EXHIBIT R

CITY OF BEAVER FALLS
WASTEWATER SYSTEM ASSETS

FAIR MARKET VALUE APPRAISAL

AT

DECEMBER 31, 2021

Prepared by:

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August 10, 2022

Via email to CJones@beaverfallspa.org

Mr. Charles R. Jones, Jr., City Manager
City of Beaver Falls
715 15th Street
Beaver Falls, PA 15010

Dear Mr. Jones:

Fair Market Value Appraisal

In accordance with your request, we have prepared a fair market value appraisal of the City of Beaver Falls' wastewater system assets ("Wastewater System") as of December 31, 2021.

Fair market value is defined as "the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts." (The International Glossary of Business Valuation Standards)

Based on our analysis, as described in the attached appraisal report, the estimate of the fair market value of the Wastewater System, as of December 31, 2021, is $44,292,000 (rounded).

Our appraisal was developed consistent with the Uniform Standards of Professional Appraisal Practices. Our fair market value appraisal of the Wastewater System was based on the Cost, Market, and Income Approaches to valuation. We used seven methods under the Cost, Market, and Income Approaches to valuation: Original Cost Method, Replacement Cost Method, Capitalization of Earnings Method, Market Multiple Discounted Cash Flow Method, Capitalization Discounted Cash Flow Method, Market Multiples Method, and the Selected Transactions Method.

The attached narrative appraisal presents our findings and conclusions regarding the fair market value of the Wastewater System's assets of December 31, 2021. The report describes the valuation methodologies employed and the Exhibits that present the valuation results.

The results of the analyses and calculations completed for each applicable approach are detailed throughout the report and the Exhibits and are summarized as follows:

Valuation Approach	Indicated Value
Cost Approach	$32,994,154
Income Approach	45,450,675
Market Approach	50,664,671

We thank the City of Beaver Falls for this opportunity to provide valuation services in connection with the fair market value appraisal of the Wastewater System's assets.

Respectfully Submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

HAROLD WALKER, III
Manager, Financial Studies

HW:mle

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INTRODUCTION

Introduction and Summary. The following narrative report presents our findings and conclusions regarding the fair market value of the wastewater system assets of the City of Beaver Falls as of December 31, 2021. The report describes the valuation methodologies employed and the Exhibits that present the valuation results. Based upon the analyses, we believe the fair market value of the City of Beaver Falls' wastewater system assets is $44.3 million ($44,292,000 rounded). This conclusion is based upon the values suggested by the Cost, Income, and Market approaches. During our analysis we found indications of value that ranged from $33.0 million to $50.7 million. However, most of the appropriate indicated values approximated $44.3 million.

Description of the Assignment. Gannett Fleming Valuation and Rate Consultants, LLC was retained by City of Beaver Falls ("Beaver Falls") to estimate the fair market value of City of Beaver Falls' wastewater system assets ("Wastewater System") as of December 31, 2021.

Standard and Premise of Value. The fair market value appraisal of the Wastewater System complies with the Uniform Standards of Professional Appraisal Practices, employing the cost, market, and income approaches. Fair market value is defined as "the price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts."[1]

As stated, the standard of value for this engagement is fair market value. The premise of value is the going concern. The going concern premise of business value assumes that the business

1 The International Glossary of Business Valuation Standards

will continue running normally using all its assets to produce income and will continue operating beyond the valuation date.

We valued the Wastewater System's assets as a group under the premise that the assets collectively comprise an ongoing operating business enterprise. Additionally, in accordance with 66 Pa. C.S. Section 1329, the original source of funding for any part of the Wastewater System's assets was not relevant to the determination of the value of said assets.

Subject Interest. The consideration in this transaction is a 100% interest in Beaver Falls' wastewater operations, which means that the buyer would be able to control the Wastewater System's operations going forward. This subject interest is marketable but is not a liquid interest. The binding agreement governing this transaction is the asset purchase agreement.

Intended Use of the Valuation. The intended use of the valuation is to comply with 66 Pa. C.S. Section 1329, Valuation of Acquired Water and Wastewater Systems and conduct a fair market value appraisal of the Wastewater System in compliance with the Uniform Standards of Professional Appraisal Practices, employing the cost, market, and income approaches. Although our appraisal is intended to estimate fair market value, we assume no responsibility for the inability of the seller or buyer to obtain a sale or purchase contract at that price.

Client and Users. The client is the City of Beaver Falls. The intended users of the valuation are the City of Beaver Falls, Aqua Pennsylvania Wastewater, Inc., and the Pennsylvania Public Utility Commission ("PUC").

Jurisdictional Exceptions. In accordance with 66 Pa. C.S. Section 1329, and PUC rules, the acquiring public utility and selling utility jointly retain a licensed engineer to conduct an assessment of the tangible assets of the system ("Engineering Assessment") to be acquired. The Engineering Assessment is required to be used by the appraiser in determining fair market value.

The Engineering Assessment provides both a condition assessment and original cost inventory of the assets.

Extraordinary Assumptions. There were no extraordinary assumptions required for this appraisal.

Hypothetical Conditions. There were no hypothetical conditions assumed for this appraisal.

Limiting Conditions. We accepted all information and data provided by the City of Beaver Falls as it pertains to this assignment "as is" after a limited review. That is, we neither audited nor verified any data, engineering assessment, financial record or operating data provided for this assignment. We assumed all title to all assets included in the appraisal is good and marketable, no hidden defects in the property or soil and no hazardous conditions or materials exist which could affect the assets. We are not an environmental consultant or auditor, and we take no responsibility for any actual or potential environmental liabilities. We have not made a specific compliance survey or analysis of the subject property to determine whether it is subject to, or in compliance with, the American Disabilities Act of 1990, and this valuation does not consider the effect, if any, of noncompliance.

The economic and industry information and data included in this report have been obtained from various printed or electronic reference sources that we believe to be reliable. We have not performed any corroborating procedures to substantiate that information and data.

Site Inspection. Wastewater engineers from our affiliated company viewed or observed the Wastewater System's facilities on February 26, 2021, August 20, 2021, January 28, 2022, and other dates unknown**.** We also relied on engineering assessment of the Wastewater System's facilities report, "City of Beaver Falls, Beaver County, Pennsylvania, Engineers Assessment of

Wastewater System Assets" dated June 9, 2022, and related files prepared by Gannett Fleming, Inc., to confirm the condition of the Wastewater System's property and equipment.

Fiduciary Duty. Gannett Fleming has a fiduciary duty to, and does provide a thorough, objective, and fair market valuation using the cost, market, and income approaches in accordance with 66 Pa. C.S. Section 1329 and Pennsylvania laws.

Gannett Fleming attests that it does not derive any material financial benefit from the sale of, or purchase of, a selling utility other than fees for services rendered. Gannett Fleming also verifies it does not have any immediate family members who are directors, officers or employees of either an acquiring public utility, entity or selling utility within a 12-month period of the date of hire to perform this appraisal. We further affirm that Gannett Fleming is not directly or indirectly owned, partnered or in any way affiliated with a water/wastewater distribution company.

Sources of Information. The following sources of information were reviewed during the assignment:

"City of Beaver Falls, Beaver County, Pennsylvania, Engineers Assessment of Wastewater System Assets," dated June 9, 2022, and related files prepared by Gannett Fleming, Inc.;

City provided electronic files (e.g., PDF and Excel);

Wastewater System's Customer data;

Wastewater System's Fee Schedule;

Wastewater System's 537 Plan;

Wastewater System's Chapter 94 Reports;

Wastewater System's Permits;

DEP's Inspection and Discharge Monitoring Reports;

Wastewater System's Sewage Service and Treatment Agreements;

Asset Purchase Agreement;

City of Beaver Falls' Audited Financials (2017 - 2020);

City of Beaver Falls' Corrective Action Plans;

City of Beaver Falls' Sewer Ordinances;

Blue Chip Financial Forecasts;

US Census Bureau, various data files;

Value Line Investment Survey; and

S&P Capital IQ.

Description of the City of Beaver Falls. City of Beaver Falls is located near the center of Beaver County, in western Pennsylvania. City of Beaver Falls lies along the western side of the Beaver River and borders Eastvale Borough on the other side of the Beaver River, West Mayfield Borough to the northwest, White Township to the west, and Patterson Heights Borough and Patterson Township to the southwest. City of Beaver Falls is the 26th largest land mass of Beaver County's 53 municipalities and was the 5th most populous with 8,661 people (2015) and 4,183 housing units (2015). City of Beaver Falls consists of 2.1 square miles and lies approximately 40 miles northwest of Pittsburgh, Pennsylvania. According to U.S. Census figures, City of Beaver Falls' population grew 0.2% from 2010 to 2020, while population in Pennsylvania grew 2.4% and -1.4% (negative) in Beaver County.

Description of the Wastewater System. City of Beaver Falls owns and operates the Wastewater System which consists of a wastewater treatment plant ("WWTP"), a pump station, about 36 miles of mains, approximately 674 manholes, 3,252 services, associated infrastructure and appurtenances, and related land and land rights.

The Wastewater System's WWTP receives and treats wastewater from the following municipalities: the City of Beaver Falls, Eastvale, White Township, West Mayfield, Patterson Township, Patterson Heights, Big Beaver Municipal Authority, and North Sewickley Township Sewer Authority. Each municipality is responsible for their own collection system.

The Wastewater System WWTP is a 4.7 million gallons per day ("MGD") capacity plant. In 2020, the WWTP's average daily flow was 2.10 MGD. The WWTP has with three primary settling tanks, two biological contact oxidation towers, five secondary settling tanks, two chlorine disinfection tanks, two anaerobic sludge digesters, a belt filter press, a grit separator, a grease separator, with various piping, pumps, blowers, controls, and an onsite emergency power generator. The dewatered sludge and process residuals are disposed at a regional landfill. The WWTP operates under NPDES Permit No. PA0026883 (effective November 1, 2018 and expires October 31, 2023).

The Wastewater System owns and maintains the Eastvale Pump Station, located in neighboring Eastvale Borough. The Eastvale Pump Station's force main is 8-inches in diameter and approximately 1,400 linear feet. The force main consists of ductile iron ("DIP") pipe, which was installed in 2006.

The Wastewater System's 190,442 linear feet of gravity sewer collection and trunk mains consist of 8-inch, 10-inch, 12-inch, 15-inch, 16-inch, 18-inch and 24-inch diameter pipe which was installed between 1937 to 2011.[2] About 82% of the gravity mains were installed in 1937, 16% between 1990 and 1998, and 1% between 2008 and 2011. The mains consist of vitrified clay ("VCP") pipe and cured in place ("CIP") VCP, and polyvinyl chloride ("PVC") SDR 35 pipe.

2 The Engineering Assessment listed installation date of 1936-1938 was assumed to be 1937 for appraisal purposes.

Only about 6% of the mains installed in 1937 have had to be replaced or lined. There are 674 brick and concrete manholes and 3,252 services laterals in the system. All manholes and services laterals were installed in 1937, and none have been replaced.

The City of Beaver Falls utilizes two enterprise funds to account for the Wastewater System's operations. The City of Beaver Falls' audited financial statements reflect the use of modified accrual accounting, a combination of cash basis and full accrual basis. Modified accrual accounting measures revenues when they become available and measurable and, with a few exceptions, records expenditures when liabilities are incurred, regardless of the timing of related cash flows. For the year ended December 31, 2020, (shown on Exhibit 1) the Wastewater System had reported revenues of $3.025 million and expenses of $2.870 million. At the same point in time, the Wastewater System was capitalized with $8.146 million of fund equity and no City of Beaver Falls' long-term debt was attributable to the Wastewater System. At the same point in time, the Wastewater System had total assets of $8.238 million, including $6.026 net utility plant.

The Wastewater System is exempt from PUC regulation as a municipal utility. The Wastewater System's rate requirements are established by the needed funds to run the system. Most municipalities, including Wastewater System, use a Government Accounting Standards Board ("GASB") process of accounting or the PA Department of Community and Economic Development ("DCED") versus Financial Accounting Standards Board ("FASB") method of accounting used by investor-owned utilities ("IOU"). Municipalities are not typically concerned with the return on and the return of their investments of their utility systems since they deem they are providing a public service to their taxpayers. Municipalities typically expense (i.e., maintenance expense) renewals replacement, and customer collection services capital expenditures and they do not typically fully account for the replacement of all capital assets which

are all typically capitalized (i.e., construction of capital asset, construction expenditure, etc.) and "booked" at original cost by IOUs. For these reasons, we do not believe Wastewater System's financial statements should be fully relied upon without recognizing their limitations.

As shown on page 1 of Exhibit 2, the Wastewater System provides service directly to 3,259 customers ("domestic customers"). The Wastewater System's domestic customers include 3,252 retail customers located in the City of Beaver Falls and seven wholesale customers whose flows are transported and treated at the WWTP.[3] The Wastewater System's seven wholesale customers service 3,767 customers whose flows are ultimately transported and treated at the WWTP ("ultimate wholesale customers"). In total, the Wastewater System provides wastewater service directly and indirectly to 7,019 customers ("ultimate customers"). The Wastewater System's 7,019 ultimate customers are comprised of 3,252 retail customers and 3,767 ultimate wholesale customers as shown on Exhibit 2, page 1.

The Wastewater System provides service to a population of 15,580 people and services to approximately 5,107 Equivalent Dwelling Units ("EDU"). EDUs are estimated to increase by 25 EDUs through 2025.

Demographics and Growth for the Wastewater System. As shown on Exhibit 3, Table 3.1, according to U.S. Census figures, the U.S. population grew 7.4% from 2010 to 2020, and the population in Pennsylvania grew 2.4%. During this same period, Beaver County's population decreased by 1.4%, the City of Beaver Falls' population grew 0.2%, and the population of all eight municipalities that are provided service by the WWTP decreased by 0.7% (Exhibit 3, Table 3.2). City of Beaver Falls' population growth was ranked 963 of the 2,572 municipalities in

3 The Wastewater System's seven wholesale customers include: Eastvale, White Township, West Mayfield, Patterson Township, Patterson Heights, Big Beaver Municipal Authority, and North Sewickley Township Sewer Authority.

Pennsylvania and the eight municipalities that are provided service by the WWTP's population growth rate would be ranked 1,083 of the 2,572 municipalities in Pennsylvania.

The Census Bureau and planning agencies provide population projections for future time periods. Population projections are a primary indicator of expected future growth, and they help determine predictable demand for utility services, housing, roads, business services and facilities. The Southwestern Pennsylvania Commission ("SPC") is the regional planning agency serving the 10-county Southwestern Pennsylvania region. The 10-county Southwestern Pennsylvania region includes the counties of Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Lawrence, Washington, and Westmoreland, and the City of Pittsburgh. The SPC publishes population projections and employment projections for the 10-county Southwestern Pennsylvania region and the municipalities which comprise the counties, which include the Wastewater System's service area.

As shown on Page 2 of Exhibit 3, Table 3.3, the City of Beaver Falls' population growth is projected to be about 62% of the growth rate projected for the total SPC Region during each five-year period from 2020 through 2045. The City of Beaver Falls' projected population growth places them in the upper 60 percent or 60th percentile of the 586 municipalities analyzed by SPC. The eight municipalities that are provided service by the WWTP's population growth rate would be ranked 243 of the 586 municipalities, equal to the upper 59 percent, or 59th percentile of the 586 municipalities analyzed by SPC.

Page 3 of Exhibit 3, Table 3.4 shows the City of Beaver Falls' employment growth is projected to be -2.2% (negative), which ranks them 375 and places them in the lower 36 percent, or 36th percentile of the 586 municipalities analyzed by SPC. The eight municipalities that are provided service by the WWTP's employment growth rate would be ranked 387 and place them

in the lower 34 percent, or 34th percentile of the 586 municipalities analyzed by SPC.

Currently, there are approximately 21,859 people (Exhibit 2) in the Wastewater System's service area 20,743 people in households. There are 9,069 occupied housing units in the Wastewater System's service area, and the ratio of people to households is 2.29 persons per household. The Wastewater System's service area density is 4.8 people per customer based on an estimated service area population of 15,580 and 3,259 domestic customers.[4] The Wastewater System's service area density is higher than the 3.6 per customer density of water and wastewater systems (see Table 2 in this report) indicating lower market penetration.

HISTORY AND NATURE OF THE BUSINESS

Economic Outlook. The valuation date (December 31, 2021) is the specific date at which the value of the Wastewater System is based. Generally, only the circumstances existing at the valuation date and events occurring up to the valuation date are considered. Events which could affect the value may occur after the valuation date.

An outbreak of a new strain of coronavirus was first reported in Wuhan, China in late 2019 and quickly spread around the world. A coronavirus is a kind of common virus that causes an infection in sinuses, or upper throat. The World Health Organization ("WHO") declared the spread of the infection a pandemic. The WHO named the virus SARS-CoV-2, and the disease COVID-19.

We do not believe the appraised value of the long-lived Water System assets is materially impacted by COVID-19 or its related relatively short-term events and does not significantly affect the determination of value as of the specified valuation date of December 31, 2021. In the valuation

4 The service area density for ultimate customers is 2.2 people per customer.

of any company, the general economic outlook as of the valuation date is important since it influences how investors perceive alternative investment opportunities at that point in time. As part of our analysis, we considered the forecasts for the U.S. economy that prevailed as of December 31, 2021. We focused on the forecasts and economic commentary presented in Blue Chip Financial Forecasts in the December 1, 2021 edition. Some of these economic forecasts are presented in Table 1.

Economic Indicators

	Latest Qtr	Consensus Forecasts	
	3Q 2021	4Q 2021	1Q 2022
Key Assumptions			
Real GDP	2.1	5.1	4.4
GDP Price Index	5.9	4.6	3.4
Consumer Price Index	6.6	5.6	3.3
Interest Rates			
3-mo. Treasury Bills	0.05	0.1	0.1
10 Year Notes	1.32	1.6	1.7
30 Year Notes	1.93	2.1	2.2
Aaa Corporate Bond Yield	2.72	2.7	2.9
Baa Corporate Bond Yield	3.16	3.4	3.6
State & Local Bonds	2.64	2.4	2.6
Home Mortgage Rate	2.87	3.1	3.2

Table 1

Industry Review. A review of the industry in which the company operates is important in determining value. The trends and stability of the specific economic environment affecting operations need to be reviewed to gain further insight regarding the prospects and risks associated

with the industry and each company.

The wastewater utility industry has a Standard Industrial Classification ("SIC") code of 4952 (Sewerage Systems), has sewer utilities, and includes establishments primarily engaged in the collection and disposal of wastes conducted through a sewer system, including such treatment processes as may be provided. There are currently 2,041 U.S. Businesses with a SIC code of 4952.

The wastewater utility industry is a fragmented industry, although not as fragmented as the water supply industry. According to the U.S. Environmental Protection Agency's ("EPA") most recent survey of publicly owned wastewater treatment facilities in 2012, there are approximately 15,000 such facilities in the nation, serving approximately 76% of the U.S. population. Eighty percent of domestic wastewater systems are government owned rather than IOUs. Currently, there are no wastewater utility companies that have actively traded stock.

