earnings</u>" determined for periods beginning on and after January 1, 2006 and before January 1, 2011 shall be based on:

(a) the Non-union Participant's "Compensation" (as defined in Section A(i) above) for the portion of the applicable 60 consecutive months which occurred before January 1, 2006; and

(b) the Non-union Participant's "Earnings" (as defined in Section 2.1(n)) for the portion of the applicable 60 consecutive months which occurred on and after January 1, 2006.

(iv) "Service Crediting" or "Years of Service" means all service including service with Elizabethtown Water Company for purposes of vesting and for purposes of determining entitlement to Early Retirement.

For purposes of benefit accrual service, effective January 1, 2006, Non-union Participants shall cease to be credited with Years of Service under the Elizabethtown Plan and will commence benefit accrual service under the Pension Plan for Employees of American Water Works Company, Inc. and Its Designated Subsidiaries.

B. Early Retirement Income means the monthly retirement income commencing on a Non-union Participant's Early Retirement Date in an amount equal to the sum of:

(i) his normal retirement benefit as determined under Section C(i) reduced to reflect the early commencement of benefits by multiplying such benefit by 5/12 of 1% for each month that the commencement of payments precedes his Normal Retirement Date (or, if the Non-union Participant has completed at least 25 Years of Service, the reduction shall apply for each month that the commencement of payments precedes his attainment of age 60); plus

(ii) his normal retirement benefit as determined under Section C(ii) multiplied by the appropriate factor, determined by his attained age and Years of Service at his Early Retirement Date, as set forth in the Schedule of Early Retirement Factors attached to this Plan as Table 1.

C. Normal Retirement Income.

Effective for any Non-union Participant retiring after January 1, 2006, except as modified by the provisions of Section 6.1(a) of the Plan, a Participant's monthly retirement income commencing on his Normal or Late Retirement Date shall be an amount equal to the sum of the following:

(i) 1.60% of Final Average Earnings at retirement multiplied by Years of Service prior to January 1, 2006 as determined under the provisions of the Elizabethtown Plan, up to a maximum of 40 years, plus

(ii) 1.60% of Final Average Earnings at retirement multiplied by Years of Service after January 1, 2006 to Normal or Late Retirement Date.

D. Vested Benefits in the Event of Termination of Employment.

The benefit of any vested Non-union Participant who terminates employment on or after January 1, 2006 and who is not yet eligible for Early Retirement, shall be determined in accordance with Section B above.

E. Lump Sum Option.

In addition to the optional forms of payment provided under Section 6.3 of the Plan, if the Actuarially Equivalent present value of a Non-union Participant's vested Accrued Benefit is less than $15,000, he may elect to receive his benefit in the form of a single lump sum payment.

UNION EMPLOYEES.

The following special rules apply only to Local 423 union employees hired before April 1, 2006 and all Local 68 union employees hired before May 1, 2006 who had accrued a benefit under the Elizabethtown Plan as of December 31, 2006 (the "Union Participants").

A. Definitions. All capitalized terms which are not defined below shall have the meaning given to them under Section 2.1 of the Plan.

(i) "Actuarial Equivalent" means an amount of equal value when computed on the basis of the 1978 Group Annuity Mortality Table (1971 Group Annuity Mortality Table Projected to 1978 with scale E) and an interest rate of 5% per annum. An average of male and female rates shall be used. For purposes of determining lump sum present values for distributions with an Annuity Starting Date on and after December 31, 2006, the calculation shall be made using the applicable interest rate under section 417(e)(3) of the Code for the October immediately preceding the calendar year during which the Annuity Starting Date occurs, provided that the lump sum present value for distributions made on or before December 31, 2007, shall not be less than the lump sum present value based on the applicable interest rate under section 417(e)(3) of the Code for the December preceding the calendar year in which the Annuity Starting Date occurs.

(ii) "Average Monthly Compensation" means the average of the Union Participant's "Compensation" (as defined in Section A(iv) below) for any four consecutive calendar years during the period beginning with 1966 and ending on the date his employment terminates which produces the highest average.

(iii) "Beneficiary" means the person, persons or trust entitled to receive the payments, if any, made with respect to a Union Participant after such Participant's death.