A comparative industry to the wastewater utility industry is the water supply industry. The water utility industry has a Standard Industrial Classification ("SIC") code of 4941 (Water Supply), has water utilities, and includes establishments primarily engaged in distributing water for sale for residential, commercial, and industrial uses. Government controlled establishments such as municipal service districts and public utilities dominate the industry. Private companies or IOUs are active in the construction and improvement of water supply facilities and infrastructure. There are currently 11,137 U.S. Businesses with a SIC code of 4941.

The water supply industry is the most fragmented of the major utility industries with more than 53,000 community water systems in the U.S. (82% of which serve less than 3,300 customers). The nation's water systems range in size from large municipally owned systems, such as the New York City water system that serves approximately 9 million people, to small systems, where a few

customers share a common well.

An estimated 14% of all water suppliers are managed or owned by IOUs. IOUs consist of companies with common stock that is either actively traded or inactively traded, as well as companies that are closely held, or not publicly traded. Currently (December 31, 2021), there are only about nine investor-owned water utility companies with publicly traded stock in the U.S.

The water utility industry and wastewater utility industry's increased compliance with state and federal water purity levels and large infrastructure replacements are driving consolidation of the wastewater utility and water utility industries. Because many wastewater utility and water utility operations do not have the means to finance the significant capital expenditures needed to comply with these requirements, many have been selling their operations to larger, financially stronger operations.

The larger IOUs have been following an aggressive acquisition program to expand their operations by acquiring smaller wastewater and water systems. Generally, they enter a new market by acquiring one or several wastewater or water utilities. After their initial entry into a new market, the larger investor-owned water utility companies continually seek to expand their market share and services through the acquisition of wastewater and water utility businesses and operations that can be integrated with their existing operations. Such acquisitions may allow a company to expand market share and increase asset utilization by eliminating duplicate management, administrative, and operational functions.

Acquisitions of small, independent utilities can often add earning assets without necessarily incurring the costs associated with the Safe Drinking Water Act ("SDWA") if such acquisitions are contiguous to the potential purchaser.

In summary, the result of increased capital spending, to meet the SDWA requirements[5] and to replace the aging infrastructure of many systems, has moved the wastewater and water industries toward consolidation. Moreover, Federal and State regulations and controls concerning water quality are still in the process of being developed and it is not possible to predict the scope or the enforceability of regulations or standards which may be established in the future, or the cost and effect of existing and potential regulations and legislation upon the sewer and water systems. However, as a small to medium sized wastewater system, the Wastewater System faces the cost of compliance with significantly limited financial resources, competing for financial needs against other municipal services and the general unwillingness of elected officials to raise taxes when compared to larger IOU water utilities.

QUANTITATIVE AND QUALITATIVE ANALYSIS

Comparison Review. The comparison review considers the financial and operating statistics for the Wastewater System, and a group of companies ("Comparable Group") that operate in the same basic or similar industry as the Wastewater System. Since no marketplace exists for the common stock of the Wastewater System, an alternative to estimate the value of the Wastewater System is to analyze the price investors are willing to pay for the publicly traded common stock of companies that are like the Wastewater System. We list the Comparable Group chosen for study in Table 2.

The companies in the Comparable Group were selected based upon: (1) the availability of

5 The SDWA, or Safe Drinking Water Act, is the principal federal law in the United States intended to ensure safe drinking water for the public. Pursuant to the act, the EPA is required to set standards for drinking water quality and oversee all states, localities, and water suppliers who implement these standards. The CWA, or Clean Water Act, is the primary federal law in the United States governing water pollution. The CWA's objective is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands.

financial information; (2) inclusion in the S&P Capital IQ database; (3) a December 31, 2021 market value of common stock, the product of multiplying the closing stock price by the number of common shares outstanding, greater than $200.0 million; (4) a December 31, 2021 total enterprise value (the sum of market value, preferred stock and total debt) greater than $450.0 million; (5) were not the subject of a known acquisition at December 31, 2021; (6) with a Standard Industrial Classification (SIC) of 4941 (i.e., Water Supply Facilities and Infrastructure) and (7) with a North American Industry Classification System (NAICS) of 221310 (i.e., Water Supply and Irrigation Systems). The eight companies ("Comparable Group") that met the criteria for selection are listed in Table 2.

	Acquisition Date Size Statistics			
	Revenues (Mill. $)	Customers	Population	Customer Density
City of Beaver Falls Wastewater System Assets	$3.025	3,259	15,580	4.8
Comparable Group				
American States Water Co	$488.243	286,341	1,000,000	3.5
American Water Works Co Inc	3,777.000	3,496,000	15,000,000	4.3
Artesian Resources -CL A	88.141	95,640	300,000	3.1
California Water Service Gp	794.307	543,000	2,000,000	3.7
Essential Utilities, Inc.	1,462.698	1,798,803	5,000,000	2.8
Middlesex Water Co	141.592	122,200	500,000	4.1
SJW Corp	564.526	389,293	1,614,866	4.1
York Water Co	53.852	72,681	202,000	2.8
Median	$526.385	337,817	1,307,433	3.6

Table 2

We believe that similar economic, industry and business risks have affected the

Comparable Group as those faced by the Wastewater System. However, consideration must be given to the fact that no two companies are exactly alike. Table 2 presents comparative statistics regarding total revenues, customers, population of the area served, and customer density (population ÷ customers). On average, the Comparable Group are larger than the Wastewater System. The relative size difference between the group and the Wastewater System suggests that the risk of the Wastewater System is greater than the Comparable Group. We will discuss the difference in risk resulting from size later in this report.

Financial Review. We conducted a financial review that considered the financial and operating statistics for the Wastewater System and the Comparable Group for the three-year period, 2018 to 2020. It is our opinion that the economic, industry and business risks affecting the Comparable Group selected are similar to those faced by the Wastewater System. However, consideration must be given to the fact that no two companies are exactly alike.

The determination of reasonable water rates and sewer rates for the Comparable Group is subject to rate regulation. For the Comparable Group, rate regulation serves as a substitute for competition in the marketplace since utility companies are precluded from exercising complete control over the price to be charged their customers. Under rate regulation, a cost of service formula is used to set the price for service charged to customers. The cost of service formula equates revenues to the sum of annual operating expenses, taxes other than income, depreciation expense, income taxes, and the product of the rate base times a fair rate of return.

It is the responsibility of the utility seeking changes in rates to present sufficient evidence to their regulators in support of their request. Historically, the Wastewater System's rates have not considered a fair rate of return nor taxes. That is, the Wastewater System's rates would have been higher and their financial results would have been healthier if they included a provision for a

fair rate of return and taxes. Consequently the results of the Wastewater System's historical financial performance shown on Exhibits 4 and 6 should be viewed with this knowledge.

Financial Benchmark Analysis. To gain insight into the risk differences between the Wastewater System and the Comparable Group, we reviewed financial ratios and coverages. Unfortunately, there is no single measure that best indicates investment risk from an investor's perspective. However, from a creditor's viewpoint, the best measure of investment risk is debt rating. The debt rating process generally provides a good measure of investment risk for common stockholders because the factors considered in the debt rating process are usually relevant factors that a common stock investor would consider in assessing the risk of an investment.

The types of financial benchmarks applied by credit rating agencies such as Standard and Poor's ("S&P") for rating IOU public utility debt are broader than the traditional measure of financial risk, leverage. Besides reviewing the amounts of leverage employed (i.e., percentage of debt used in the capital structure), S&P also focuses on earnings protection and cash flow adequacy. During the period 2018-2020, the Wastewater System's financial benchmark ratios show (Exhibit 4) lower investment risk than the Comparable Group based on coverage and cash flow.

Risk Analysis. From an operations standpoint, the Wastewater System and the Comparable Group are indistinguishable. Both are required to meet SDWA and CWA requirements and are also required to provide safe and reliable services to their customers.

A basic premise of finance is the tradeoff between risk and return. That is, the higher the perceived risk, the higher the required return. Conversely, the lower the perceived risk, the lower the required return.

As mentioned previously, size is a determinant of risk. Based on size, the Wastewater System's risk is higher than the Comparable Group given Wastewater System's relatively small size. Table 2 details the size difference between the Wastewater System and the Comparable Group. As shown on Table 2, the Wastewater System is many times smaller than the Comparable Group.

Size is a determinant of risk because the loss of a large customer impacts a small company much more than a large company because a large customer of a small company usually accounts for a larger percentage of the small company's sales. Further, a larger company has much more diversification in customer mix, economic conditions, source of supplies, weather, demographic, and financing than the Wastewater System. Because the larger Comparable Group has a more diverse geographic operation than the Wastewater System, it enables them to sustain earnings fluctuations caused by adverse weather conditions in one portion of its service territory. Further, the larger Comparable Group has a more diverse customer base and is less susceptible to local downturns associated with regional economic conditions than the Wastewater System.

Exhibit 5, Table 5.1, provides an illustration which shows company size has been inversely related to returns and the volatility of their common stock. Specifically, Ibbotson Associates sorted 2,966 publicly traded common stocks based on size of market value (market price multiplied by the number of shares) and placed them into four different portfolios (quartiles). The common stock quartile return and the resultant size premium, column B, increased at an increasing rate as you move from a larger stock quartile to a smaller stock quartile. Similarly, the total risk, or standard deviation of annual returns (a measure of risk), also increased with decreasing company size (column C).

The Comparable Group's market value on December 31, 2021, ranged from $435 million to $34,285 million as shown on Table 5.2 of Exhibit 5. Based on their market value, the Comparable Group's median market quartile was 2. Wastewater System's market value would place them in quartile 4 based upon Wastewater System's financial statements and since the largest company in quartile 4 on Table 5.1 had a market value of $453 million.

The change in risk adjusted common stock return rate between quartile 2 and quartile 4 (column J) is 1.92 percentage points (3.68% - 1.76%). The results of the illustration shown on Exhibit 5 suggests the Wastewater System's common equity cost rate could be about 1.92 percentage points higher than the Comparable Group. The history of common stock returns indicates small company stocks are riskier than large company stocks because as one moves from the larger to smaller quartiles, the standard deviation (a measure of risk) of returns increases. Historically, common stock investors have been compensated for taking on this additional risk by the higher returns provided by small company stocks.

In general, it is reasonable to expect small companies to be more risky than large ones. Exhibit 5 shows small company stocks have been riskier over a long period of time than larger company stocks due to the various advantages that larger companies have over smaller companies. For example, small capitalized firms generally have less access to capital and, overall, not as many financial resources. Further, small capitalized stocks have lower trading liquidity than larger ones.

The bond market, particularly the corporate bond market, also differentiates between large and small bond issues, where many large institutional investors such as pension funds and insurance companies require large blocks of bonds for liquidity and performance. Because of

this size preference, smaller bond issuers often pay a cost rate premium when compared to larger bond issuers.

A higher return requirement for companies the size of Wastewater System translates into a higher capitalization rate. All else being equal, a higher capitalization rate will produce a lower value. However, all things are seldom equal as shown by the array of market multiples for the companies that comprise the Comparable Group (Exhibit 17, page 2). As shown on Exhibit 17, the Comparable Group's current market multiples do not suggest a higher capitalization rate due to size as there are numerous other risks affecting the Comparable Group's market values.

Property Plant and Equipment Analysis. The Wastewater System can best be characterized as a fully integrated domestic wastewater system with wholesale customers ("integrated with wholesale").[6] The Wastewater System does not have the number of large treatment facilities that the Comparable Group.[7] The Wastewater System's gross property, plant and equipment is in relatively good condition given its age (Exhibit 6, Table 6.1) with 61% of their gross property, plant and equipment remaining undepreciated while 78% of the Comparable Group's gross property, plant and equipment remained undepreciated.[8]

Property Plant and Equipment Analysis for Contributions. Most regulatory commissions determine rates for utilities based on a cost of service formula reflective of gross plant, property, and equipment less accumulated depreciation (i.e., net property, plant, and equipment) being roughly equal to investor provided capital (i.e., debt and equity capital) plus "cost free" capital such as customer contributions. Under 66 Pa. C.S. Section 1329 (Valuation of Acquired Water

6 A fully integrated domestic wastewater system is characterized as having both collection assets and treatment assets.
7 The Wastewater System derives a larger percentage of its revenues from wholesale customers and treats a larger percentage of flows from wholesale customers than the Comparable Group (Exhibit 2, page 2).
8 The Wastewater System's gross and net property, plant and equipment is developed on Exhibit 7.

and Wastewater Systems), the original source of funding for any part of the assets of a selling utility is not relevant to determining the value of a selling utility's assets.

We found a 19% (100% - 81%) difference between the Comparable Group's net property, plant and equipment and the Comparable Group's investor provided capital on the valuation date (Exhibit 6, page 1, Table 6.2). The difference between the Comparable Group's net property, plant and equipment and the Comparable Group's investor provided capital is comprised of "cost free" capital such as customer contributions.[9] This is evidenced by the 19% difference in the Comparable Group's net property, plant and equipment and the Comparable Group's investor provided capital (Exhibit 6, page 1, Table 6.2). Additionally, we verified known components of the Comparable Group's "cost free" capital by reviewing their individual balance sheets (Exhibit 6, page 1, Table 6.2) at year-end 2020.

We did not analyze the Wastewater System's property, plant, and equipment for "cost free" capital, or customer contributions, because the original source of funding for any part of the assets of a selling utility is irrelevant to the valuation process under 66 Pa. C.S. Section 1329.

Capital Expenditures Analysis. The level of capital expenditures required for business purposes is an indicator of risk. Over the last four years, the Comparable Group had annual capital expenditures of about 9% of net plant (Exhibit 6, page 2, Table 6.3). During this same time, 2018-20, the Wastewater System had annual capital expenditures of about between 0% to 1% of net plant. Therefore, the Wastewater System historical capital spending was below the Comparable Group's median.

Growth Rate Analyses. Higher growth rates are an indication of less risk. A review of

9 Under rate regulation "cost free" capital, such as customer contributions, is subtracted from plant assets in determining the dollar amount of property on which a utility may earn a "fair rate of return" and therefore, "cost free" capital has no economic value to investors.

the growth rates in revenue, operating income plus depreciation and operating income, reveal that the Wastewater System's revenues have been growing less than the Comparable Group (Exhibit 6, page 4, Table 6.4) over the last three years. Similarly, the Wastewater System's operating income plus depreciation and operating income have been growing less than the Comparable Group. Prospectively, the Wastewater System's growth rates should lag the Comparable Group's without increased rates and a higher level of planned capital additions.

Profit Margin Analyses. Higher profit margins are an indication of less risk. We compared earnings before interest and taxes ("EBIT") to revenues to see how successful the Wastewater System's management has been at generating income from the operation of the business. We also compared operating profitability or earnings before interest, tax, depreciation, and amortization ("EBITDA") divided by total revenue to gain a clearer view of the Wastewater System's core profitability. The Wastewater System's EBITDA profit margins are lower than the Comparable Group's indicating more risk. Similarly, the Wastewater System's EBIT profit margins are lower indicating more risk (Exhibit 6, page 5, Table 6.5).

VALUATION

The purpose of this valuation is to comply with 66 Pa. C.S. Section 1329 (Valuation of Acquired Water and Water Systems) and conduct a fair market value appraisal of the Wastewater System's assets as of December 31, 2021 in compliance with the Uniform Standards of Professional Appraisal Practices, employing the cost, market, and income approaches. Consequently, three basic valuation approaches were considered in this analysis: the cost approach, the income approach, and the market approach.

The Cost Approach. In general terms, the cost approach measures value by determining the amount of money required to replace the future service capability of an asset. The cost approach is based on the premise that an informed purchaser will not pay more for a property than the cost of constructing an equally desirable substitute property, minus applicable depreciation, and assuming no undue delay.

The cost approach can include the use of the: original cost method; trended original cost method; reproduction cost method; and replacement cost method. From these cost bases, the calculated accrued depreciation (accumulated depreciation) is subtracted.

The original cost method begins with determining the original cost new ("OCN") measure of the cost of the assets when first constructed. The OCN is based on (1) a review and summary of the utility's accounting records, contractors' invoices and bid tabulations to determine the most appropriate data sources of each type of asset; (2) and the "pricing out" of assets using unit costs for each vintage year that property was placed in service.

Under the trended cost method, the trended original cost ("TOC") measures the reproduction cost by multiplying the OCN by specific cost indices. The TOC is based on (1) a review and summary of the OCN at each location to determine those elements that would be replaced-in-kind, those that would be replaced with current methods and technologies and those that would not be replaced; (2) the selection of cost indexes and the calculation of trended original cost for those elements that would be replaced-in-kind; and (3) the estimation of the cost to purchase or construct those elements that would be replaced with current methods and technologies. The TOC is a procedure for estimating reproduction cost new of property and is sometimes used as a substitute for reproduction cost method and may be considered a form of the reproduction cost method, though not as precise.

The reproduction cost method begins with determining the reproduction cost new ("RPCN") by determining the current cost of constructing identical new property. The replacement cost method begins with estimating the replacement cost new ("RCN") based on approximating the current cost of replacing service of existing property with similar new property having the nearest equivalent utility to the property being valued (as defined by the *International Glossary of Business Valuation Terms*).

The RPCN and the RCN methods include the research and verification of the inventory of a company's tangible personal property. Upon verification of the inventory, current material costs, current construction costs, engineering costs, administration costs, interest during construction, and entrepreneurial profit[10] are applied to the inventory listing in order to determine the RPCN and to determine the RCN.

The RPCN method assumes the assets would be recreated under the conditions existing at the date certain or valuation date, using the exact materials, standards, design, layout, and quality of workmanship used to create the original assets. The RCN assumes the assets would be recreated under the conditions existing at the date certain or valuation date, using similar materials, current standards, under current conditions with similarly functional property.

From these cost bases (i.e., OCN, TOC, RPCN and RCN), the calculated accrued depreciation (accumulated depreciation) is subtracted ("LD"). The calculated accrued depreciation is based on the assets' attained ages, and the service life of the assets. The cost bases of depreciable assets are reduced annually by the accumulated depreciation to reflect the loss in the service value of the assets since being constructed.

10 The administration costs and entrepreneurial profit are those of the contractors and engineers. The cost of overhead of the entity having the assets constructed can also be included. Generally overhead costs are allocated as part of an asset's cost, and usually represent at least 5% to 15% of infrastructure asset total costs.

Depreciation represents the loss in property value from: physical deterioration; functional obsolescence; and external obsolescence. The accrued depreciation represents the sum of the annual depreciation amounts that would have been charged for depreciation at a point in time. Accrued depreciation is a calculated amount that would be in the book reserve account at a point in time using the current depreciation parameters (i.e., average service life). The average service lives of depreciable assets are based on the materials used for construction and how long the depreciable assets are likely to meet service demands.

The range of survivor characteristics usually experienced by utility and industrial properties is encompassed by a system of generalized "survivor curves" known as the Iowa type curves. The accrued depreciation ratio from a survivor curve is a concept that is used to estimate the consumed service capacity of plant at a point in time. The survivor curve is used to find the applicable accrued depreciation factors of the assets to result in the total accumulated depreciation.

The Original Cost Method. For this report, the City of Beaver Falls provided us a copy of the Engineer's assessment report "City of Beaver Falls, Beaver County, Pennsylvania, Engineers Assessment of Wastewater System Assets" dated June 9, 2022, and related files prepared by Gannett Fleming, Inc., the Wastewater System's Chapter 94 reports, the system's 537 Plan, the APA, and the Wastewater System's asset replacement history, to confirm the condition of the Wastewater System's property and equipment. We utilized the Engineering Assessment and calculated the Original Cost and Related Accrued Depreciation of the Wastewater System as of December 31, 2021 ("OCNLD Study") shown on Exhibit 7.