(iv) "Compensation" means regular earnings paid to a Union Participant, including contributions made by a Union Participant to a Code section 125 or 401(k) plan, but excluding bonuses, overtime pay, special pay and all other Employer contributions to benefit plans. Compensation shall also include amounts paid to a Union Participant by Elizabethtown Water Company, or any of its participating affiliates, and credited as "Compensation" under the Elizabethtown Plan prior to the merger on December 31, 2006.

(v) "Early Retirement Date" means the first of the month following a Union Participant's 55th birthday and completion of 10 or more Years of Service.

(vi) "Elizabethtown Plan" means the Employees' Retirement Plan of Elizabethtown Water Company, as in effect on December 31, 2006, the date it was merged with and into the Plan.

(vii) "Qualified Joint and Survivor Annuity" or "QJSA" means an annuity for the life of the Union Participant with a survivor annuity for the life of such Participant's surviving Spouse which is equal to 50% of the amount which is payable during the joint lives of the Union Participant and his Spouse.

(viii) "Service Crediting" or "Years of Service". A Union Participant shall be credited with a Year of Service for each Plan Year during which he completes at least 1,000 Hours of Service with the Designated Subsidiary. Years of Service shall also include periods of service with Elizabethtown Water Company or its participating affiliates credited under the Elizabethtown Plan as "Credited Service" prior to the merger on December 31, 2006. Notwithstanding the foregoing, the maximum number of Years of Service credited under the Plan shall be 40.

(ix) "Spouse" means the husband or wife to whom the Union Participant had been married throughout the one-year period preceding the earlier of his Annuity Starting Date or date of his death.

B. Early Retirement Income. A Union Participant's monthly retirement income commencing on a Union Participant's Early Retirement Date shall be an amount equal to his normal retirement benefit as determined under Section C(i) reduced to reflect the early commencement of benefits by multiplying such benefit by 5/12 of 1% for each month that the commencement of payments precedes his Normal Retirement Date (or, if the Union Participant has completed at least 25 Years of Service, the reduction shall apply for each month that the commencement of payments precedes his attainment of age 60).

C. Normal or Late Retirement Income.

A Union Participant's monthly retirement income commencing on his Normal or Late Retirement Date shall be an amount equal to the greater of (i) or (ii) as follows:

(i) 1.60% of Average Monthly Compensation at retirement multiplied by Years of Service, up to a maximum of 40 years, or

(ii) his Accrued Benefit as of December 31, 1995, calculated under the terms of the prior Elizabethtown Plan as then effective.

D. Disability. A Union Participant shall not be eligible for any disability retirement benefit under the Plan unless such Union Participant (1) is a Local 423 union employee hired before April 1, 2006 who had a benefit under the Elizabethtown Plan as of December 31, 2006, and (2) becomes eligible for a disability retirement benefit under Section 4.3 of the Plan on or after February 1, 2009 while actively employed by New Jersey-American Water Company, Inc. (formerly known as the Elizabethtown Water Company). A Union Participant who is a Local 68 union employee shall not be eligible for any disability retirement benefit under the Plan.

E. Vested Benefits in the Event of Termination of Employment.

The benefit of any vested Union Participant who terminates employment on or after January 1, 2006 and who is not yet eligible for Early Retirement, shall be determined in accordance with Section B above. Such Union Participant shall be entitled to receive his benefit beginning with the month following his Normal Retirement Date and shall not be eligible to receive his benefit upon termination as provided in Section 8.2(b).

F. Forms of Benefit Payment.

(i) Normal Forms of Payment.

(a) The normal form of retirement benefit for an unmarried Union Participant shall be a monthly annuity for the life of such Participant continuing until the last payment due before his death. An unmarried Union Participant may elect an optional faun of payment in lieu of the normal form pursuant to the notice and election procedures under the Plan.

(b) The normal form of retirement benefit for a Union Participant who has been married throughout the one year period preceding his Annuity Starting Date shall be a Qualified Joint and Survivor Annuity or QJSA. Such a Participant may elect the normal form of benefit for an unmarried Participant or an optional fouls of benefit under this Section F. The Union Participant's election of an optional form of benefit will be valid only if his Spouse consents to his election in writing, signed before a notary public, pursuant to the notice and election procedures set forth in the Plan.