Page 1 of Exhibit 7 summarizes the original cost and related accrued depreciation by account for the Wastewater System as of December 31, 2021. The original cost was brought forward from page 2 of Exhibit 7 and the accrued depreciation from page 3 of Exhibit 7.

The original cost of the Wastewater System was determined from the Engineering Assessment and is summarized on page 2 of Exhibit 7. A summarizing analysis of the original cost of the Wastewater System by account and vintage year is shown on Exhibit 10.

The accrued depreciation calculation, shown on page 3 of Exhibit 7, was based on recognized methods using estimated survivor characteristics and the straight-line depreciation method. The estimated survivor curves are those used by other Pennsylvania regulated wastewater companies and the material and age of the assets. The average service life procedure was used to apply the methods of depreciation to group properties for which a survivor curve was used to recognize the existence of life dispersion. The detailed calculations of accrued depreciation applicable to original cost by account and vintage are included in Exhibit 8.

The results of the OCNLD Study established that the OCN of the Wastewater System's utility plant in service as of December 31, 2021 was not less than $12.9 million ($12,898,487 rounded). The OCNLD Study also determined a theoretical calculated accrued depreciation reserve of the utility plant in service of $5.0 million ($5,047,800 rounded) as of December 31, 2021. After factoring in the OCNLD Study's accrued depreciation reserve, the OCNLD of Wastewater System's utility plant in service as of December 31, 2021 was determined to be $7.9 million ($12,898,487 - $5,047,800 = $7,850,687).

The Replacement Cost Method. We utilized the OCN to calculate the trended original cost (TOC) measures, or the replacement cost of the depreciable assets (RCN), by multiplying the OCN by specific transition factors.[11] The transition factors included both cost changes measured during TOC process and preliminary obsolescence, so all RPCN values were valued on an RCN

11 We used the TOC method because the mandated use of the Engineering Assessment's original cost essentially dictates the use of TOC over the reproduction cost or the replacement cost methods.

basis. The result of this analysis is shown in the Replacement Cost and Related Accrued Depreciation of the Wastewater System as of December 31, 2021 ("RCNLD Study") shown on Exhibit 9.

Page 1 of Exhibit 9 summarizes the replacement cost new and related accrued depreciation by account for the Wastewater System as of December 31, 2021. The replacement cost new was brought forward from page 2 of Exhibit 9 and the accrued depreciation from page 3 of Exhibit 9.

The replacement cost new of the Wastewater System (see Exhibit 10) was calculated by trending the original cost measures by multiplying the OCN by Handy-Whitman indices and preliminary obsolescence factors.[12] A summarizing analysis of the replacement cost new of the Wastewater System by account and vintage year and related transition factors is shown on Exhibit 10.[13]

The accrued depreciation calculation, shown on page 3 of Exhibit 9, was based on recognized methods using estimated survivor characteristics and the straight-line depreciation method. The estimated survivor curves are those used in the OCNLD Study. The average service life procedure was used to apply the methods of depreciation to group properties for which a survivor curve was used to recognize the existence of life dispersion. The detailed calculations of accrued depreciation applicable to replacement cost new by account and vintage are included in Exhibit 11.

The results of the RCNLD Study established that the RCN of the Wastewater System's utility plant in service as of December 31, 2021 was not less than $82.3 million ($82,286,857 rounded). The RCNLD Study also determined a theoretical calculated accrued depreciation

12 See the Accrued Depreciation and Obsolescence section of this report for a further discussion.
13 All land and land rights were valued at original cost.

reserve of the utility plant in service of $49.3 million ($49,292,703 rounded) as of December 31, 2021. After factoring in the RCNLD Study's accrued depreciation reserve, the RCNLD of Wastewater System's utility plant in service as of December 31, 2021 was determined to be $33.0 million ($82,286,857 - $49,292,703 = $32,994,154).

The results of the OCNLD and RCNLD Cost Approaches show a range of value for the Wastewater System of $7.9 million to $33.0 million and collectively, indicated value of $33.0 million ($32,994,154 rounded) for the Wastewater System based on the results of the RCNLD.

Benchmark Metrics. Besides providing an indication of value based upon a cost method, the OCN and OCNLD can also be used to calculate meaningful benchmark metrics. These benchmark metrics are utilized to evaluate the reasonableness of other indications of value produced by alternative valuation methods, including the cost method itself. For example, the Comparable Group's market value of common equity plus minority interest, preferred stock, and total debt net of cash and cash equivalents ("Enterprise Value") is currently 2.03-times (Exhibit 17, page 2) their OCNLD or net property, plant and equipment. Similarly, the Comparable Group's Enterprise Value is currently 1.62-times (Exhibit 17, page 2) their OCN or gross property, plant and equipment.

The above-mentioned property, plant and equipment "multiples" may understate the multiple applicable to the Wastewater System because some of the Comparable Group's property, plant and equipment includes assets that were originally financed with "cost free" capital such as customer contributions.[14] Subtracting customer contributions ("CIAC") from the Comparable Group's property, plant and equipment (Exhibit 17, page 3) based on differences between investor

14 Under rate regulation "cost free" capital, such as customer contributions, is subtracted from plant assets in determining the dollar amount of property on which a utility may earn a "fair rate of return" and therefore, "cost free" capital has no economic value to investors.

provided capital and OCN results in CIAC adjusted multiples of 2.31-times OCNLD and 1.84-times OCN for the Comparable Group.

Multiplying the Wastewater System's OCN of $12.9 million by the Comparable Group's 1.62-times OCN multiple or the 1.84-times contributions adjusted OCN multiple indicates a range of market value of $20.9 million to $23.7 million for the Wastewater System, below the RCNLD of $33.0 million. Further, multiplying the Wastewater System's OCNLD of $7.9 million by the Comparable Group's 2.03-times OCNLD multiple or the 2.31-times contributions adjusted OCNLD multiple indicates a range of market value of $16.0 million to $18.2 million for the Wastewater System, below the RCNLD of $33.0 million.[15] Using a similar technique, we multiplied the Wastewater System's number of domestic customers of 3,259 by the Comparable Group's $10,788-times customer multiple and produced a market value of $35.2 million, which is similar to the RCNLD of $33.0 million.[16] However, this technique does not account for the additional value of the 3,767 ultimate wholesale customers. If the 3,767 ultimate wholesale customers were factored into this technique, we believe the result would be considerably higher than the RCNLD of $33.0 million

Accrued Depreciation and Obsolescence. The accrued depreciation reflects the total loss in value from RCN due to physical deterioration, functional and economic obsolescence. The physical deterioration was accounted for with our determination of average service lives of depreciable assets. The average service lives used in determining the RCNLD reflect the materials

15 The range of benchmark metrics values suggested for the Wastewater System are not a substitute for an appraisal. However, the referenced range of market values for the Wastewater System can be a meaningful metric to evaluate the reasonableness of other indication of value produced by other valuation methods.
16 Customers "multiples" may understate the multiple applicable to the Wastewater System because some of the Comparable Group's property, plant and equipment includes assets that were originally financed with "cost free" capital, such as customer contributions, which diminishes the value of a customer.

used for construction, age, and the average length of time the depreciable assets are likely to meet service demands.

Functional obsolescence ("FO") is a "form of deterioration due to a feature in the property that is no longer useful or functional, resulting in a loss of value for the entire property."[17] FO is sometimes evident due to increased operating costs, increased maintenance costs, lost profits and for a wastewater utility, excess inflow and infiltration (I&I). According to the Engineering Assessment, the Wastewater System's operations staff reported minimal I&I coming from the system's mains and manholes.[18] Additionally, the Engineering Assessment did not find any assets that were no longer useful or functional. Therefore, we conclude no significant FO is suggested.

Economic obsolescence ("EO") refers to the loss of value that is caused by factors that are external to the property. "EO manifests itself in the profit margin of business. If the operating margin of an asset or group of assets is below what provides a sufficient economic return to the supporting assets, and there is a difference between the existing operating level/capacity and a sufficient operating/level capacity, EO may be an issue."[19] To evaluate EO we compared our RCNLD value of $33.0 million to the economic values produced by our Income and Market Approaches, discussed later in this report, and conclude no EO is suggested.

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17 "Physical Deterioration: The loss in value of a real estate property due to the physical wearing out of a building," *Corporate Finance Institute*, Updated October 3, 2021. Accessed 6/20/22. https://corporatefinanceinstitute.com/resources/knowledge/other/physical-deterioration/

18 See pages 6 and 7 of the Engineering Assessment.

19 Mickle, Joseph and Sapnas, Charles. "Perspectives, Economic Obsolescence: Discover Loss of Value Caused by External Factors," *Valuation Research Corporation*. Accessed 6/20/22. https://www.valuationresearch.com/pure-perspectives/economic-obsolescence-determining-loss-value-caused-external-factors/#:~:text=Economic%20obsolescence%20(EO)%20is%20the,companies%20in%20capital%2Dintensive%20industries.

Our RCN and RCNLD, discussed previously, indicated values of $82.3 million and $33.0 million, respectively. The RCNLD's accrued depreciation reflects the total loss in value from RCN due to physical deterioration, functional and economic obsolescence.

Cost Approach Conclusion. Comparing the results of the OCNLD method and RCNLD method to the benchmark metrics indicates that the value indicated by the OCNLD method of $7.9 million is inconsistent with the benchmark metrics. The results of the RCNLD method of $33.0 million ($32,994,154 rounded) form the basis for our Cost Approach conclusion, shown on Exhibit 9, page 4. Based on this result, the Cost Approach to valuation indicates a value of $33.0 million for the Wastewater System's based on the RCNLD method.

We note, the differences of the benchmark metrics to the Wastewater System's OCN, OCNLD, RCN and RCNLD, discussed previously, are somewhat concerning because it suggests either some plant inventory may be unaccounted for and/or understated in value, or other issues may not be accounted for in the Cost Approach.[20] As a result, we did another, more in depth analysis, where we compared the Wastewater System's OCN, OCNLD, RCN and RCNLD on a per customer basis (e.g., OCN ÷ Customers) to similar values calculated for the eight fully integrated systems used in the selected transactions method analysis.[21]

Using only domestic customers, the Wastewater System's per customer OCN ratio and per customer OCNLD ratio were found to be below all eight fully integrated systems' ratios which could be attributable to plant vintage. However, the Wastewater System's per customer RCN ratio and per customer RCNLD ratio were found to be in the lower third to lowest quarter of the eight

20 Other issues may include excessive depreciation, our use of the TOC method, not accounting for the intangible value of ultimate wholesale customers, etc.

21 See the Selection Transactions Method section of this report for a further discussion of the selection transaction method. The transactions included in the selection transaction method include all section 1329 transaction reviewed by the Commission to date.

fully integrated systems' ratios when we used domestic customers. We then considered the impact of including ultimate customers in a similar analysis. When ultimate customers were included in the comparison, we found all Wastewater System's ratios were below all eight fully integrated systems' ratios for OCN, OCNLD, RCN and RCNLD.

We also reviewed the price change for the larger plant accounts typical of fully integrated system assets, shown in Table 3. We did so because the eight fully integrated systems' transactions occurred from 2016 to date, and the RCN and RCNLD values used in the analysis described above were reflective of the time period of each transaction (e.g., a 2016 transaction reflects a 2016 RCN). When the price changes, shown in Table 3, were considered along with the per customer RCN ratios and per customer RCNLD ratios, discussed previously, it was concluded that the Wastewater System's RCN ratios and per customer RCNLD ratios were lower than all eight fully integrated systems' ratios whether domestic customers or ultimate customers were considered.

	Annual Price Change			Cumulative Price Change to 12/31/21		
	Structures & Improvements	Large Treatment Plant Equipment	Mains-Average All Types	Structures & Improvements	Large Treatment Plant Equipment	Mains-Average All Types
2016	-	-	-	-	-	-
2017	2%	3%	3%	33%	33%	30%
2018	4%	4%	3%	31%	29%	27%
2019	2%	4%	3%	25%	24%	23%
2020	3%	5%	3%	23%	19%	19%
2021	11%	7%	7%	20%	13%	15%
12/31/2021	8%	6%	7%	8%	6%	7%

Source: Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, North Atlantic Region.

Table 3

The results of this analysis which compared the Wastewater System's OCN, OCNLD, RCN and RCNLD on a per customer basis to similar values calculated for the eight fully integrated systems used in the selected transactions method analysis do not alleviate our concerns regarding the results produced by our Cost Approach.

The Income Approach. Capitalizing or discounting a future income stream to a present value provides an indication of the value of a security or asset. The capitalization or discount rate reflects future growth, business risk, economic factors, financial risk, and industry risk of the assets. The theory behind the income approach is that the value of a business is the future economic benefit that ownership will provide.

The two most common methods of the income approach to valuation are the capitalization of earning or cash flow method and the discounted cash flow method ("DCF"). The capitalization of earning method converts a single base economic income number to a value by dividing it by a capitalization rate. The capitalization of earnings is best suited when the future earnings, or cash flow, can be predicted. The implicit assumption in the capitalization of earning method is that the cash flow is a perpetuity, and the capitalization rate is a constant.

The DCF method uses estimates of future free cash flow and discounts them to arrive at a present value or price of the cash flows. Generally, the DCF analysis begins with an estimate of the Debt Free Net Cash Flow over the next five to twenty years along with a terminal value. In each year, the Debt Free Net Cash Flow is comprised of projected EBIT, minus income taxes, plus projected depreciation, and amortization, plus or minus projected changes in net cash working capital, less projected capital expenditures. The second element of the DCF analysis is the determination of an appropriate discount rate.

The capitalization rate used in the capitalization of earnings method and the discount rate

used in the DCF method are related. The discount rate is the market participant's opportunity cost rate related to the risk of the cash flows. For the Wastewater System's, the market participants are assumed to include IOU and larger regional municipal authority ("MUNI"). For the Wastewater System, the appropriate discount rate is the current municipal revenue bond yield on December 31, 2021 of 2.85%. The appropriate IOU discount rate is the current net of tax overall cost of capital (weighted average cost of capital) on December 31, 2021 and ranges from 6.59% to 8.50%.[22] The capitalization rate is simply the discount rate minus the expected growth rate. If no growth is assumed, the capitalization rate is equal to the discount rate.

The capitalization of earnings method is generally a reasonable approach for valuing the Wastewater System as it is currently owned (i.e., non-IOU) and operated. However, change in ownership of the Wastewater System to a MUNI or IOU produces a myriad of problems for both the capitalization of earnings method and the DCF Method because any future cash flow estimates would be hypothetical or estimated due to the uncertain nature that would accompany new ownership including future rates, future expenses, future capital expenditures, taxes, and regulation.

For a MUNI, the appropriate discount rate is the current municipal revenue bond, 2.85%, because debt is the only major source of capital available to finance an acquisition (Exhibit 22, pages 2-6). Although a MUNI likely carries equity on their books (balance sheet), all existing equity is already invested in other assets and therefore, cannot be used to finance an acquisition.[23]

22 Both the American Society of Appraisers, ASA Business Valuation Standards, 2009, and the National Association of Certified Valuation Analysts, Professional Standards, 2007, use the same definition: "Weighted Average Cost of Capital (WACC). The cost of capital (discount rate) determined by the weighted average, at market values, of the cost of all financing sources in the business enterprise's capital structure."

23 For example, when a municipal or government entity, such as the Commonwealth of Pennsylvania, finance construction of a road or bridge, they only consider the marginal debt cost despite having "equity" reflected on their books (balance sheet).

For valuation purposes, an embedded cost of debt, or the historical cost of all debt issuances outstanding is not used because this capital is already invested in assets. Whereas the marginal cost of debt, 2.85%, at the valuation date is used in accordance with accepted valuation practices and used for market valuation purposes.

As discussed previously, for an IOU, the appropriate discount rate is the net of tax overall cost of capital (weighted average cost of capital), 6.59% to 8.50% (Exhibit 22, pages 2-8). In this instance, the net of tax overall cost of capital (weighted average cost of capital) is based on the Comparable Group's market value capital structure of 22.7% debt and 77.3% equity, a market cost of debt of 3.08% and a range of market cost of equity of 7.87% to 10.35%.[24] The Comparable Group's net of tax overall cost of capital (weighted average cost of capital) is used as a proxy to conform to the "hypothetical buyer" or "hypothetical seller" of fair market valuation. Use of the buyer's net of tax overall cost of capital (weighted average cost of capital) would produce an investment valuation, not a fair market valuation.[25]

We began the Income Approach for the Wastewater System by first determining the Debt Free Net Cash Flow to be capitalized or discounted. The Debt Free Net Cash Flow is comprised of EBIT, minus income taxes, plus depreciation and amortization, plus or minus projected changes in net cash working capital, less projected capital expenditures. The development of Wastewater System's Debt Free Net Cash Flow begins on Exhibit 1 and ends on Exhibits 12 through 16.

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24 For example, see http://www.investinganswers.com/financial-dictionary/financial-statement-analysis/weighted-average-cost-capital-wacc-2905. Also see http://www.wallstreetmojo.com/weighted-average-cost-capital-wacc/ , or http://accountingexplained.com/misc/corporate-finance/wacc .

25 We did not use the 6.15% Comparable Group's DSIC (distribution system improvement charge) related net of tax overall cost of capital in our valuation because a "hypothetical buyer" cannot finance an acquisition at such a rate and therefore, its use would provide a meaningless result. Where the 6.15% DSIC related cost was determined based the Comparable Group's book value capital structure of 48.1% debt and 51.9% equity, a cost of debt of 3.08% and a DSIC cost of equity of 9.80%. We note the 6.15% Comparable Group's DSIC related net of tax overall cost of capital falls below the 6.59% to 8.50% range of discount rates used in our Income Approach.

Differences in accounting practices exist between GASB, DCED and FASB because there are differences in their purpose. The GASB's and DCED's impetuses are to make sure government entities are accountable for the money they receive from the public or taxpayers, while the FASB's focus is to help investors and creditors make decisions. These differences in accounting objectives between GASB, DCED and FASB can present a problem when it comes to comparing the financial statements of entities that are either publicly or privately owned, such as the Wastewater System and the Comparable Group.

Exhibit 1 presents the Wastewater System's financial information contained in their financial statements, so it is more consistent with the Comparable Group and more practical for valuation purposes. The information on Exhibit 1 was used to develop Exhibits 12 through 16. As noted previously, the Wastewater System's financial statements and their rates did not include taxes nor a fair rate of return. Accordingly, on Exhibits 13 through 16 we adjusted the Wastewater System's post-2020 financial information for pro forma expenses and returns to be reflective of a MUNI or IOU ownership.

The Capitalization of Earnings Method. The capitalization of earnings method begins with an estimate of the income or cash flow producing capabilities of the business (Exhibit 12) for a recent time period and assumes current ownership and operations. We began the capitalization of earnings method for the Wastewater System by first determining the Debt Free Net Cash Flow to be capitalized. The Debt Free Net Cash Flow is comprised of current EBIT, minus income taxes, plus current depreciation, and amortization, plus or minus projected changes in net cash working capital, less projected capital expenditures. Specifically, our capitalization of earnings

method capitalizes Wastewater System's current (2021) Debt Free Net Cash Flow.[26] The second element of the capitalization of earnings method is the determination of an appropriate capitalization rate. Our analysis uses the current municipal revenue bond yield on December 31, 2021 of 2.85% (Exhibit 12, line 24) as the capitalization rate. We also did a second capitalization of earnings calculation based on a 2.75% capitalization rate (Exhibit 12, line 27), or 10-basis points below the current level to reflect some population growth projected for the Wastewater System's because we assumed the Wastewater System's Debt Free Net Cash Flow growth will be at least 0.1% (10-basis points).

We computed the Wastewater System's indicated value based on the capitalization of earnings method by dividing the projected Debt Free Net Cash Flow by the capitalization factor. The capitalization factor is equal to the discount rate minus assumed growth in projected Debt Free Net Cash Flow. We considered ranges of growth in the capitalization of earnings method. Essentially, we considered two ranges of growth in the capitalization of earnings method, no growth and 0.1% growth. However, based upon our quantitative and qualitative analysis, recent rate increase, and the Wastewater System service area's projected population growth, we believe the 0.1% growth scenario is reasonable for the Water System based on current ownership and operations.

For pro forma 2021, we adjusted the Wastewater System's Debt Free Net Cash Flow (Exhibit 12, lines 23 and 28) and removed the sewer line rental expenses to get a clearer picture of Debt Free Net Cash Flow. Exhibit 12 shows the results of the capitalization of earnings method. For the Wastewater System, the capitalization of earnings method using a 2.85% capitalization

26 Data from 2020 was assumed for the year 2021 due to lack of actual information.

rate (no growth) indicates a value of $5.8 million and $14.2 million on pro forma 2021 results. The capitalization of earnings method using a 2.75% capitalization rate (growth) indicates a value of $6.0 million and $14.7 million on pro forma 2021 results. Collectively, for Wastewater System, we believe the 0.1% growth scenario is the most probable result based on current ownership and operations and therefore, the capitalization of earnings method suggests a value of $14.7 million based on pro forma 2021 results and current operations and ownership.

The DCF Method. For the Wastewater System, the DCF method considers two types of discounted cash flow analyses, the EBIT and EBITDA terminal value model ("Market Multiple DCF") and the capitalization of terminal value model ("Capitalization DCF"). We show the results of these models on Exhibits 13 through 16.

The DCF method begins with an estimate of the income or cash flow producing capabilities of the business. Specifically, our DCF methods use estimates of the results of the Wastewater System's operations over the next 20 years. We use two different assumptions for the Wastewater System's future operations in the DCF methods: MUNI ownership shown on Exhibits 13 and 15; and IOU ownership shown on Exhibits 14 and 16.

Under the MUNI ownership the discount rate is the current 2.85% municipal revenue bond yield and under the IOU ownership the discount rate is the current net of tax overall cost of capital, reflecting the upper and lower range of the net of tax overall cost of capital for the Comparable Group of 6.59% to 8.50%. For the Capitalization DCF, the capitalization rate reflects a scenario of no additional growth (i.e., discount rate = capitalization rate) and a scenario of minimal growth of 0.1% (i.e., discount rate – 0.1% growth = capitalization rate) under MUNI ownership and 0.1% growth (i.e., discount rate – 0.1% growth = capitalization rate) under IOU ownership based on inflation, changes in Debt Free Net Cash Flows and the projected population growth.

We computed the Market Multiple DCF terminal values by multiplying the Wastewater System's projected EBITDA and EBIT by the Comparable Group's adjusted multiples of 20.3-times and 30.1-times, respectively. We computed the Capitalization DCF terminal value by dividing the projected Debt Free Net Cash Flow by the capitalization factor. The capitalization factor is equal to the discount rate minus assumed growth in projected Debt Free Net Cash Flow.

Exhibit 13 shows the results of the DCF method under the MUNI ownership scenario. The results of the Capitalization DCF shown on Exhibit 13 show a range of value for the Wastewater System of $7.5 million to $7.6 million. The results of the Market Multiple DCF shown on Exhibit 13 show a value of $8.9 million. Collectively, the DCF method based on the MUNI ownership scenario indicates a value of $8.3 million for the Wastewater System based on the 0.1% growth assumption.

Exhibit 14 shows the results of the DCF method under the IOU ownership scenario. The results of the Capitalization DCF shown on Exhibit 14 show a range of value for Wastewater System of $4.6 million to $5.9 million. The results of the Market Multiple DCF shown on Exhibit 14 show a range of value of $7.1 million to $9.0 million. Collectively, the DCF method based on the IOU ownership scenario and a 0.1% growth assumption indicates a value of indicates a value of $6.5 million for the Wastewater System.[27]

27 If we used the 6.15% Comparable Group's DSIC (distribution system improvement charge) related net of tax overall cost of capital in our valuation shown on Exhibit 14, the results of the Capitalization DCF would show a value for Wastewater System of $6.3 million. Further, the results of the Market Multiple DCF would show a value of $9.5 million and collectively, the DCF method based on the IOU ownership scenario and a 0.1% growth assumption indicates a value of $7.9 million for the Wastewater System. The DCF method based on the MUNI ownership scenario indicates a value of $8.3 million and the DCF method based on the IOU ownership scenario indicates a value of $7.9 million. Collectively, the DCF method indicates a value of $8.1 million based on OCNLD.

The DCF method based on the MUNI ownership scenario indicates a value of $16.6 million and the DCF method based on the IOU ownership scenario indicates a value of $11.9 million. Collectively, the DCF method indicates a value of $14.2 million based on OCNLD.

Change in ownership of the Wastewater System to a MUNI or an IOU produces a myriad of problems for the DCF Method. Under a MUNI purchase, future cash flow estimates are uncertain because they would reflect the actual price paid for the acquisition. Under an IOU purchase and the associated regulation by the PUC, future cash flow estimates are uncertain since regulation by the PUC would result in an unknown determination of rate base and the related depreciation and authorized/achieved earning levels. In the current instance, we know the Market Approach and the Cost Approach (RCNLD) indicate values considerably higher than the OCNLD value.

Therefore, Exhibits 13 and 14 are recalculated on Exhibits 15 and 16 to reflect revenues and cash flows derived from an earnings base between the values indicated by the RCNLD and the Market Approach. Exhibit 15 shows the results of the DCF method under the MUNI ownership scenario. The results of the Capitalization DCF shown on Exhibit 15 show a range of value for the Wastewater System of $50.3 million to $51.4 million. The results of the Market Multiple DCF shown on Exhibit 15 show a value of $47.8 million. Collectively, the DCF method based on the MUNI ownership scenario indicates a value of $49.6 million for the Wastewater System based on the 0.1% growth assumption.

Exhibit 16 shows the results of the DCF method under the IOU ownership. The results of the Capitalization DCF shown on Exhibit 16 show a range of value for Wastewater System of $29.6 million to $38.8 million. The results of the Market Multiple DCF shown on Exhibit 16 show a range of value of $43.8 million to $56.1 million. Collectively, the DCF method based on

the IOU ownership scenario and a 0.1% growth assumption indicates a value of $41.3 million for the Wastewater System.[28]

The DCF method based on the MUNI ownership scenario indicates a value of $49.6 million and the DCF method based on the IOU ownership scenario indicates a value of $41.3 million. Collectively, the DCF method indicates a value of $45.5 million ($45,450,675 rounded) based on the Income Approach.

The Market Approach. There are two methods of doing the Market Approach to valuation: the market multiples method; and the selected transaction method. We developed both the market multiples method and the selected transaction method in our valuation analysis.

The Market Multiples Method. The market multiples method valuation begins by reviewing market price data of corporations engaged in the same or a similar line of business as the Wastewater System. We relied upon market data for the Comparable Group for these purposes since they are equally affected by similar economic, industry, and business risks as the Wastewater System. Since no marketplace exists for the common stock of the Wastewater System, an alternative to estimate the value of the Wastewater System is to analyze the price investors are willing to pay for the publicly traded common stock of companies that are similar to the Wastewater System. The specific market price data reviewed includes the market value of common equity plus minority interest, preferred stock, and total debt net of cash and cash equivalents (i.e., Enterprise Value). Where the market value of common equity is the product of

28 If we used the 6.15% Comparable Group's DSIC (distribution system improvement charge) related net of tax overall cost of capital in our valuation shown on Exhibit 16, the results of the Capitalization DCF would show a value for Wastewater System of $41.5 million. Further, the results of the Market Multiple DCF would show a value of $59.5 million and collectively, the DCF method based on the IOU ownership scenario and a 0.1% growth assumption indicates a value of $50.6 million for the Wastewater System. The DCF method based on the MUNI ownership scenario indicates a value of $49.6 million and the DCF method based on the IOU ownership scenario using DSIC indicates a value of $50.6 million. Collectively, the DCF method indicates a value of $50.1 million when DSIC is considered.

multiplying the closing stock price by the number of common shares outstanding. The Enterprise Value provides an indication of the value of the entire business. The Enterprise Value multiples ("Market Multiples") are shown on Exhibit 17. For the Comparable Group, the Market Multiples were calculated as of December 31, 2021 based on the latest twelve months of financial data available at the appraisal date.

We used the Comparable Group's Enterprise Value on December 31, 2021 and calculated Market Multiples of: revenue ("Revenue"); EBITDA; EBIT; gross property plant and equipment ("GPPE"); net property plant and equipment ("NPPE"); investor provided capital ("ICAP"); utility customers ("Customers"); and population of the area served ("Population").

The next step in the market multiples method valuation was applying the Comparable Group's Market Multiples to corresponding financial and operating statistics of the Wastewater System. The Comparable Group's Market Multiples reflect their capitalization rate of each financial and operating statistic. For example, a Market Multiple of EBIT of 16.14 times equates to a capitalization of EBIT of 6.20% (1 ÷ 16.14 = 6.20%). Each capitalization rate is unique to the entity and the statistic being evaluated and reflects the growth and investment risk of the entity.

We believe that similar economic, industry and business risks have affected the Comparable Group as those faced by the Wastewater System. However, consideration must be given to the fact that no two companies are exactly alike. On average, the utilities in the Comparable Group are larger than the Wastewater System. The relative size difference between the Comparable Group and Wastewater System suggests that the risk to investors of the Wastewater System is higher than the Comparable Group. Further, based upon our quantitative and qualitative analysis, we concluded that the Wastewater System has more risk than the Comparable Group.

Accordingly, the Comparable Group's Market Multiples are not directly applicable to the Wastewater System. We assumed the higher risk due to the Wastewater System's size is added to the higher risk found in our quantitative and qualitative analysis. This combined risk was assumed to result in the Wastewater System being 10% more risky than the Comparable Group and produces an 90% (100% - 90%) base risk adjustment to the Comparable Group's Market Multiples. We applied the 90% base risk adjustment to all financial multiples. For example, the Comparable Group's ICAP multiple was multiplied by 90% to produce a lower multiple applicable to the Wastewater System to account for risk differences.

The Comparable Group's Market Multiples of Revenue, EBITDA, and EBIT were adjusted for the base risk adjustment to produce multiples applicable to the Wastewater System (Exhibit 17, page 3). The Comparable Group's Market Multiples of GPPE and NPPE were adjusted for the base risk adjustment and for their percentage of property plant and equipment (Exhibit 17, page 3) financed with "cost free" capital such as contributions because "cost free" capital should not be part of this valuation process. The Comparable Group's Market Multiples of Customers and Population were adjusted for the type of assets of the Wastewater System, earnings rate, and growth.

The net risk adjustments to the Comparable Group's Market Multiples are shown on page 1 of Exhibit 17. The adjustments to the Comparable Group's Market Multiples are: 90% of ICAP (more risk/less growth); 102% of GPPE (more risk/lower growth and contributions); 102% of NPPE (more risk/lower growth and contributions); 90% of Revenue (more risk/lower growth); 90% of EBIT; 90% EBITDA (more risk/lower growth); 104% of Customers (growth, earning rate, and contributions); and 104% Population (growth, earning rate, and contributions).

Page 1 of Exhibit 17 shows the market multiples method indicated values based on: Revenue, EBIT and EBITDA (collectivity called "Income Statement Items"); ICAP, GPPE and NPPE (collectivity called "Capital Items"); and Customers and Population (collectivity called "Demographics Items"). For most municipal utilities, the indicated values based on Income Statement Items are far below the indicated values that are based on Capital Items and those based on Demographics Items. We attribute this to the dollars of Revenue, EBIT and EBITDA do not reflect any provision for taxes while the multiples for the Comparable Group do.[29] Consequently, we do not believe the results of the multiples of Revenue, EBIT and EBITDA are meaningful and should not be used for municipal utilities.

In the market multiples method, the meaningful Market Multiples of the Comparable Group are used to develop an indicated value of the Wastewater System. This is accomplished by multiplying the Wastewater System's financial and operating data by the Comparable Group's median Market Multiples (Exhibit 17, page 1). The results of the market multiples method (Exhibit 17, page 1) show a range of value for the Wastewater System of $18.8 million to $46.2 million. We note the value indicated by the Capital Items are substantially different (lower) than the other indicated values. In the Cost Approach Conclusion section of this report we noted our concerns regarding the values suggested by the OCN and OCNLD. Accordingly, we gave the Capital Items 25% weight, while weighting the Demographics Items 75%, in determining an indicated value of $36.3 million for the Wastewater System's domestic customers using the market multiples method.[30] The additional value attributable to the Wastewater System's ultimate

29 The Revenue, EBIT and EBITDA for the Wastewater System also do not include a fair rate of return.
30 The results of the market multiples method would indicate a value of $32.5 million had we given Capital Items and Demographics Items equal weight.

wholesale customers is determined later in the Market Value of Ultimate Wholesale Customers section of this report.

The Selected Transactions Method. The selected transactions method entails analyzing certain public information relating to selected transactions involving the purchase or sales of businesses involved in the same or similar business line. The number of selected transactions available for review is limited because most acquisitions in the water and wastewater industry involve small acquisitions for which no public information exits. Additionally, not all transactions are comparable since some purchase prices may only involve the acquisition of the common stock, purchase prices may be net of cash and others may only involve assets. In any of these instances, the derived multiples (e.g., purchase price as a multiple of: Revenues; EBITDA; EBIT; etc.) would understate (overstate) the multiples involving a purchase price for an entire business enterprise (common stock) or business assets.

The selected transactions method provides a valuation of a business, or assets, at the time the acquisition of that business was completed, rather than the appraisal date market value (December 31, 2021). The change in the Comparable Group's market multiples of NPPE and ICAP, shown in Figure 1, illustrates the change in market valuation over a recent 72-month period.[31] In Figure 1 the Comparable Group's market multiples of NPPE and ICAP were indexed to December 31, 2021 valuation multiples so that the December 31, 2021 valuation multiples have an index value of 100.

31 Note that Figure 1 only depicts change in market valuations based on NPPE and ICAP. Other metrics (e.g., EBIT, Customers, etc.) may reveal different changes in market valuations.

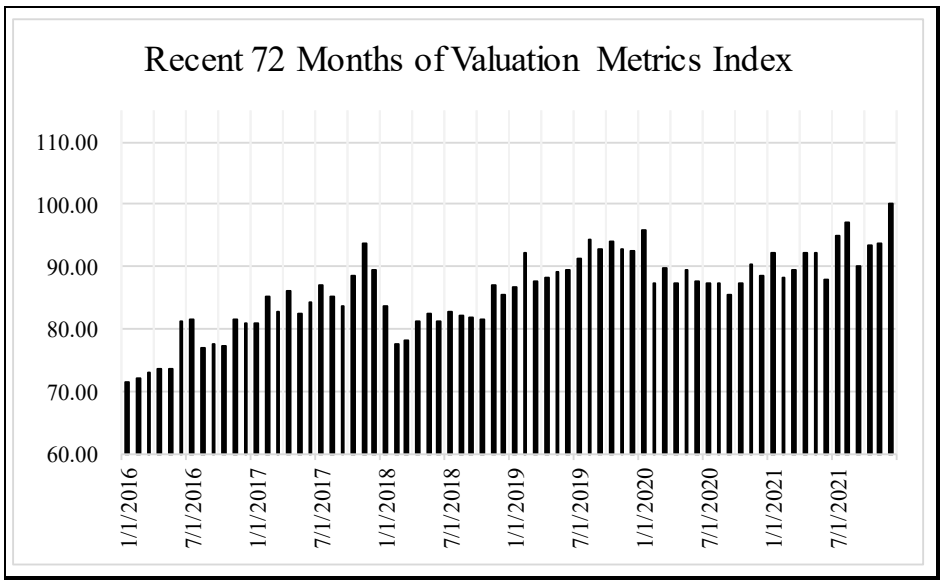


Figure 1

The index of the Comparable Group's appraisal date (December 31, 2021) valuation multiples is 12% above the 2021's lowest levels and at the 2021's highest levels and 15% above the 2020's lowest levels and 4% above 2020's highest levels. The index of the Comparable Group's December 31, 2021 valuation multiples is 15% higher than 2019's lowest levels and 6% above 2019's highest levels, are 22% higher than 2018's lowest levels and 13% above 2018's highest levels, are 22% higher than 2017's lowest levels and 6% above 2017's highest level, and are 19% to 29% higher than 2016's multiples' index.

Because of the rapid rise in valuation multiples since early 2016 we limited our search for selected transactions to: (1) those that occurred in 2016 or later; (2) purchases of water or sewer systems; (3) assets being purchased; and (4) those that did not discount "cost free" capital/customer contributions in the valuation. The selected transactions that met the stated selection criteria are shown on pages 2 and 3 of Exhibit 18.

Using certain public information, we calculated sales price multiples of selected transactions involving the purchase or sale of businesses that met the stated selection criteria. The

calculated sales price multiples included transactions multiples of: ICAP; GPPE; NPPE; Revenue; EBITDA; EBIT; Customers; and Population. As shown on pages 2 and 3 of Exhibit 18, the selected transactions method indicated values based on the Income Statement Items are far different than the Wastewater System's selected transactions method indicated values based on Capital Items and those based on Demographics Items. We attribute this to the fact the selling utilities' dollars of Income Statement Items do not reflect any provision for taxes.[32] Consequently, we do not believe the results of the multiples of Income Statement Items are meaningful.

The selected transaction method relies on and reflects information that was known, ex-ante, at the time the winning purchase bid (price) was offered, and the metrics used are time period sensitive. For example, bids made in 2016 only reflects metrics from 2015 since the results of 2016 could not be known at the time of the bids. The selected transaction method ex-ante information (metrics) is shown on page 2 of Exhibit 18. Complete information only exists for a few of the transactions, with only Customers and Population having ample data for all transactions as is evident from the information shown (Exhibit 18, page 2). Therefore, we supplemented the ex-ante data with ex-post information of GPPE and NPPE (collectivity called "Asset Items") as shown on page 3 of Exhibit 18.

In the selected transactions method, the significant selected transactions multiples of the selling utilities are used to develop an indicated value of the Wastewater System. Initially, the value of the Wastewater System's domestic customers is determined before the value attributable to the Wastewater System's ultimate wholesale customers is added. This process is accomplished

32 Further, Revenue, EBIT and EBITDA for the Wastewater System also do not include a fair rate of return.

by multiplying the Wastewater System's financial and operating data by the selling utilities' transactions multiples (Exhibit 18, pages 2 and 3).