(ii) Optional Forms of Payment. Subject to the spousal waiver provision described above (if applicable) and in lieu of the normal form of benefit payment, a Union Elizabethtown Participant may elect one of the optional fauns of benefit payment:

(a) 100% Contingent Annuitant Option. The amount of retirement income to be paid to the Union Participant shall be reduced, but after his death 100% of such reduced retirement income shall be paid for life to his Spouse. The amount of reduced retirement income payable to the Participant shall be 80% of the amount otherwise payable. Such reduced retirement income shall be further reduced, or increased, by 1% for each year by which the Union Participant's Spouse is more than five years younger, or older, than the Participant. However, in no event shall the retirement income payable under this option be greater than that payable in the absence of an option.

(b) 50% Contingent Annuitant Option. The amount of retirement income to be paid to the Union Participant shall be reduced, but after his death 50% of such reduced retirement income shall be paid for life to his Spouse. The amount of reduced retirement income payable to the Participant shall be 90% of the amount otherwise payable. Such reduced retirement income shall be further reduced, or increased, by 1/2% for each year by which the Union Participant's Spouse is more than five years younger, or older, than the Participant. However, in no event shall the retirement income payable under this option be greater than that payable in the absence of an option.

(c) Five-Year Certain Option. The amount of retirement income to be paid to the Union Participant shall be reduced, but in the event of his death prior to receiving 60 monthly payments, the same amount of retirement income shall be continued to his Beneficiary until a combined total of 60 monthly payments have been made. The amount of reduced retirement income payable to the Participant shall be 98% of the amount otherwise payable to him.

(d) Ten-Year Certain Option. The amount of retirement income to be paid to the Union Participant shall be reduced, but in the event of his death prior to receiving 120 monthly payments, the same amount of retirement income shall be continued to his Beneficiary until a combined total of 120 monthly payments have been made. The amount of reduced retirement income payable to the Participant shall be 94% of the amount otherwise payable to him.

(e) Fifteen-Year Certain Option. The amount of retirement income to be paid to the Union Participant shall be reduced, but in the event of his death prior to receiving 180 monthly payments, the same amount of retirement income shall be continued to his Beneficiary until a combined total of 180 monthly payments have been made. The amount of reduced retirement income payable to the Participant shall be 88% of the amount otherwise payable to him.

(f) Lump Sum Option. If the Actuarially Equivalent present value of a Union Participant's vested Accrued Benefit is less than $15,000, he may elect to receive his benefit in the form of a single lump sum payment.

G. Death Benefits. The provisions of this Section shall apply to any vested Union Participant whether or not he has terminated employment with the Employer. Sections 6.3 and 6.4 shall not apply to any Union Participant. In addition, the Automatic Surviving Spouse Benefit under Section 6.1 of the Plan shall not apply to any Union Participant, however Section 6.2 Notice and Election Procedures for Qualified Joint and Survivor Annuity, shall apply to all Union Participants.

(i) Qualified Preretirement Survivor Annuity (QPSA).

(a) Death After Earliest Retirement Age. If a vested active or terminated vested Union Participant dies after the Earliest Retirement Age (as defined below), the Participant's Spouse or Beneficiary will receive the same benefit that would be payable if the Participant had retired with an immediate QJSA on the day before his date of death.

(b) Death Before Earliest Retirement Age If a vested active or terminated vested Union Participant dies on or before the Earliest Retirement Age, the Participant's Spouse or Beneficiary will receive the same benefit that would be payable if the Participant had:

(1) separated from service on the date of death,

(2) survived to the Earliest Retirement Age,

(3) elected to receive an immediate QJSA at the Earliest Retirement Age, and

(4) died on the day after the Earliest Retirement Age.

Notwithstanding the provisions of this Section, if the value of the QPSA is less than $5,000, the Committee shall direct the immediate distribution of the Actuarial Equivalent thereof in a single lump sum in cash to the Union Participant's Spouse or Beneficiary.

(c) Reduction in Benefit. The benefit payable to the Spouse or Beneficiary will be reduced by 1/6 of one percent for each month that the date of birth of the Spouse or Beneficiary is more than five years after the date of birth of the deceased Union Participant.

(d) Death Benefit after Commencement of Benefits. The benefits, if any, payable as a result of death after the commencement of benefits shall be governed by the payment option in effect in accordance with Section F.