Previously we noted our concerns regarding the values suggested by the OCN and OCNLD and therefore, gave less weight (i.e., 25%) to the results indicated by the Asset Items then the Demographics Items (i.e., 75%) in reaching our conclusion shown on Exhibit 18, page 1.[33] The results of the selected transactions method (Exhibit 18, page 1) show a range of value for the Wastewater System's domestic customers of $17.2 million to $32.2 million when all transactions are considered and a range of value of $16.5 million to $44.8 million when fully integrated assets (excluding wholesale) are solely considered. We determined an indicated value of $33.3 million for the Wastewater System's domestic customers using the selected transactions method by considering the results of all transactions, $28.4 million, and the results of the fully integrated assets (excluding wholesale) of $36.5 million.[34] The additional value attributable to the Wastewater System's ultimate wholesale customers is determined later in the Market Value of Ultimate Wholesale Customers section of this report.

Wall Street Transactions. In 2018 two IOUs, Connecticut Water Service, Inc. ("Connecticut Water") and SJW Group, announced a planned merger with Connecticut Water being acquired by SJW through a stock purchase (stock swap). SJW Group's purchase of Connecticut Water was approved in late 2019. Similarly, in 2021 two IOUs, were involved in another transaction which involved Aquarion Company, parent of Aquarion Water Company,

33 If equal weighting was given to both Asset Items and Demographic Items, the indicated value for the Wastewater System's domestic customers would have been $27.5 million.

34 The appraisal gave 25% weight to the collection/distribution assets selected transactions results and 75% weight to the integrated systems (excluding wholesale) transactions results. We did so due to the small sample size of integrated systems (excluding wholesale) transactions and the fact that similar multiples occurred in both the collection/distribution systems and integrated systems selected transactions, therefore, consideration was given to both.

completing its acquisition of the New England Service Company, Inc. ("NESC") through a stock purchase (stock swap).[35] Both Connecticut Water and NESC were publicly traded as was the stock they received in the transactions.

Although these acquisitions are not directly applicable to the Wastewater System, they do provide a range of indicated value for the Wastewater System's domestic customers (Exhibit 19, page 1) which we relied on as checks. In these selected transactions, the significant selected transactions multiples of the selling utilities, Connecticut Water and NESC, are used to develop an indicated value of the Wastewater System. This is accomplished by multiplying the Wastewater System's financial and operating data by the selling utilities' transactions multiples. The results of the Connecticut Water selected transactions (Exhibit 19, page 2) show a range of value for the Wastewater System's domestic customers of $27.9 million when the reported significant selected transactions multiples are considered and a value of $40.1 million when the reported significant selected transactions multiples have been adjusted for "cost free" capital. The results of the NESC selected transactions (Exhibit 19, page 3) show a range of value for the Wastewater System's domestic customers of $20.4 million when the reported significant selected transactions multiples are considered and a value of $33.2 million when the reported significant selected transactions multiples have been adjusted for "cost free" capital.[36]

Collectively, the Wall Street selected transactions indicate values of $33.2 million to $40.1 million, which are similar to the values found by the market multiples method of $39.3

35 NESC is the sole stockholder of four regulated water companies operating in three separate states.
36 For Connecticut Water and NESC, we gave the Capital Items 25% weight and weighted the Demographics Items 75% in determining their indicated values.

million and the selected transaction method of $33.3 million for the Wastewater System's domestic customers.[37]

The results of the market multiples method shown on Exhibit 17 indicate value of $39.3 million. The results of the selected transactions method shown on Exhibit 18 indicate value of $33.3 million. Based on the aforesaid results, the Market Approach to valuation indicates a value of $36.3 million for the Wastewater System's domestic customers based on the results of the market multiples method and the selected transactions method.

Market Value of Ultimate Wholesale Customers . Exhibit 20 shows the calculation of the value of ultimate whole customers and the Market Approach conclusion. As shown, we computed the market value of receiving only treatment services of $12.8 million by subtracting the value of collection/distribution assets from the value of integrated systems (excluding wholesale).[38] We then determined the number of ultimate wholesale customers of 3,760 to be valued by subtracting the number of domestic customers from the number of ultimate customers (7,019 - 3,259).

The market value of receiving only treatment services, $12.8 million, was then divided by the number of domestic customers to produce the treatment value per domestic customer of $3,936 ($12,828,666 ÷ 3,259). We looked at the relative contribution of domestic customers and ultimate customers in terms of flows and revenues (Exhibit 2, page 2) and concluded a relative ultimate wholesale customer equivalency factor of 97%.[39] The relative wholesale customer equivalency

37 We note Connecticut Water and NECS were fully integrated companies, as is Wastewater System. Additionally, both were publicly traded, which the Wastewater System is not, and therefore, may overstate the value for the Wastewater System. However, these transactions were stock transactions, which may understate the value for the Wastewater System's asset purchase.

38 See the Selected Transactions section of this report for the asset value determination of collection/distribution assets and integrated systems (excluding wholesale).

39 The relative ultimate wholesale customer equivalency factor indicates ultimate wholesale customers contribute about 97% as domestic customers, on a per customer basis.

factor was multiplied by the treatment value per domestic customer to determine the treatment value per ultimate wholesale customer of $3,936 ($3,818 × 97%).

The treatment value per ultimate wholesale customer was then multiplied by number of ultimate wholesale customers to produce the market value of the Wastewater System's ultimate wholesale customers of $14.4 million ($3,818 × 3,760). The market value of the Wastewater System's ultimate wholesale customers was then added to the market value of the Wastewater System's domestic customers to produce the total market value for the Wastewater System. Based on the aforesaid results, the Market Approach to valuation indicates a value of $50.7 million ($50,664,671 rounded) for the Wastewater System ($36.3 million + $14.4 million) as shown on Exhibit 20.

Conclusion. We summarize our findings for the Wastewater System on Exhibit 21. Our finding for the Wastewater System is based on the Cost, Market, and Income Approaches to valuation. We used seven methods under the Cost, Market, and Income Approaches to valuation: Original Cost Method, Replacement Cost Method, Capitalization of Earnings Method, Market Multiple Discounted Cash Flow Method, Capitalization Discounted Cash Flow Method, Market Multiples Method, and the Selected Transactions Method.

The results from the market multiple discounted cash flow method and the capitalization discounted cash flow method form the basis for our Income Approach. Our Market Approach is supported by the market multiples method and selected transactions method. The results from the original cost method form the basis for our replacement cost method, and both methods form the basis for our Cost Approach.

We considered the results of each approach as an indicator of value individually, or as independent indicators of value. Therefore, all three approaches to valuation were given

consideration in arriving at our estimate of the fair market value conclusion. We gave less weight to the Cost Approach due to our concerns stated in this report. At a minimum, we believe the Cost Approach does not fully account for the intangible value of ultimate wholesale customers. We gave equal weight to the indicated values produced by the two economic approaches, Income and Market, as they best capture the intrinsic value of the ultimate wholesale customers. Based on these facts, our conclusion regarding the fair market value is $44.3 million. Our conclusion regarding the fair market value can be described by the weights and the specific results of the three approaches to valuation that are shown on Exhibit 21. The results of our analyses, shown on Exhibit 21, indicate a range of value for the Wastewater System of $33.0 million to $50.7 million and collectively indicate a fair market value of $44,292,000 for the Wastewater System.

APPENDIX A - QUALIFICATIONS

APPENDIX A

Professional Qualifications
of
Harold Walker, III
Manager, Financial Studies
Gannett Fleming Valuation and Rate Consultants, LLC.

EDUCATION

Mr. Walker graduated from Pennsylvania State University in 1984 with a Bachelor of Science Degree in Finance. His studies concentrated on securities analysis and portfolio management with an emphasis on economics and quantitative business analysis. He has also completed the regulation and the rate-making process courses presented by the College of Business Administration and Economics Center for Public Utilities at New Mexico State University. Additionally, he has attended programs presented by The Institute of Chartered Financial Analysts (CFA).

Mr. Walker was awarded the professional designation "Certified Rate of Return Analyst" (CRRA) by the Society of Utility and Regulatory Financial Analysts. This designation is based upon education, experience, and the successful completion of a comprehensive examination. He is also a member of the Society of Utility and Regulatory Financial Analysts (SURFA) and has attended numerous financial forums sponsored by the Society. The SURFA forums are recognized by the Association for Investment Management and Research (AIMR) and the National Association of State Boards of Accountancy for continuing education credits.

Mr. Walker is also a licensed Municipal Advisor Representative (Series 50) by Municipal Securities Rulemaking Board (MSRB) and Financial Industry Regulatory Authority (FINRA).

BUSINESS EXPERIENCE

In 1996, Mr. Walker joined Gannett Fleming Valuation and Rate Consultants, LLC. In his capacity as Manager, Financial Studies and for the past 25 years, he has continuously studied rates of return requirements for regulated firms. In this regard, he supervised the preparation of rate of return studies in connection with his testimony and in the past, for other individuals. He also assisted and/or developed dividend policy studies, nuclear prudence studies, calculated fixed charge rates for avoided costs involving cogeneration projects, financial decision studies for capital budgeting purposes and developed financial models for determining future capital requirements and the effect of those requirements on investors and ratepayers, valued utility property and common stock for acquisition and divestiture, and assisted in the private placement of fixed capital securities for public utilities.

Head, Gannett Fleming GASB 34 Task Force responsible for developing Governmental Accounting Standards Board (GASB) 34 services and educating Gannett Fleming personnel and

Gannett Fleming clients on GASB 34 and how it may affect them. The GASB 34 related services include inventory of assets, valuation of assets, salvage estimation, annual depreciation rate determination, estimation of depreciation reserve, asset service life determination, asset condition assessment, condition assessment documentation, maintenance estimate for asset preservation, establishment of condition level index, geographic information system (GIS) and data management services, management discussion and analysis (MD&A) reporting, required supplemental information (RSI) reporting, auditor interface, and GASB 34 compliance review.

In 2004, Mr. Walker was elected to serve on the Board of Directors of SURFA. Previously, he served as an ex-officio directors as an advisor to SURFA's existing President. In 2000, Mr. Walker was elected President of SURFA for the 2001-2002 term. Prior to that, he was elected to serve on the Board of Directors of SURFA during the period 1997-1998 and 1999-2000. Currently, he also serves on the Pennsylvania Municipal Authorities Association, Electric Deregulation Committee.

Prior to joining Gannett Fleming Valuation and Rate Consultants, LLC., Mr. Walker was employed by AUS Consultants - Utility Services. He held various positions during his eleven years with AUS, concluding his employment there as a Vice President. His duties included providing and supervising financial and economic studies on behalf of investor owned and municipally owned water, wastewater, electric, natural gas distribution and transmission, oil pipeline and telephone utilities as well as resource recovery companies.

Mr. Walker was also the Publisher of C.A. Turner Utility Reports from 1988 to 1996 while employed at AUS Consultants - Utility Services. C.A. Turner Utility Reports is a financial publication which provides financial data and related ratios and forecasts covering the utility industry. From 1993 to 1994, he became a contributing author for the Fortnightly, a utility trade journal while employed at AUS Consultants - Utility Services. His column was the Financial News column and focused mainly on the natural gas industry.

EXPERT TESTIMONY

Mr. Walker has submitted testimony or been deposed on various topics before regulatory commissions and courts in 26 states including: Arizona, California, Colorado, Connecticut, Delaware, Hawaii, Idaho, Illinois, Indiana, Kentucky, Maryland, Massachusetts, Michigan, Missouri, New Hampshire, Nevada, New Jersey, New York, North Carolina, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, and West Virginia. His testimonies covered various subjects including: fair market value, the taking of natural resources, appropriate capital structure and fixed capital cost rates, depreciation, fair rate of return, purchased water adjustments, synchronization of interest charges for income tax purposes, valuation, cash working capital, lead-lag studies, financial analyses of investment alternatives, benchmarking, and fair value.

PROFESSIONAL AFFILIATIONS

Society of Utility and Regulatory Financial Analysts
- Board of Directors, 1996-2000, 2005-2008
- President, 2000-2002
- Treasurer, 1996-1998

National Association of Water Companies
Pennsylvania Municipal Authorities Association
- Electric Deregulation Committee

TECHNICAL PUBLICATIONS & PRESENTATIONS

Walker, Harold. Panelist "Now is the Time to Maximize Your Utility's Value." Presented at the Pennsylvania Association of Township Supervisors 97th Annual State Convention, April 2019.

Walker, Harold. Panelist "Fair Market Acquisitions Debate." Presented at National Association of Regulatory Utilities Commissioners Winter Policy Summit, February 2019.

Walker, Harold. Panelist "Fair Market Value Legislation." Presented at the National Association of Water Companies Water Summit, October 2018.

Walker, Harold. Panelist "Leveraging Water & Sewer to Address Roads, Schools, and Pension Obligations." Presented at the Maryland Association of Counties 2018 Summer Conference, August 2018.

Walker, Harold. Panelist "Is the Glass Half Full or Half Empty? Valuing Municipal Water Acquisitions." Presented at the Mid-Atlantic Conference of Regulatory Utilities Commissioners 23rd Annual Education Conference, June 2018.

Walker, Harold. "Valuation and Inventory of Governmental Assets Under GASB 34." Presented at the Society of Depreciation Professionals 21st Annual Conference, September 2007.

Walker, Harold. "The Paradox of State Regulatory Opinions and Investor Behavior." Presented at the National Association of Water Companies New England Chapter conference, November 2006.

Walker, Harold. "Valuation and Inventory Under GASB 34." Presented at the Government Finance Officers Association South Central Pennsylvania Regional Chapter conference, August 2003.

Walker, Harold. "Valuation and Inventory under GASB 34." Presented at the Government Finance Officers Association Southeastern Pennsylvania Regional Chapter conference, April 2002.

Walker, Harold. "GASB 34 & Your Infrastructure." *The Authority,* August 2001, Volume XXXII, No. 4, pages 10-13.

Walker, Harold. "Managing Risk." Conference Chairperson, presented at the Society of Utility & Regulatory Financial Analysts 33rd Financial Forum, April 2001.

Walker, Harold. "Paying for Your MSW System - Waste Generation Fees." Presented at the Federation of New York Solid Waste Association Solid Waste/Recycling Conference and Trade Show, May 2001.

Walker, Harold. "Statement No. 34 of the Government Accounting Standards Board." Presented at the Pennsylvania Association of Township Supervisors 79th Annual State Convention, April 2001.

Walker, Harold. "Cost of Capital Issues." Presented at the National Association of Water Companies New England Chapter conference, October 2000.

Walker, Harold, Timothy Hartman, and Mark Everett. "Waste Generation Study: Life After Flow Control." Presented at Waste Con 2000, October 1999.

Walker, Harold, and Timothy Hartman. "The Enhancement of Revenues Through a Waste Generation Study." Presented at SWANA's Planning and Management Symposium, July 1999.

COMPLIANCE & APPRAISAL CERTIFICATION

Compliance with Uniform Standards of Professional Appraisal Practice (USPAP) 2020-2021*

Fulfillment of Requirements for a Personal Property Appraisal and Report

- **State the identity of the client and any intended users, by name or type:**

  The client is the City of Beaver Falls. The intended users of the valuation are the City of Beaver Falls, Aqua Pennsylvania Wastewater, Inc., and the Pennsylvania Public Utility Commission ("PUC").

- **State the intended use of the appraisal**

  The intended use of the valuation is to comply with 66 Pa. C.S. Section 1329, Valuation of Acquired Water and Wastewater Systems and conduct a fair market value appraisal of the Wastewater System in compliance with the Uniform Standards of Professional Appraisal Practices, employing the cost, market, and income approaches.

- **Describe information sufficient to identify the property, real, personal, and intangible, involved in the appraisal, including the physical and economic property characteristics relevant to the assignment.**

  City of Beaver Falls owns and operates the Wastewater System which consists of a wastewater treatment plant ("WWTP"), a pump station, about 36 miles of mains, approximately 674 manholes, 3,252 services, associated infrastructure and appurtenances, and related land and land rights.

  The Wastewater System's WWTP receives and treats wastewater from the following municipalities: the City of Beaver Falls, Eastvale, White Township, West Mayfield, Patterson Township, Patterson Heights, Big Beaver Municipal Authority, and North Sewickley Township Sewer Authority. Each municipality is responsible for their own collection system.

  The Wastewater System WWTP is a 4.7 million gallons per day ("MGD") capacity plant. In 2020, the WWTP's average daily flow was 2.10 MGD. The WWTP has with three primary settling tanks, two biological contact oxidation towers, five secondary settling tanks, two chlorine disinfection tanks, two anaerobic sludge digesters, a belt filter press, a grit separator, a grease separator, with various piping, pumps, blowers, controls, and an onsite emergency power generator. The dewatered sludge and process residuals are disposed at a regional landfill. The WWTP operates under NPDES Permit No. PA0026883 (effective November 1, 2018 and expires October 31, 2023).

  The Wastewater System owns and maintains the Eastvale Pump Station, located in neighboring Eastvale Borough. The Eastvale Pump Station's force main is 8-inches

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in diameter and approximately 1,400 linear feet. The force main consists of ductile iron ("DIP") pipe, which was installed in 2006.

The Wastewater System's 190,442 linear feet of gravity sewer collection and trunk mains consist of 8-inch, 10-inch, 12-inch, 15-inch, 16-inch, 18-inch and 24-inch diameter pipe which was installed between 1937 to 2011. About 82% of the gravity mains were installed in 1937, 16% between 1990 and 1998, and 1% between 2008 and 2011. The mains consist of vitrified clay ("VCP") pipe and cured in place ("CIP") VCP, and polyvinyl chloride ("PVC") SDR 35 pipe. Only about 6% of the mains installed in 1937 have had to be replaced or lined. There are 674 brick and concrete manholes and 3,252 services laterals in the system. All manholes and services laterals were installed in 1937, and none have been replaced.

The Wastewater System's land and land rights include land used wastewater collection and transmission, about 36 miles of mains, 1 WWTP, 1 pump station and multiple easements and rights-of-way necessary to operate the Wastewater System.

- **State the real property interests appraised**

  The Wastewater System's land and land rights agreements necessary to access its property.

- **State the type and definition of value and cite the source of the definition, including whether the opinion of value is in terms of cash or of financing terms equivalent to cash, or based on non-market financing or financing with unusual conditions or incentives**

  Fair market value is defined as:

  > "The price, expressed in terms of cash equivalents, at which property would change hands between a hypothetical willing and able buyer and a hypothetical willing and able seller, acting at arm's length in an open and unrestricted market, when neither is under compulsion to buy or sell and when both have reasonable knowledge of the relevant facts." The International Glossary of Business Valuation Standards

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Compliance with Uniform Standards of Professional Appraisal Practice (USPAP) 2020-2021*

Fulfillment of Requirements for a Personal Property Appraisal and Report

- **State the effective date of the appraisal and the date of the report**

  The effective date of the appraisal is as of December 31, 2021, and the appraisal report date is August 10, 2022.

- **Describe sufficient information to disclose to the client and any other intended users of the appraisal the scope of work used to develop the appraisal**

  Gannett Fleming Valuation and Rate Consultants, LLC was retained by City of Beaver Falls ("Beaver Falls") to estimate the fair market value of City of Beaver Falls' wastewater system assets ("Wastewater System") as of December 31, 2021.