(e) Earliest Retirement Age, for the purpose of this Section, is the earliest date on which, under the Plan, the Union Participant could elect to receive retirement benefits.

(f) Qualified Joint and Survivor Annuity. For purposes of this Section, the definition of Qualified Joint and Survivor Annuity set forth in Section A is changed by substituting the term "Beneficiary" in place of the term "Spouse" wherever it is used therein.

(g) Benefits Payable to Beneficiaries. The death benefit payable pursuant to the provisions of this Section G(i) shall be payable to a Beneficiary only if the Union Participant has no Spouse, unless a valid spousal waiver has been obtained, in accordance with Section G(ii)(d).

(ii) Beneficiary Designation.

(a) Each Union Participant shall have the right to designate one or more Beneficiaries and contingent Beneficiaries to receive any benefit payable under Section G(i)(d) by filing a written designation with the Committee on the form prescribed by the Committee.

(b) If the Union Participant has elected an annuity with a contingent annuitant option, the election of the contingent annuitant shall be irrevocable as of the Annuity Starting Date.

(c) If the Union Participant has elected an annuity with a guaranteed number of monthly payments or commuted death benefit, such Union Participant may thereafter designate a different Beneficiary to receive the guaranteed monthly payments or commuted death benefit at any time by filing a new written designation with the Committee.

(d) Notwithstanding the foregoing, if a married Union Participant designates a contingent annuitant or Beneficiary other than his Spouse and his Spouse does not consent to such designation in writing witnessed by a notary public or a representative of the Committee in a manner prescribed by the Committee, then the Union Participant's Spouse shall be the Participant's sole Beneficiary. A Spouse's consent to the Union Participant's Beneficiary designation given in accordance with the Committee's rules shall be irrevocable by the Spouse with respect to the Beneficiary then designated by the Union Participant unless the Participant makes a new Beneficiary designation.

(e) Any written designation shall become effective only upon its receipt by the Committee. If the Beneficiary designated pursuant to this Section should die on or before distribution of benefits and the Union Participant fails to make a new designation, then his Beneficiary shall be determined pursuant to Section G(iii). The Beneficiary of guaranteed monthly payments shall select the faun of distribution in accordance with Section G(iv).

(iii) <u>Beneficiary List</u>. If (1) a Union Participant omits or fails to designate a Beneficiary, (2) no designated Beneficiary survives the Union Participant or (3) the Committee determines that the Union Participant's Beneficiary designation is invalid for any reason, then any guaranteed monthly payments or commuted benefit payable after the death of the Union Participant shall be paid to his Spouse, or if the Union Participant is not survived by his Spouse, then to his estate. If the Union Participant's designated Beneficiary dies after the Union Participant, but before distribution of all guaranteed monthly payments, then the balance of the payments shall be paid to the Beneficiary's estate.

(iv) <u>Manner and Form of Payment</u>.

(a) Death benefits under Section G shall be distributed over a period not extending beyond five years of the Union Participant's date of death unless (1) payment of benefits commenced in the form of an annuity under Section E before the Union Participant's date of death, in which case benefits shall be distributed at least as rapidly as under the method of distribution in effect on the Union Participant's date of death, or (2) the benefit is payable to the Union Participant's designated Beneficiary and the projected distribution period does not exceed the life expectancy of such Beneficiary, provided distribution begins not later than one year after the date of the Participant's death or such later date as applicable regulations under the Code may permit.

(b) Notwithstanding the provisions of this Section, if the value of the death benefit is less than $5,000, the Committee shall direct the immediate distribution of the Actuarial Equivalent thereof in a single lump sum in cash to the Union Participant's Spouse or Beneficiary.

(v) Distribution of Employee Contributions. If a Union Participant dies prior to retirement and his Spouse is not eligible for a death benefit under Section G, his Beneficiary shall be paid a lump sum amount equal to the contributions, if any, which he made to the Elizabethtown Plan, including interest. Interest will be compounded annually to the date of death based on the following rates:

(a) from the date of contribution to December 31, 1987 at the rate of 5%;

(b) from January 1, 1988 to the date of death at the rate of 120 percent of the Federal mid-term rate as in effect under section 1274 of the Code for the first month of the Plan Year.