  The intended use of the valuation is to comply with 66 Pa. C.S. Section 1329, Valuation of Acquired Water and Wastewater Systems and conduct a fair market value appraisal of the Wastewater System in compliance with the Uniform Standards of Professional Appraisal Practices, employing the cost, market, and income approaches.

  As stated, the standard of value for this engagement is fair market value. The premise of value is the going concern. The going concern premise of business value assumes that the business will continue running normally using all its assets to produce income and will continue operating beyond the valuation date.

  We valued the Wastewater System's assets as a group under the premise that the assets collectively comprise an ongoing operating business enterprise. Additionally, in accordance with 66 Pa. C.S. Section 1329, the original source of funding for any part of the Wastewater System's assets was not relevant to the determination of the value of said assets.

  We accepted all information and data provided by the City of Beaver Falls as it pertains to this assignment "as is" after a limited review. That is, we neither audited nor verified any data, engineering assessment, financial record or operating data provided for this assignment. We assumed all title to all assets included in the appraisal is good and marketable, no hidden defects in the property or soil and no hazardous conditions or materials exist which could affect the assets.

  The appraisal considered all three approaches to value: the cost, income, and market. Briefly the scopes of work for each are as follows:

  The cost approach utilized the original cost method and replacement cost method. The reproduction cost method was calculated by trending (trended cost method) the

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asset inventory developed by Gannett Fleming, Inc. from its original cost new inventory. The original cost method determined the original cost new measure of the cost of the assets when first constructed. The original cost new inventory was trended using the Handy Whitman Index of Public Utility Construction Costs for the water industry to produce the reproduction cost new and converted to replacement cost new after obsolescence was factored. The calculated accrued depreciation was determined for the original cost new and for the replacement cost new. The calculated accrued depreciation was based on the assets' attained ages, and the service life of the assets. The cost basis of depreciable assets was reduced annually by the accumulated depreciation to reflect the loss in the service value of the assets since being constructed. All land and land rights were valued at original cost.

Income Approach - The income approach utilized the capitalization of earning (cash flow) method and the discounted cash flow method. The capitalization of earning method converted a single base economic income number to a value by dividing it by a capitalization rate. The discounted cash flow method used estimates of future debt free net cash flow and discounted them to arrive at a present value or price of the cash flows. The capitalization rate and the discount rate were developed based on market debt and equity rates at the appraisal date. The discounted cash flow method reflected two types of discounted cash flow analyses, the EBIT and EBITDA terminal value model and a capitalization of terminal value model.

Market Approach - The market approach was developed based on the market multiples method and the selected transaction method. The market multiples method was based on the market price data of publicly traded corporations engaged in the same or a similar line of business as the Wastewater System. The market price data of these comparable publicly traded corporations was used to calculate the market multiples for the comparable publicly traded corporations at the appraisal date. The selected transactions method used certain public information relating to the purchase or sales of businesses involved in the same or a similar business line as the Wastewater System to calculated market multiples at the time of transaction (sale/purchase). The calculated market multiples determined by the market multiples method and the selected transaction method were then multiplied by the corresponding the Wastewater System financial and operating statistic to produce an indicated value for the Wastewater System.

Reconciliation of the Valuation Approaches - The fair market value conclusion was based on reconciliation of each of the three approaches to value and the intended purpose of the appraisal.

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- **Clearly and conspicuously:**
  - **State all extraordinary assumptions and hypothetical conditions;**

    There were no extraordinary assumptions required or hypothetical conditions in this appraisal.

  - **State that their use might have affected the assignment results**

    Not applicable.

- **Clearly and accurately disclose all assumptions, extraordinary assumptions, hypothetical conditions, and limiting conditions used in the assignment**

  Not applicable.

- **Describe the information analyzed, the appraisal procedures followed, and the reasoning that supports the analyses, opinions, and conclusions**

  See scope of work above.

- **State the use of the real estate existing as of the date of value and the use of the real estate reflected in the appraisal**

  The Wastewater System's land and land rights include land used wastewater collection and transmission, about 36 miles of mains, 1 WWTP, 1 pump station and multiple easements and rights-of-way necessary to operate the Wastewater System.

  The Wastewater System's land and land rights were assumed to be used for the operation of the Wastewater for the appraisal.

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- **State and describe the support and rationale for the appraiser's opinion of the highest and best use of the real estate**

  All land and land rights were assumed to be used for the operation of the Wastewater System for the appraisal, were valued at original cost, and not at highest and best use of the real estate.

- **State and explain any permitted departures from specific requirements of STANDARD 1 and the reason for excluding any of the usual valuation approaches. The appraisal then becomes a limited appraisal - a limited appraisal report must contain a prominent section that clearly identifies the extent of the appraisal process performed and the departures taken**

  No departures for Standard 1 were made.

- **Include a signed certification in accordance with Standards Rule 2-3**

  See attached for signed certification.

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APPRAISAL CERTIFICATION
Beaver County, Pennsylvania
City of Beaver Falls
Wastewater System Assets
Fair Market Value Appraisal Report
As of December 31, 2021

Gannett Fleming Valuation and Rate Consultants, LLC certify that, to the best of its knowledge and belief:

— The statements of fact contained in this report are true and correct.

— The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions.

— Gannett Fleming Valuation and Rate Consultants, LLC has not performed an appraisal of the City of Beaver Falls' wastewater system prior to this current appraisal.

— Gannett Fleming Valuation and Rate Consultants, LLC, nor its professional staff has any present or prospective interest in the property that is the subject of this report and has no interest or bias with respect to the parties involved.

— We have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.

— Our engagement in this assignment is not contingent upon developing or reporting predetermined results.

— Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.

— Our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice (2020-2021)

APPRAISAL CERTIFICATION
Beaver County, Pennsylvania
City of Beaver Falls
Wastewater System Assets
Fair Market Value Appraisal Report
As of December 31, 2021

— The signers of this report relied upon John F. Rae, P.E., Senior Project Manager, at Gannett Fleming, Inc., who viewed or observed the property that is the subject of this report.

— Individuals providing significant appraisal assistance to the person signing this certification include: John J. Spanos, President, Joanna Lappin, Depreciation Analyst and Glen Friel, Analyst at Gannett Fleming Valuation and Rate Consultants, LLC.

Gannett Fleming Valuation and Rate Consultants, LLC

By,



HAROLD WALKER, III

Manager, Financial Studies

EXHIBITS

City of Beaver Falls Wastewater System Assets
Selected Audited Financial Information

	12-Months Ended December 31:			
	2017	2018	2019	2020
Gross property, plant & equipment	13,202,222	13,208,168	13,210,979	13,298,336
Accumulated depreciation	6,543,064	6,789,301	7,032,761	7,272,228
Net property, plant & equipment	6,659,158	6,418,867	6,178,218	6,026,108
Assets	8,321,618	8,566,364	8,166,744	8,238,912
Debt Current	0	0	0	0
Debt	0	0	0	0
Equity	8,053,661	8,367,190	7,978,686	8,146,961
Total Capital	8,053,661	8,367,190	7,978,686	8,146,961
OPERATING REVENUES				
Charges for services	2,800,191	3,054,418	3,147,364	3,023,166
Other operating income	1,794	1,577	1,337	2,249
TOTAL OPERATING REVENUES	2,801,985	3,055,995	3,148,701	3,025,415
Expenses	2,188,424	2,224,099	2,620,251	2,630,694
Depreciation	249,840	246,236	243,460	239,466
TOTAL OPERATING EXPENSES	2,438,264	2,470,335	2,863,711	2,870,160
CAPX	7,749	5,945	2,811	87,357
Interest	24,629	0	0	0
Principal	940,000	0	0	0

Source of Information: Audited Financial Statements (2017-2020)

City of Beaver Falls Wastewater System Assets
Population, Housing Units, Customer Count, EDUs and Flows

	City	Ultimate	System
Population in Houses (2021)	7,488	20,743	
Occupied Housing Units (2021)	3,333	9,069	
Average Size	2.25	2.29	

	Domestic	Ultimate
Population to Customers	4.8	2.2
Customers to Housing Units	98%	

Customers (2021)	Domestic Customers	Ultimate Wholesale Customers	Ultimate Customers
Retail Customers			
City of Beaver Falls	3,252		3,252
Wholesale Customers			
Big Beaver	1	166	166
Eastvale	1	104	104
North Sewickley	1	1,094	1,094
Patterson Heights	1	270	270
Patterson Township	1	1,191	1,191
West Mayfield	1	521	521
White Township	1	421	421
Total	3,259	3,767	7,019

	Total EDUs
	5,107

Projected New EDUs

	2021	2022	2023	2024	2025
New EDUs	19	0	1	2	3

Annual Daily Average Sewage Flow (MGD)

	2016	2017	2018	2019	2020
WWTP Totals	1.93	2.65	3.00	2.65	2.10

City of Beaver Falls Wastewater System Assets
Population, Housing Units, Customer Count, EDUs and Flows

Population and Housing Units (2021)

	Total Population	Population in Households	Occupied Housing Units	Persons Per Housing Unit	Estimated Population Served
City of Beaver Falls	8,578	7,488	3,333	2.25	7,488
Big Beaver	1,912	1,906	839	2.27	330
Eastvale	209	200	89	2.25	200
North Sewickley	5,264	5,264	2,122	2.48	2,786
Patterson Heights	542	542	227	2.39	542
Patterson Township	2,960	2,953	1,406	2.10	1,866
West Mayfield	1,106	1,102	464	2.38	1,080
White Township	1,288	1,288	589	2.19	1,288
Total	21,859	20,743	9,069	2.29	15,580

					Percentage to Totals	
	Billable Gallons	Revenues - Sewage Charges	Gallons Per Ultimate Customers	Revenues Per Ultimate Customers	Billable Gallons	Revenues - Sewage Charges
	(2020)	(2020)				
Retail Customers	162,524,000	$1,506,821	49,977	$463	45%	50%
Wholesale Customers	199,834,000	1,516,345	53,049	403	55%	50%
Total	362,358,000	$3,023,166				

TABLE 3.1 US Population Census Counts, 2010 & 2020

State	Population 2010	Population 2020	Percentage Change
Alabama	4,779,736	5,024,279	5.1%
Alaska	710,231	733,391	3.3%
Arizona	6,392,017	7,151,502	11.9%
Arkansas	2,915,918	3,011,524	3.3%
California	37,253,956	39,538,223	6.1%
Colorado	5,029,196	5,773,714	14.8%
Connecticut	3,574,097	3,605,944	0.9%
Delaware	897,934	989,948	10.2%
District of Columbia	601,723	689,545	14.6%
Florida	18,801,310	21,538,187	14.6%
Georgia	9,687,653	10,711,908	10.6%
Hawaii	1,360,301	1,455,271	7.0%
Idaho	1,567,582	1,839,106	17.3%
Illinois	12,830,632	12,812,508	-0.1%
Indiana	6,483,802	6,785,528	4.7%
Iowa	3,046,355	3,190,369	4.7%
Kansas	2,853,118	2,937,880	3.0%
Kentucky	4,339,367	4,505,836	3.8%
Louisiana	4,533,372	4,657,757	2.7%
Maine	1,328,361	1,362,359	2.6%
Maryland	5,773,552	6,177,224	7.0%
Massachusetts	6,547,629	7,029,917	7.4%
Michigan	9,883,640	10,077,331	2.0%
Minnesota	5,303,925	5,706,494	7.6%
Mississippi	2,967,297	2,961,279	-0.2%
Missouri	5,988,927	6,154,913	2.8%
Montana	989,415	1,084,225	9.6%
Nebraska	1,826,341	1,961,504	7.4%
Nevada	2,700,551	3,104,614	15.0%
New Hampshire	1,316,470	1,377,529	4.6%
New Jersey	8,791,894	9,288,994	5.7%
New Mexico	2,059,179	2,117,522	2.8%
New York	19,378,102	20,201,249	4.2%
North Carolina	9,535,483	10,439,388	9.5%
North Dakota	672,591	779,094	15.8%
Ohio	11,536,504	11,799,448	2.3%
Oklahoma	3,751,351	3,959,353	5.5%
Oregon	3,831,074	4,237,256	10.6%
Pennsylvania	12,702,379	13,002,700	2.4%
Rhode Island	1,052,567	1,097,379	4.3%
South Carolina	4,625,364	5,118,425	10.7%
South Dakota	814,180	886,667	8.9%
Tennessee	6,346,105	6,910,840	8.9%
Texas	25,145,561	29,145,505	15.9%
Utah	2,763,885	3,271,616	18.4%
Vermont	625,741	643,077	2.8%
Virginia	8,001,024	8,631,393	7.9%
Washington	6,724,540	7,705,281	14.6%
West Virginia	1,852,994	1,793,716	-3.2%
Wisconsin	5,686,986	5,893,718	3.6%
Wyoming	563,626	576,851	2.3%
Total - States & D.C.	308,745,538	331,449,281	7.4%

Source: STATS Indiana, using U.S. Census Bureau data

TABLE 3.2 Pennsylvania Population Census by County and Municipality, 2010 & 2020

Geographic Area	Population 2010	Population 2020	Percentage Change	Municipal Growth Rank
Pennsylvania	12,702,379	13,002,700	2.4%	-
Beaver County	170,539	168,215	-1.4%	-
Beaver Falls City	8,987	9,005	0.2%	963 out of 2,572
Big Beaver Borough	1,970	1,852	-6.0%	1,816 out of 2,572
Eastvale Borough	225	184	-18.2%	2,477 out of 2,572
North Sewickley Townsh	5,488	5,495	0.1%	971 out of 2,572
Patterson Township	3,029	3,129	3.3%	594 out of 2,572
Patterson Heights Boroug	636	639	0.5%	930 out of 2,572
West Mayfield Borough	1,239	1,195	-3.6%	1,473 out of 2,572
White Township	1,394	1,316	-5.6%	1,762 out of 2,572
System Total	22,968	22,815	-0.7%	1,083 out of 2,572

Source: U.S. Census Bureau,Census 2020 Redistricting Data (Public Law 94-171) Summary File.

TABLE 3.3 Forecasted Population by County and Municipality, 2020-2045

	Population						Percentage Change					
	Estimate 2020	Forecast 2025	Forecast 2030	Forecast 2035	Forecast 2040	Forecast 2045	2020 to 2025	2025 to 2030	2030 to 2035	2035 to 2040	2040 to 2045	2020 to 2045
Pittsburgh, City of	304,900	311,659	321,969	333,067	344,473	357,154	2.2%	3.3%	3.4%	3.4%	3.4%	17.1%
Allegheny (Excl. Pittsburgh)	924,120	938,526	963,797	989,969	1,015,104	1,043,734	1.6%	2.7%	2.7%	2.5%	2.5%	12.9%
Armstrong	64,822	63,052	62,573	63,017	63,683	64,156	-2.7%	-0.8%	0.7%	1.1%	1.1%	-1.0%
Beaver	165,356	165,660	169,639	174,012	177,584	180,383	0.2%	2.4%	2.6%	2.1%	2.1%	9.1%
Butler	189,577	193,864	201,009	209,286	216,520	222,117	2.3%	3.7%	4.1%	3.5%	3.5%	17.2%
Fayette	129,158	126,620	126,610	127,595	128,255	128,468	-2.0%	0.0%	0.8%	0.5%	0.5%	-0.5%
Greene	37,184	36,790	36,981	37,450	37,912	38,341	-1.1%	0.5%	1.3%	1.2%	1.2%	3.1%
Indiana	87,307	88,299	90,698	93,276	95,010	95,804	1.1%	2.7%	2.8%	1.9%	1.9%	9.7%
Lawrence	85,935	84,432	85,425	87,531	89,361	90,583	-1.7%	1.2%	2.5%	2.1%	2.1%	5.4%
Washington	209,558	213,562	220,429	228,261	235,444	241,574	1.9%	3.2%	3.6%	3.1%	3.1%	15.3%
Westmoreland	355,285	357,066	366,299	377,950	387,880	394,643	0.5%	2.6%	3.2%	2.6%	2.6%	11.1%
Total - SPC Region	2,553,202	2,579,530	2,645,429	2,721,414	2,791,226	2,856,957	1.0%	2.6%	2.9%	2.6%	2.6%	11.9%
Beaver Falls City	8,404	8,367	8,520	8,687	8,839	9,019	-0.4%	1.8%	2.0%	1.7%	1.7%	7.3%
Big Beaver Borough	1,837	1,879	1,965	1,992	2,025	2,050	2.3%	4.6%	1.4%	1.7%	1.7%	11.6%
Eastvale Borough	217	211	211	213	214	215	-2.8%	0.0%	0.9%	0.5%	0.5%	-0.9%
North Sewickley Township	5,363	5,321	5,400	5,531	5,632	5,700	-0.8%	1.5%	2.4%	1.8%	1.8%	6.3%
Patterson Heights Borough	609	606	620	635	645	651	-0.5%	2.3%	2.4%	1.6%	1.6%	6.9%
Patterson Township	2,940	2,945	3,007	3,065	3,100	3,114	0.2%	2.1%	1.9%	1.1%	1.1%	5.9%
West Mayfield Borough	1,283	1,304	1,349	1,389	1,418	1,440	1.6%	3.5%	3.0%	2.1%	2.1%	12.2%
White Township	1,304	1,291	1,309	1,327	1,338	1,349	-1.0%	1.4%	1.4%	0.8%	0.8%	3.5%
System Total	21,957	21,924	22,381	22,839	23,211	23,538	-0.2%	2.1%	2.0%	1.6%	1.6%	7.2%

Source: Southwestern Pennsylvanaia Commission, June 2019.

TABLE 3.4 Forecasted Employment by County and Municipality, 2020-2045

	Employment						Percentage Change					
	Estimate 2020	Forecast 2025	Forecast 2030	Forecast 2035	Forecast 2040	Forecast 2045	2020 to 2025	2025 to 2030	2030 to 2035	2035 to 2040	2035 to 2040	2020 to 2045
Pittsburgh, City of	32,014	31,555	31,463	32,272	33,601	35,092	-1.4%	-0.3%	2.6%	4.1%	4.1%	9.6%
Allegheny (Excl. Pittsburgh)	110,038	107,804	106,063	107,535	110,874	114,757	-2.0%	-1.6%	1.4%	3.1%	3.1%	4.3%
Armstrong	4,160	4,016	3,916	3,920	3,963	3,993	-3.5%	-2.5%	0.1%	1.1%	1.1%	-4.0%
Beaver	13,247	12,932	12,750	12,821	12,989	13,147	-2.4%	-1.4%	0.6%	1.3%	1.3%	-0.8%
Butler	21,551	21,255	21,043	21,405	21,957	22,436	-1.4%	-1.0%	1.7%	2.6%	2.6%	4.1%
Fayette	10,604	10,262	10,026	10,042	10,138	10,177	-3.2%	-2.3%	0.2%	1.0%	1.0%	-4.0%
Greene	2,568	2,475	2,411	2,420	2,460	2,491	-3.6%	-2.6%	0.4%	1.7%	1.7%	-3.0%
Indiana	7,947	7,810	7,726	7,848	8,009	8,125	-1.7%	-1.1%	1.6%	2.1%	2.1%	2.2%
Lawrence	6,751	6,556	6,446	6,496	6,599	6,669	-2.9%	-1.7%	0.8%	1.6%	1.6%	-1.2%
Washington	19,660	19,321	19,089	19,440	20,066	20,650	-1.7%	-1.2%	1.8%	3.2%	3.2%	5.0%
Westmoreland	37,420	36,547	36,028	36,450	37,175	37,705	-2.3%	-1.4%	1.2%	2.0%	2.0%	0.8%
Total - SPC Region	265,960	260,533	256,961	260,649	267,831	275,242	-2.0%	-1.4%	1.4%	2.8%	2.8%	3.5%
Beaver Falls City	1,029	993	975	976	987	1,006	-3.5%	-1.8%	0.1%	1.1%	1.1%	-2.2%
Big Beaver Borough	25	25	23	23	24	24	0.0%	-8.0%	0.0%	4.3%	4.3%	-4.0%
Eastvale Borough	39	36	36	36	35	36	-7.7%	0.0%	0.0%	-2.8%	-2.8%	-7.7%
North Sewickley Township	184	177	172	173	175	176	-3.8%	-2.8%	0.6%	1.2%	1.2%	-4.3%
Patterson Heights Borough	32	31	31	31	31	31	-3.1%	0.0%	0.0%	0.0%	0.0%	-3.1%
Patterson Township	14	13	13	13	13	13	-7.1%	0.0%	0.0%	0.0%	0.0%	-7.1%
West Mayfield Borough	5	5	5	5	5	6	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%
White Township	4	4	4	4	4	4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
System Total	1,332	1,284	1,259	1,261	1,274	1,296	-3.6%	-1.9%	0.2%	1.0%	1.0%	-2.7%

Source: Southwestern Pennsylvanaia Commission, June 2019.

Comparison of Credit Market Financial Risk Metrics
For City of Beaver Falls Wastewater System Assets
And the Comparable Group
2018 - 2020 (1)

	City of Beaver Falls Wastewater System Assets			Comparable Group		
	2020	2019	2018	2020	2019	2018
Debt Service Coverage	NA	NA	NA	2.4	2.0	3.7
Pre-Tax Interest Coverage - Including AFC(2)(x)	NA	NA	NA	3.7	3.6	3.6
Post-Tax Interest Coverage - Including AFC(2)(x)	NA	NA	NA	3.2	2.9	3.0
GCF / Interest Coverage(3)(x)	NA	NA	NA	5.2	4.7	4.9
GCF / Tot. Debt(4)(%)	NA	NA	NA	15.9	15.8	18.7
GCF / Construction(5)(%)	451.8	18,799.4	13,993.2	72.2	63.0	63.2

Notes: (1) Average of the achieved results for each individual company based upon the financials as originally reported.
(2) Represents the number of times available earnings, including AFC, cover all interest charges.
(3) GCF or gross cash flow (sum of net income, depreciation, amortization, net deferred income taxes and investment tax credits, less AFC), plus interest charges, divided by interest charges.
(4) GCF (see note 3) as a percentage of total debt.
(5) The percent of GCF (see note 3) which cover gross construction expenditures.

Source: 2018-20 Annual Reports and Budgets
S&P Capital IQ
EXHIBIT 1

City of Beaver Falls Wastewater System Assets
Illustrating the Impact of Size on Risk and Retun
Through Common Stock Returns

TABLE 5.1 Change in Return and Risk for Size-Quartiles Portfolio of the NYSE/AMEX/NASDAQ Common Stocks (1)

	A	B	C	D	E	F	G	H	I	J
									Beta Adjusted	
Market Quartile	Market Quartile Name	Average Quartile Premium 1926-20 (%)	Standard Deviation of Return 1926-18 (%)	Change in Quartile Premium (%)	Largest Market Value in the Quartile (Mill $)	Quartile Beta	Comparison Group Beta	Beta Ratio	Quartile Size Premium (%)	Change in Quartile Premium (%)
(Largest Stocks)										
1	Large-Cap	0.00	19.9	--	1,966,079	1.00	0.80	80%	0.00	
2	Mid-Cap	2.48	24.3	2.48	13,179	1.13	0.80	71%	1.76	1.76
3	Low-Cap	3.95	28.5	1.47	2,446	1.23	0.80	65%	2.57	0.81
4	Mico-Cap	6.21	38.5	2.26	453	1.35	0.80	59%	3.68	1.11
(Smallest Stocks)										

Notes: (1) 2020 Stocks, Bonds, Bills, and Inflation (SBBI) Yearbook

TABLE 5.2 Recent Market Values and Ibbotson Associates Market Quartiles for the Comparable Group

	12/31/2021 Market Value (Mill $)	Market Quartile Name	Market Quartile
Comparable Group			
American States Water Co	3,821	Mid-Cap	2
American Water Works Co Inc	34,285	Large-Cap	1
Artesian Resources -Cl A	435	Mico-Cap	4
California Water Service Gp	3,780	Mid-Cap	2
Essential Utilities, Inc.	13,570	Large-Cap	1
Middlesex Water Co	2,105	Low-Cap	3
SJW Corp	2,183	Low-Cap	3
York Water Co	652	Low-Cap	3
Median	2,982	Mid-Cap	2

City of Beaver Falls Wastewater System Assets
Property Plant & Equipment Analysis
Capital Expenditures Analysis
Growth Rate Analyses
Profit Margin Analyses

TABLE 6.1 Property Plant & Equipment Analysis

(Current Know Statistics)

	Gross Property, Plant & Equipment	Net Property, Plant & Equipment	Percentage of Property, Plant & Equipment Not Depreciated
	(Millions of $)		
City of Beaver Falls Wastewater System Assets *	$12.898	$7.851	61%
Comparable Group			
American States Water Company	$2,202.419	$1,614.705	73%
American Water Works Company	26,972.000	20,680.000	77%
Artesian Resources Corporation	743.292	585.751	79%
California Water Service Group	4,124.024	2,796.369	68%
Essential Utilities, Inc.	12,348.442	10,012.155	81%
Middlesex Water Company	1,063.753	865.947	81%
SJW Group	3,616.710	2,486.932	69%
The York Water Company	464.886	368.286	79%
Median			78%

* - Developed on Exhibit 7.

TABLE 6.2 Property Plant & Equipment Analysis for Contributions

(As of 9/30/2021)

	Net Property, Plant & Equipment	Investor's Capital	Percentage of Property, Plant & Equipment Net of Contributions	2020 Percentage of Known "Cost Free" Capital
	(Millions of $)			
Comparable Group				
American States Water Co	$1,614.705	$1,292.917	80%	22%
American Water Works Co Inc	20,680.000	18,040.000	87%	19%
Artesian Resources -CL A	585.751	347.983	59%	39%
California Water Service Gp	2,796.369	2,305.564	82%	28%
Essential Utilities, Inc.	10,012.155	10,907.411	109%	20%
Middlesex Water Co	865.947	693.048	80%	25%
SJW Corp	2,486.932	2,569.103	103%	26%
York Water Co	368.286	285.060	77%	28%
Median			81%	25%

City of Beaver Falls Wastewater System Assets
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TABLE 6.3 Capital Expenditures Analysis

	PP&E-Total Net (Millions of $)				Capital Expenditures (Millions of $)			
	2020	2019	2018	2017	2020	2019	2018	2017
City of Beaver Falls Wastewater System Assets	$6.026	$6.178	$6.419	$6.659	$0.087	$0.003	$0.006	$0.008
Comparable Group								
American States Water Co	$1,557.936	$1,458.595	$1,304.683	$1,213.264	$130.423	$151.940	$126.561	$113.126
American Water Works Co Inc	19,805.000	18,335.000	17,409.000	16,246.000	1,822.000	1,654.000	1,586.000	1,434.000
Artesian Resources -CL A	563.817	535.013	502.527	464.384	34.277	40.677	49.053	41.094
California Water Service Gp	2,654.027	2,409.873	2,220.873	2,036.971	298.651	273.770	271.707	259.194
Essential Utilities, Inc.	9,573.211	6,358.657	5,930.326	5,399.860	835.642	550.273	495.737	478.089
Middlesex Water Co	813.014	722.044	628.476	566.718	105.619	89.125	72.094	50.301
SJW Corp	2,356.988	2,230.343	1,365.771	1,278.025	195.323	164.325	135.973	141.213
York Water Co	344.365	313.993	299.871	289.524	33.299	20.537	16.882	25.074

	Capital Expenditures / PP&E-Total Net			
	2020	2019	2018	2017
City of Beaver Falls Wastewater System Assets	1%	0%	0%	0%
Comparable Group				
American States Water Co	8%	10%	10%	9%
American Water Works Co Inc	9%	9%	9%	9%
Artesian Resources -CL A	6%	8%	10%	9%
California Water Service Gp	11%	11%	12%	13%
Essential Utilities, Inc.	9%	9%	8%	9%
Middlesex Water Co	13%	12%	11%	9%
SJW Corp	8%	7%	10%	11%
York Water Co	10%	7%	6%	9%
Median	9%	9%	10%	9%

City of Beaver Falls Wastewater System Assets
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	Revenues				EBITDA			
	2020	2019	2018	2017	2020	2019	2018	2017
	(Millions of $)				(Millions of $)			
City of Beaver Falls Wastewater System Assets	$3.025	$3.149	$3.056	$2.802	$0.395	$0.528	$0.832	$0.614
Comparable Group								
American States Water Co	$488.243	$473.869	$436.816	$440.603	$171.044	$164.085	$144.803	$159.380
American Water Works Co Inc	3,777.000	3,610.000	3,440.000	3,357.000	1,901.000	1,812.000	1,704.000	1,720.000
Artesian Resources -CL A	88.141	83.595	80.411	82.235	39.122	35.909	34.234	36.450
California Water Service Gp	794.307	714.557	698.196	676.113	244.000	201.212	205.393	211.184
Essential Utilities, Inc.	1,462.698	889.692	838.091	809.525	713.483	513.717	476.204	465.691
Middlesex Water Co	141.592	134.598	138.077	130.775	58.537	51.550	53.546	52.813
SJW Corp	564.526	420.482	397.699	389.225	208.918	138.578	146.601	148.580
York Water Co	53.852	51.578	48.437	48.589	31.246	30.023	28.242	29.242

	EBIT			
	2020	2019	2018	2017
	(Millions of $)			
City of Beaver Falls Wastewater System Assets	$0.155	$0.285	$0.586	$0.364
Comparable Group				
American States Water Co	$133.840	$128.372	$104.140	$120.107
American Water Works Co Inc	1,297.000	1,230.000	1,159.000	1,228.000
Artesian Resources -CL A	27.979	25.106	23.946	26.895
California Water Service Gp	143.065	109.924	119.686	132.592
Essential Utilities, Inc.	456.424	357.241	329.531	328.967
Middlesex Water Co	37.699	34.318	37.766	37.967
SJW Corp	117.296	70.089	89.694	98.079
York Water Co	23.069	22.335	21.232	22.473

City of Beaver Falls Wastewater System Assets
Property Plant & Equipment Analysis
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TABLE 6.4 Growth Rate Analyses

	Revenue Growth			EBITDA Growth		
	2020	2019	2018	2020	2019	2018
City of Beaver Falls Wastewater System Assets	-3.9%	3.0%	9.1%	-25.2%	-36.5%	35.5%
Comparable Group						
American States Water Co	3.0%	8.5%	-0.9%	4.2%	13.3%	-9.1%
American Water Works Co Inc	4.6%	4.9%	2.5%	4.9%	6.3%	-0.9%
Artesian Resources -CL A	5.4%	4.0%	-2.2%	8.9%	4.9%	-6.1%
California Water Service Gp	11.2%	2.3%	3.3%	21.3%	-2.0%	-2.7%
Essential Utilities, Inc.	64.4%	6.2%	3.5%	38.9%	7.9%	2.3%
Middlesex Water Co	5.2%	-2.5%	5.6%	13.6%	-3.7%	1.4%
SJW Corp	34.3%	5.7%	2.2%	50.8%	-5.5%	-1.3%
York Water Co	4.4%	6.5%	-0.3%	4.1%	6.3%	-3.4%
Median	5.3%	5.3%	2.4%	11.3%	5.6%	-2.0%

	EBIT Growth		
	2020	2019	2018
City of Beaver Falls Wastewater System Assets	-45.6%	-51.4%	61.0%
Comparable Group			
American States Water Co	4.3%	23.3%	-13.3%
American Water Works Co Inc	5.4%	6.1%	-5.6%
Artesian Resources -CL A	11.4%	4.8%	-11.0%
California Water Service Gp	30.1%	-8.2%	-9.7%
Essential Utilities, Inc.	27.8%	8.4%	0.2%
Middlesex Water Co	9.9%	-9.1%	-0.5%
SJW Corp	67.4%	-21.9%	-8.5%
York Water Co	3.3%	5.2%	-5.5%
Median	10.7%	5.0%	-7.1%

City of Beaver Falls Wastewater System Assets
Property Plant & Equipment Analysis
Capital Expenditures Analysis
Growth Rate Analyses
Profit Margin Analyses

TABLE 6.5 Profit Margin Analyses

	EBITDA / Revenue - Margin		
	2020	2019	2018
City of Beaver Falls Wastewater System Assets	13.1%	16.8%	27.2%
Comparable Group			
American States Water Co	35.0%	34.6%	33.1%
American Water Works Co Inc	50.3%	50.2%	49.5%
Artesian Resources -CL A	44.4%	43.0%	42.6%
California Water Service Gp	30.7%	28.2%	29.4%
Essential Utilities, Inc.	48.8%	57.7%	56.8%
Middlesex Water Co	41.3%	38.3%	38.8%
SJW Corp	37.0%	33.0%	36.9%
York Water Co	58.0%	58.2%	58.3%
Median	42.9%	40.6%	40.7%

	EBIT / Revenue - Margin		
	2020	2019	2018
City of Beaver Falls Wastewater System Assets	5.1%	9.1%	19.2%
Comparable Group			
American States Water Co	27.4%	27.1%	23.8%
American Water Works Co Inc	34.3%	34.1%	33.7%
Artesian Resources -CL A	31.7%	30.0%	29.8%
California Water Service Gp	18.0%	15.4%	17.1%
Essential Utilities, Inc.	31.2%	40.2%	39.3%
Middlesex Water Co	26.6%	25.5%	27.4%
SJW Corp	20.8%	16.7%	22.6%
York Water Co	42.8%	43.3%	43.8%
Median	29.3%	28.6%	28.6%

Source: S&P Capital IQ
EXHIBIT 1

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

SUMMARY OF ORIGINAL COST AND ACCRUED DEPRECIATION
OF WASTEWATER SYSTEM AS OF DECEMBER 31, 2021

ACCOUNT	DESCRIPTION	ORIGINAL COST	ACCRUED DEPRECIATION
(1)	(2)	(3)	(4)
353.20	LAND AND LAND RIGHTS - COLLECTION	109.00	
353.30	LAND AND LAND RIGHTS - PUMPING	1.00	
353.40	LAND AND LAND RIGHTS - TREATMENT	47,637.50	
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	133,168.00	30,629
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	4,536,214.51	1,674,975
355.00	POWER GENERATION EQUIPMENT	92,474.78	59,838
360.10	FORCE MAINS	234,542.22	47,915
361.10	GRAVITY MAINS	3,740,050.47	1,224,191
361.12	MANHOLES	64,697.57	51,579
363.20	SERVICES TO CUSTOMERS	170,292.73	141,569
364.30	METERS	57,104.19	28,362
371.30	PUMPING EQUIPMENT	731,614.08	288,255
380.00	TREATMENT AND DISPOSAL EQUIPMENT	1,950,795.49	933,736
381.40	PLANT SEWERS	698,718.01	323,953
382.00	OUTFALL SEWERS	70,212.80	58,859
390.00	OFFICE FURNITURE AND EQUIPMENT	2,390.76	179
390.70	COMPUTERS	8,215.98	2,065
391.70	TRANSPORTATION EQUIPMENT	105,532.31	56,352
392.70	STORES EQUIPMENT	7,968.37	7,968
393.70	TOOLS, SHOP AND GARAGE EQUIPMENT	104,839.60	7,863
394.70	LABORATORY EQUIPMENT	60,719.01	54,357
395.70	POWER OPERATED EQUIPMENT	69,588.51	53,982
396.00	COMMUNICATION EQUIPMENT	9,600.00	893
397.70	MISCELLANEOUS EQUIPMENT	2,000.00	280
	TOTAL COMPANY	**12,898,486.89**	**5,047,800**

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

SUMMARY OF ANALYSIS OF ORIGINAL COST
OF WASTEWATER SYSTEM AS OF DECEMBER 31, 2021

ACCOUNT	DESCRIPTION	ORIGINAL COST
(1)	(2)	(3)
353.20	LAND AND LAND RIGHTS - COLLECTION	109.00
353.30	LAND AND LAND RIGHTS - PUMPING	1.00
353.40	LAND AND LAND RIGHTS - TREATMENT	47,637.50
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	133,168.00
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	4,536,214.51
355.00	POWER GENERATION EQUIPMENT	92,474.78
360.10	FORCE MAINS	234,542.22
361.10	GRAVITY MAINS	3,740,050.47
361.12	MANHOLES	64,697.57
363.20	SERVICES TO CUSTOMERS	170,292.73
364.30	METERS	57,104.19
371.30	PUMPING EQUIPMENT	731,614.08
380.00	TREATMENT AND DISPOSAL EQUIPMENT	1,950,795.49
381.40	PLANT SEWERS	698,718.01
382.00	OUTFALL SEWERS	70,212.80
390.00	OFFICE FURNITURE AND EQUIPMENT	2,390.76
390.70	COMPUTERS	8,215.98
391.70	TRANSPORTATION EQUIPMENT	105,532.31
392.70	STORES EQUIPMENT	7,968.37
393.70	TOOLS, SHOP AND GARAGE EQUIPMENT	104,839.60
394.70	LABORATORY EQUIPMENT	60,719.01
395.70	POWER OPERATED EQUIPMENT	69,588.51
396.00	COMMUNICATION EQUIPMENT	9,600.00
397.70	MISCELLANEOUS EQUIPMENT	2,000.00
	TOTAL COMPANY	**12,898,486.89**