AMERICAN WATER WORKS COMPANY, INC.

SPECIAL OPTION FACTORS TO BE APPLIED TO BENEFITS
ACCRUED UNDER PRIOR PLANS OF DESIGNATED SUBSIDIARIES

1. California-American Water Company Employee Retirement Plan:

    (a) Basis: Interest 5%

    Mortality 1951 Group Annuity Mortality Table

    (b) Options available on this basis: Early retirement - 50%, 66 2/3%, and 100% Contingent Annuities.

2. West Virginia Water Company Pension Plan:

    (a) Basis: Interest Rate specified by Pension Benefit Guaranty Corporation for immediate annuities as of the Participant's termination date.

    Mortality 1971 TPF&C Forecast Mortality Table

    (b) Option available on this basis: Lump sum distribution if benefit payable is less than $240 per year, determined in accordance with Section 2.1(b) of the Plan.

3. Seymour Water Company and Pekin Water Works Company Pension Plans:

    Early Retirement Reduction Factors: 1/15 for each of the first five years and 1/30 for each of the next five years by which commencement of benefits precedes the Participant's Normal Retirement Date.

4. All other options for Prior Plans of Designated Subsidiaries will be calculated based on the option factors specified in Tables 1-4(b).

Exhibit 10.16.2

AMENDMENT TWO
TO THE
PENSION PLAN FOR EMPLOYEES OF
AMERICAN WATER WORKS COMPANY, INC.
AND ITS DESIGNATED SUBSIDIARIES
(As Amended and Restated Effective January 1, 2016)

WHEREAS, American Water Works Company, Inc. (the "Company") sponsors the Pension Plan For Employees of American Water Works Company, Inc. And Its Designated Subsidiaries (the "Plan") and its corresponding trust for the benefit of its eligible employees; and

WHEREAS, Section 16.1 of the Plan authorizes the Benefits Administration Committee of American Water Works Company, Inc. and Its Designated Beneficiaries (the "Committee") to amend the Plan for amendments that do not have a material cost; and

WHEREAS, the Committee desires to amend the Plan, to (i) add a lump sum benefit payment option to the Plan, which will be in addition to any other lump sum payment options currently available under the Plan, for all participants (both non-union and those participants who are covered by a collective bargaining agreement), who retire from employment with the Company and all affiliated employers on or after December 31, 2018, and whose annuity starting occurs on or after January 1, 2019, and (ii) provide that a participant's benefit payable as of normal retirement date, shall never be less than the benefit that is payable as of any earlier retirement age under the Plan, and (iii) provide that the benefit of a participant who is not a "named executive officer" of the Company will not decrease after attainment of age 62.

WHEREAS, this "Amendment" shall supersede the provisions of the Plan to the extent those provisions are inconsistent with the provisions of this Amendment.

NOW THEREFORE, BE IT RESOLVED, that by virtue of the authority reserved to the Committee under Section 16.1 of the Plan, the Plan is hereby amended as follows:

1. Effective January 1, 2019, Section 2.1(b) of the Plan is amended to read as follows:

"(b) 'Actuarial Equivalent' means a benefit of equivalent value (A) computed on the basis set out in Tables 2 through 4(a), appended hereto, (B) derived based on interest rates and mortality tables set forth in Table 5 or (C) in any instance in which neither (A) nor (B) applies, based on an assumed interest rate of 8% and using the 1983 Group Annuity Mortality Table (set-back 1 year for Participants and set back 5 years for Contingent Annuitants). For the purpose of determining lump sum present values pursuant to Sections 6.4(h), 6.6 and 6.7, the calculation shall be made using the "applicable mortality table" under section 417(e)(3)(B) of the Code and shall be based on the "applicable interest rate" under section 417(e)

(3)(C) of the Code for the third calendar month preceding the calendar month during which the Annuity Starting Date occurs."

2. Effective January 1, 2019, Section 4.1(a) of the Plan is amended to read as follows:

"(a) Upon retirement at his Normal Retirement Date, a Participant shall be entitled to receive a monthly retirement income commencing on his Normal Retirement Date, which in accordance with Treas. Reg. section 1.411(a)-7(c)(1) shall be equal to the greatest of: (i) the Participant's Accrued Benefit that he could have commenced on or after the date the Participant has attained age 55, provided the sum of his age and Years of Service equals or exceeds 70; (ii) in the case of a Participant who, as of January 1, 2019, is not a "named executive officer" (as defined in Item 402(a)(3) of Regulation S-K of the Securities Act of 1933, as amended), the Participant's Accrued Benefit that he could have commenced on or after attaining age 62; or (iii) the Participant's Accrued Benefit payable at Normal Retirement Date, or in the case of (i), (ii) or (iii), as applicable, the Actuarial Equivalent of such Accrued Benefit in an amount determined under Sections 5.2, 5.6, 5.7 and, if applicable, Section 6.1(a)."

3. Effective January 1, 2019, the title of Section 6.4 of the Plan is amended to read as follows:

"**Survivor and Lump Sum Benefits Available by Election**."

4. Effective January 1, 2019, Section 6.4(a) of the Plan is amended to read as follows:

"(a) Participants whose benefits are not subject to an automatic surviving spouse benefit under Section 6.1 or who, with their spouse's written and notarized consent as described in Section 6.2, elect not to accept an automatic surviving spouse benefit may elect to provide benefits for their Contingent Annuitants as described below, or effective January 1, 2019, elect payment of benefits in the form of a lump sum payment if they meet the conditions set forth in subsection (h) below."

5. Effective January 1, 2019, Section 6.4 of the Plan is amended to add the following new subsection (h) to the Plan to the end thereof to read as follows:

"(h) Effective January 1, 2019, a Participant whose Annuity Starting Date occurs on or after January 1, 2019, and who retires from employment with the Employer on or after December 31, 2018, may elect to receive his vested Accrued Benefit in a single sum payment which shall be an amount equal to the Actuarial Equivalent present value of the Participant's vested Accrued Benefit which would otherwise be payable at the Participant's Normal Retirement Date, excluding the value of any early retirement subsidy."

6. Effective January 1, 2019, Article IX of the Plan is amended to add the following new Section 9.5 to the end thereof to read as follows:

> "9.5 Reinstatement of Years of Service for Benefit Accrual. A Participant's Years of Service for benefit accrual attributable to a prior cash-out or lump sum payment equal to the Actuarial Equivalent present value of a Participant's Accrued Benefit, shall be restored upon reemployment of the Participant if payment was made to the Participant later than the last day of the second Plan Year following the Participant's termination from employment with the Employer. Upon subsequent termination, the Accrued Benefit payable to the Participant shall be offset by the value of the previous lump sum distribution."

(Signature Page Follows)

IN WITNESS WHEREOF, this Amendment has been executed this 19th day of December, 2018.

BENEFITS ADMINISTRATION
COMMITTEE OF
AMERICAN WATER WORKS
COMPANY,
INC. AND ITS DESIGNATED
SUBSIDIARIES

By: /s/ Melanie M. Kennedy

Title: SVP, Human Resources

American Water Works Company, Inc.'s Subsidiaries

As of February 18, 2020

Entity Name	Entity Type	Jurisdiction of Organization
American Industrial Water LLC	Limited Liability Company	Ohio
American Lake Water Company	Corporation	Illinois
American Water – Acciona Agua LLC	Limited Liability Company	Delaware
American Water (USA), LLC	Limited Liability Company	Delaware
American Water Canada Corp.	Corporation	Ontario
American Water Capital Corp.	Corporation	Delaware
American Water Carbon Services Corp.	Corporation	Ontario
American Water Enterprises Holding, LLC	Limited Liability Company	Delaware
American Water Enterprises, LLC	Limited Liability Company	Delaware
American Water Defense Services, LLC	Limited Liability Company	Delaware
American Water Federal Services, LLC	Limited Liability Company	Delaware
American Water Military Services, LLC	Limited Liability Company	Delaware
American Water Operations and Maintenance, LLC	Limited Liability Company	Texas
American Water Resources Holdings, LLC	Limited Liability Company	Delaware
American Water Resources of Florida, LLC	Limited Liability Company	Delaware
American Water Resources of Texas, LLC	Limited Liability Company	Delaware
American Water Resources, LLC	Limited Liability Company	Virginia
American Water Services CDM, Inc.	Corporation	Washington
American Water Services, LLC	Limited Liability Company	Delaware
American Water Works Service Company, Inc.	Corporation	Delaware
AW Contract Services (Canada), Inc.	Corporation	Canada
AW Insurance LLC	Series Limited Liability Company	Delaware
AWIP Holdings LLC	Limited Liability Company	Delaware
AW Technologies, LLC	Limited Liability Company	Delaware
Bluefield Valley Water Works Company	Corporation	Virginia
California-American Water Company	Corporation	California
Edison Water Company	Corporation	New Jersey
EMC American Water Canada Inc.	Corporation	Canada
Environmental Disposal Corporation	Corporation	New Jersey
Environmental Management, LLC	Limited Liability Company	Missouri
E'town Properties, Inc.	Corporation	Delaware
E'town Services L.L.C.	Limited Liability Company	New Jersey
Georgia-American Water Company LLC	Limited Liability Company	Delaware
Hawaii-American Water Company	Corporation	Nevada
Illinois-American Water Company	Corporation	Illinois
Indiana-American Water Company, Inc.	Corporation	Indiana
Iowa-American Water Company	Corporation	Delaware
Kentucky-American Water Company	Corporation	Kentucky
Laurel Oak Properties Corporation	Corporation	Delaware
Liberty Water Company	Corporation	New Jersey
Maryland-American Water Company	Corporation	Maryland
Michigan-American Water Company	Corporation	Michigan
Missouri-American Water Company	Corporation	Missouri
Mt. Ebo Sewage Works, Inc.	Corporation	New York

Entity Name	Entity Type	Jurisdiction of Organization
New Jersey-American Water Company, Inc.	Corporation	New Jersey
New York American Water Company, Inc.	Corporation	New York
OMI/Thames Water Stockton, Inc.	Corporation	Delaware
One Water Street LLC	Limited Liability Company	New Jersey
Pennsylvania-American Water Company	Corporation	Pennsylvania
Pivotal Home Solutions, LLC	Limited Liability Company	Delaware
Prism-Berlie (Windsor) Limited	Corporation	Ontario
Tennessee-American Water Company	Corporation	Tennessee
TWH LLC	Limited Liability Company	Delaware
TWNA, Inc.	Corporation	Delaware
Virginia-American Water Company	Corporation	Virginia
West Virginia-American Water Company	Corporation	West Virginia

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (Nos. 333-229994 and 333-224558) and Form S-8 (Nos. 333-235598, 333-219682, 333-217975, 333-168543 and 333-150381) of American Water Works Company, Inc. of our report dated February 18, 2020 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Philadelphia, Pennsylvania
February 18, 2020

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

I, Susan N. Story, certify that:

1. I have reviewed this annual report on Form 10-K of American Water Works Company, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 18, 2020

By: /s/ SUSAN N. STORY

Susan N. Story
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

I, M. Susan Hardwick, certify that:

1. I have reviewed this annual report on Form 10-K of American Water Works Company, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 18, 2020

By: /s/ M. SUSAN HARDWICK

M. Susan Hardwick

Executive Vice President and Chief Financial Officer (Principal Financial Officer)

Exhibit 32.1

AMERICAN WATER WORKS COMPANY, INC.

CERTIFICATION PURSUANT TO
RULE 13a-14(b) UNDER THE SECURITIES EXCHANGE ACT OF 1934 AND
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Susan N. Story, President and Chief Executive Officer of American Water Works Company, Inc. (the “Company”), hereby certify that, based on my knowledge:

(1) The Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2019 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ SUSAN N. STORY

Susan N. Story
President and Chief Executive Officer
(Principal Executive Officer)

February 18, 2020

Exhibit 32.2

AMERICAN WATER WORKS COMPANY, INC.

CERTIFICATION PURSUANT TO
RULE 13a-14(b) UNDER THE SECURITIES EXCHANGE ACT OF 1934 AND
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, M. Susan Hardwick, Executive Vice President and Chief Financial Officer of American Water Works Company, Inc. (the "Company"), hereby certify that, based on my knowledge:

(1) The Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ M. SUSAN HARDWICK

M. Susan Hardwick

Executive Vice President and Chief Financial Officer (Principal Financial Officer)

February 18, 2020