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

SUMMARY OF SERVICE LIFE ESTIMATES AND CALCULATED ACCRUED DEPRECIATION RELATED TO ORIGINAL COST AS OF DECEMBER 31, 2021

ACCOUNT	DESCRIPTION	SURVIVOR CURVE	ORIGINAL COST	ACCRUED DEPRECIATION
(1)	(2)	(3)	(4)	(5)
353.20	LAND AND LAND RIGHTS - COLLECTION	NONDEPRECIABLE	109.00	
353.30	LAND AND LAND RIGHTS - PUMPING	NONDEPRECIABLE	1.00	
353.40	LAND AND LAND RIGHTS - TREATMENT	NONDEPRECIABLE	47,637.50	
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	65-R3	133,168.00	30,629
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	70-R2.5	4,536,214.51	1,674,975
355.00	POWER GENERATION EQUIPMENT	30-S2	92,474.78	59,838
360.10	FORCE MAINS	70-R2.5	234,542.22	47,915
361.10	GRAVITY MAINS	75-R1.5	3,740,050.47	1,224,191
361.12	MANHOLES	65-R1.5	64,697.57	51,579
363.20	SERVICES TO CUSTOMERS	60-R1.5	170,292.73	141,569
364.30	METERS	30-L3	57,104.19	28,362
371.30	PUMPING EQUIPMENT	40-R1.5	731,614.08	288,255
380.00	TREATMENT AND DISPOSAL EQUIPMENT	45-S0.5	1,950,795.49	933,736
381.40	PLANT SEWERS	60-R3	698,718.01	323,953
382.00	OUTFALL SEWERS	70-R2.5	70,212.80	58,859
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	2,390.76	179
390.70	COMPUTERS	5-SQ	8,215.98	2,065
391.70	TRANSPORTATION EQUIPMENT	11-S1.5	105,532.31	56,352
392.70	STORES EQUIPMENT	20-SQ	7,968.37	7,968
393.70	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	104,839.60	7,863
394.70	LABORATORY EQUIPMENT	15-SQ	60,719.01	54,357
395.70	POWER OPERATED EQUIPMENT	15-L2.5	69,588.51	53,982
396.00	COMMUNICATION EQUIPMENT	15-SQ	9,600.00	893
397.70	MISCELLANEOUS EQUIPMENT	15-SQ	2,000.00	280
	TOTAL COMPANY		**12,898,486.89**	**5,047,800**

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 353.20 LAND AND LAND RIGHTS - COLLECTION

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
NONDEPRECIABLE							
1937	109.00						
	109.00						

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 353.30 LAND AND LAND RIGHTS - PUMPING

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
NONDEPRECIABLE							
1982	1.00						
	1.00						

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 353.40 LAND AND LAND RIGHTS - TREATMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
NONDEPRECIABLE							
1964	10,800.00						
1973	26,100.00						
1996	10,737.50						
	47,637.50						

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - PUMPING

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 65-R3 NET SALVAGE PERCENT.. 0							
2006	133,168.00	65.00	1.54	2,050.79	50.05	0.2300	30,629
	133,168.00			2,050.79			30,629

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.54

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TREATMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 70-R2.5							
NET SALVAGE PERCENT.. 0							
1937	11,464.36	70.00	1.43	163.94	11.32	0.8383	9,610
1964	106,465.92	70.00	1.43	1,522.46	23.41	0.6656	70,861
1974	1,071,672.11	70.00	1.43	15,324.91	29.94	0.5723	613,307
1996	2,738,371.24	70.00	1.43	39,158.71	47.00	0.3286	899,747
2010	523,430.68	70.00	1.43	7,485.06	59.31	0.1527	79,933
2020	69,810.20	70.00	1.43	998.29	68.58	0.0203	1,416
2021	15,000.00	70.00	1.43	214.50	69.53	0.0067	101
	4,536,214.51			64,867.87			1,674,975

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 355.00 POWER GENERATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

	ORIGINAL	AVG.	--ANNUAL ACCRUAL--			--ACCRUED DEPREC.--	
YEAR	COST	LIFE	RATE	AMOUNT	EXP.	FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 30-S2							
NET SALVAGE PERCENT.. 0							
1996	87,502.00	30.00	3.33	2,913.82	9.57	0.6810	59,589
2020	4,972.78	30.00	3.33	165.59	28.50	0.0500	249
	92,474.78			3,079.41			59,838

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 3.33

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 360.10 FORCE MAINS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 70-R2.5							
NET SALVAGE PERCENT.. 0							
2006	234,542.22	70.00	1.43	3,353.95	55.70	0.2043	47,915
	234,542.22			3,353.95			47,915

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 361.10 GRAVITY MAINS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 75-R1.5							
NET SALVAGE PERCENT.. 0							
1937	489,859.08	75.00	1.33	6,515.13	19.96	0.7339	359,493
1990	268,174.99	75.00	1.33	3,566.73	50.56	0.3259	87,390
1991	377,447.37	75.00	1.33	5,020.05	51.29	0.3161	119,322
1993	107,872.58	75.00	1.33	1,434.71	52.75	0.2967	32,003
1996	1,932,736.25	75.00	1.33	25,705.39	54.97	0.2671	516,176
1998	286,361.78	75.00	1.33	3,808.61	56.46	0.2472	70,789
2008	240,153.18	75.00	1.33	3,194.04	64.14	0.1448	34,774
2011	37,445.24	75.00	1.33	498.02	66.50	0.1133	4,244
	3,740,050.47			49,742.68			1,224,191

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.33

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 361.12 MANHOLES

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 65-R1.5 NET SALVAGE PERCENT.. 0							
1937	64,697.57	65.00	1.54	996.34	13.18	0.7972	51,579
	64,697.57			996.34			51,579

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.54

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 363.20 SERVICES TO CUSTOMERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 60-R1.5							
NET SALVAGE PERCENT.. 0							
1937	170,292.73	60.00	1.67	2,843.89	10.12	0.8313	141,569
	170,292.73			2,843.89			141,569

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 364.30 METERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 30-L3							
NET SALVAGE PERCENT.. 0							
1996	26,010.00	30.00	3.33	866.13	9.94	0.6687	17,392
1998	4,315.00	30.00	3.33	143.69	10.58	0.6473	2,793
2006	14,000.00	30.00	3.33	466.20	15.38	0.4873	6,823
2012	2,738.00	30.00	3.33	91.18	20.66	0.3113	852
2020	10,041.19	30.00	3.33	334.37	28.50	0.0500	502
	57,104.19			1,901.57			28,362

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 3.33

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 371.30 PUMPING EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 40-R1.5							
NET SALVAGE PERCENT.. 0							
1974	1,052.13	40.00	2.50	26.30	9.70	0.7575	797
1996	451,422.00	40.00	2.50	11,285.55	20.99	0.4753	214,538
2006	236,966.95	40.00	2.50	5,924.17	27.91	0.3023	71,623
2020	42,173.00	40.00	2.50	1,054.32	38.77	0.0308	1,297
	731,614.08			18,290.34			288,255

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.50

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 380.00 TREATMENT AND DISPOSAL EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 45-S0.5							
NET SALVAGE PERCENT.. 0							
1964	84,623.16	45.00	2.22	1,878.63	11.24	0.7502	63,486
1974	327,096.94	45.00	2.22	7,261.55	15.13	0.6638	217,120
1996	1,525,782.76	45.00	2.22	33,872.38	25.75	0.4278	652,699
2020	13,292.63	45.00	2.22	295.10	43.54	0.0324	431
	1,950,795.49			43,307.66			933,736

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.22

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 381.40 PLANT SEWERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 60-R3							
NET SALVAGE PERCENT.. 0							
1937	465.84	60.00	1.67	7.78	4.16	0.9307	434
1974	160,611.05	60.00	1.67	2,682.20	19.18	0.6803	109,269
1996	537,641.12	60.00	1.67	8,978.61	36.09	0.3985	214,250
	698,718.01			11,668.59			323,953

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 382.00 OUTFALL SEWERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 70-R2.5							
NET SALVAGE PERCENT.. 0							
1937	70,212.80	70.00	1.43	1,004.04	11.32	0.8383	58,859
	70,212.80			1,004.04			58,859

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 20-SQUARE							
NET SALVAGE PERCENT.. 0							
2020	2,390.76	20.00	5.00	119.54	18.50	0.0750	179
	2,390.76			119.54			179

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 5.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 390.70 COMPUTERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 5-SQUARE NET SALVAGE PERCENT.. 0							
2020	6,215.98	5.00	20.00	1,243.20	3.50	0.3000	1,865
2021	2,000.00	5.00	20.00	400.00	4.50	0.1000	200
	8,215.98			1,643.20			2,065

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 20.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 391.70 TRANSPORTATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 11-S1.5							
NET SALVAGE PERCENT.. 0							
1992	29,103.64	11.00				1.0000	29,104
2002	3,217.22	11.00	9.09	292.45	0.65	0.9409	3,027
2006	4,848.45	11.00	9.09	440.72	1.68	0.8473	4,108
2014	25,656.00	11.00	9.09	2,332.13	4.84	0.5600	14,367
2020	42,707.00	11.00	9.09	3,882.07	9.52	0.1346	5,746
	105,532.31			6,947.37			56,352

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.58

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 392.70 STORES EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 20-SQUARE							
NET SALVAGE PERCENT.. 0							
1996	7,968.37	20.00				1.0000	7,968
	7,968.37						7,968

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 393.70 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 20-SQUARE NET SALVAGE PERCENT.. 0							
2020	104,839.60	20.00	5.00	5,241.98	18.50	0.0750	7,863
	104,839.60			5,241.98			7,863

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 5.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 394.70 LABORATORY EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 15-SQUARE							
NET SALVAGE PERCENT.. 0							
1996	54,138.01	15.00				1.0000	54,138
2021	6,581.00	15.00	6.67	438.95	14.50	0.0333	219
	60,719.01			438.95			54,357

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.72

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 395.70 POWER OPERATED EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 15-L2.5							
NET SALVAGE PERCENT.. 0							
1998	49,374.85	15.00	6.67	3,293.30	3.30	0.7800	38,512
1999	20,213.66	15.00	6.67	1,348.25	3.52	0.7653	15,470
	69,588.51			4,641.55			53,982

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 15-SQUARE							
NET SALVAGE PERCENT.. 0							
2020	8,600.00	15.00	6.67	573.62	13.50	0.1000	860
2021	1,000.00	15.00	6.67	66.70	14.50	0.0333	33
	9,600.00			640.32			893

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 397.70 MISCELLANEOUS EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 15-SQUARE							
NET SALVAGE PERCENT.. 0							
2018	600.00	15.00	6.67	40.02	11.50	0.2333	140
2020	1,400.00	15.00	6.67	93.38	13.50	0.1000	140
	2,000.00			133.40			280

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

SUMMARY OF REPLACEMENT COST AND ACCRUED DEPRECIATION
OF WASTEWATER SYSTEM AS OF DECEMBER 31, 2021

ACCOUNT	DESCRIPTION	REPLACEMENT COST	ACCRUED DEPRECIATION
(1)	(2)	(3)	(4)
353.20	LAND AND LAND RIGHTS - COLLECTION	109.00	
353.30	LAND AND LAND RIGHTS - PUMPING	1.00	
353.40	LAND AND LAND RIGHTS - TREATMENT	47,637.50	
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	251,761.82	57,905
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	18,744,546.41	8,800,274
355.00	POWER GENERATION EQUIPMENT	315,296.69	211,222
360.10	FORCE MAINS	462,504.10	94,485
361.10	GRAVITY MAINS	32,233,125.13	19,370,184
361.12	MANHOLES	3,031,543.28	2,416,837
363.20	SERVICES TO CUSTOMERS	9,512,065.35	7,907,665
364.30	METERS	186,921.73	103,616
371.30	PUMPING EQUIPMENT	2,263,701.35	954,164
380.00	TREATMENT AND DISPOSAL EQUIPMENT	8,454,982.25	4,733,183
381.40	PLANT SEWERS	3,019,153.39	1,619,666
382.00	OUTFALL SEWERS	3,289,971.20	2,757,950
390.00	OFFICE FURNITURE AND EQUIPMENT	2,686.27	201
390.70	COMPUTERS	8,400.42	2,113
391.70	TRANSPORTATION EQUIPMENT	118,574.34	66,441
392.70	STORES EQUIPMENT	15,972.20	15,972
393.70	TOOLS, SHOP AND GARAGE EQUIPMENT	111,247.88	8,344
394.70	LABORATORY EQUIPMENT	84,022.28	77,615
395.70	POWER OPERATED EQUIPMENT	120,716.15	93,651
396.00	COMMUNICATION EQUIPMENT	9,702.28	903
397.70	MISCELLANEOUS EQUIPMENT	2,214.57	312
	TOTAL COMPANY	**82,286,856.59**	**49,292,703**

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

SUMMARY OF ANALYSIS OF REPLACEMENT COST
OF WASTEWATER SYSTEM AS OF DECEMBER 31, 2021

ACCOUNT	DESCRIPTION	REPLACEMENT COST
(1)	(2)	(3)
353.20	LAND AND LAND RIGHTS - COLLECTION	109.00
353.30	LAND AND LAND RIGHTS - PUMPING	1.00
353.40	LAND AND LAND RIGHTS - TREATMENT	47,637.50
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	251,761.82
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	18,744,546.41
355.00	POWER GENERATION EQUIPMENT	315,296.69
360.10	FORCE MAINS	462,504.10
361.10	GRAVITY MAINS	32,233,125.13
361.12	MANHOLES	3,031,543.28
363.20	SERVICES TO CUSTOMERS	9,512,065.35
364.30	METERS	186,921.73
371.30	PUMPING EQUIPMENT	2,263,701.35
380.00	TREATMENT AND DISPOSAL EQUIPMENT	8,454,982.25
381.40	PLANT SEWERS	3,019,153.39
382.00	OUTFALL SEWERS	3,289,971.20
390.00	OFFICE FURNITURE AND EQUIPMENT	2,686.27
390.70	COMPUTERS	8,400.42
391.70	TRANSPORTATION EQUIPMENT	118,574.34
392.70	STORES EQUIPMENT	15,972.20
393.70	TOOLS, SHOP AND GARAGE EQUIPMENT	111,247.88
394.70	LABORATORY EQUIPMENT	84,022.28
395.70	POWER OPERATED EQUIPMENT	120,716.15
396.00	COMMUNICATION EQUIPMENT	9,702.28
397.70	MISCELLANEOUS EQUIPMENT	2,214.57
	TOTAL COMPANY	**82,286,856.59**

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

SUMMARY OF SERVICE LIFE ESTIMATES AND CALCULATED ACCRUED DEPRECIATION RELATED TO REPLACEMENT COST AS OF DECEMBER 31, 2021

ACCOUNT	DESCRIPTION	SURVIVOR CURVE	REPLACEMENT COST	ACCRUED DEPRECIATION
(1)	(2)	(3)	(4)	(5)
353.20	LAND AND LAND RIGHTS - COLLECTION	NONDEPRECIABLE	109.00	
353.30	LAND AND LAND RIGHTS - PUMPING	NONDEPRECIABLE	1.00	
353.40	LAND AND LAND RIGHTS - TREATMENT	NONDEPRECIABLE	47,637.50	
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	65-R3	251,761.82	57,905
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	70-R2.5	18,744,546.41	8,800,274
355.00	POWER GENERATION EQUIPMENT	30-S2	315,296.69	211,222
360.10	FORCE MAINS	70-R2.5	462,504.10	94,485
361.10	GRAVITY MAINS	75-R1.5	32,233,125.13	19,370,184
361.12	MANHOLES	65-R1.5	3,031,543.28	2,416,837
363.20	SERVICES TO CUSTOMERS	60-R1.5	9,512,065.35	7,907,665
364.30	METERS	30-L3	186,921.73	103,616
371.30	PUMPING EQUIPMENT	40-R1.5	2,263,701.35	954,164
380.00	TREATMENT AND DISPOSAL EQUIPMENT	45-S0.5	8,454,982.25	4,733,183
381.40	PLANT SEWERS	60-R3	3,019,153.39	1,619,666
382.00	OUTFALL SEWERS	70-R2.5	3,289,971.20	2,757,950
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	2,686.27	201
390.70	COMPUTERS	5-SQ	8,400.42	2,113
391.70	TRANSPORTATION EQUIPMENT	11-S1.5	118,574.34	66,441
392.70	STORES EQUIPMENT	20-SQ	15,972.20	15,972
393.70	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	111,247.88	8,344
394.70	LABORATORY EQUIPMENT	15-SQ	84,022.28	77,615
395.70	POWER OPERATED EQUIPMENT	15-L2.5	120,716.15	93,651
396.00	COMMUNICATION EQUIPMENT	15-SQ	9,702.28	903
397.70	MISCELLANEOUS EQUIPMENT	15-SQ	2,214.57	312
	TOTAL COMPANY		**82,286,856.59**	**49,292,703**

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

SUMMARY OF REPLACEMENT COST NEW AND REPLACEMENT COST NEW LESS DEPRECIATION OF WASTEWATER SYSTEM AS OF DECEMBER 31, 2021

DESCRIPTION		REPLACEMENT COST
(1)		(2)
REPLACEMENT COST NEW	$	82,286,857
LESS: ACCRUED DEPRECIATION		49,292,703
REPLACEMENT COST NEW LESS DEPRECIATION	$	32,994,154
CONCLUSION: RCNLD	**$**	**32,994,154**

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

SUMMARY OF REPLACEMENT COST AND TRANSITION FACTORS BY ACCOUNT AND VINTAGE YEAR
OF WASTEWATER SYSTEM AS OF DECEMBER 31, 2021

ACCOUNT	DESCRIPTION	VINTAGE YEAR	BASE COST	TRANSITION FACTOR	FACTOR REFERENCE	REPLACEMENT COST
(1)	(2)	(3)	(4)	(5)	(6)	(7)
353.20	LAND AND LAND RIGHTS - COLLECTION	1937	109.00	1.00000	(1)	109.00
353.30	LAND AND LAND RIGHTS - PUMPING	1982	1.00	1.00000	(1)	1.00
353.40	LAND AND LAND RIGHTS - TREATMENT	1964	10,800.00	1.00000	(1)	10,800.00
353.40	LAND AND LAND RIGHTS - TREATMENT	1973	26,100.00	1.00000	(1)	26,100.00
353.40	LAND AND LAND RIGHTS - TREATMENT	1996	10,737.50	1.00000	(1)	10,737.50
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	2006	133,168.00	1.89056	(2)	251,761.82
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	1937	11,464.36	48.94444	(2)	561,116.73
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	1964	106,465.92	15.73214	(2)	1,674,937.06
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	1974	1,071,672.11	7.52991	(2)	8,069,599.39
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	1996	2,738,371.24	2.74455	(2)	7,515,592.09
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	2010	523,430.68	1.57321	(2)	823,468.62
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	2020	69,810.20	1.19864	(2)	83,677.26
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	2021	15,000.00	1.07702	(2)	16,155.26
355.00	POWER GENERATION EQUIPMENT	1996	87,502.00	3.54000	(3)	309,757.08
355.00	POWER GENERATION EQUIPMENT	2020	4,972.78	1.11399	(3)	5,539.61
360.10	FORCE MAINS	2006	234,542.22	1.97194	(4)	462,504.10
361.10	GRAVITY MAINS	1937	489,859.08	46.85714	(4)	22,953,396.89
361.10	GRAVITY MAINS	1990	268,174.99	3.26910	(4)	876,691.66
361.10	GRAVITY MAINS	1991	377,447.37	3.20521	(4)	1,209,798.74
361.10	GRAVITY MAINS	1993	107,872.58	3.06542	(4)	330,674.82
361.10	GRAVITY MAINS	1996	1,932,736.25	2.90265	(4)	5,610,066.28
361.10	GRAVITY MAINS	1998	286,361.78	2.77183	(4)	793,746.45
361.10	GRAVITY MAINS	2008	240,153.18	1.67347	(4)	401,889.00
361.10	GRAVITY MAINS	2011	37,445.24	1.51852	(4)	56,861.29
361.12	MANHOLES	1937	64,697.57	46.85714	(4)	3,031,543.28
363.20	SERVICES TO CUSTOMERS	1937	170,292.73	55.85714	(5)	9,512,065.35
364.30	METERS	1996	26,010.00	3.87923	(6)	100,898.70
364.30	METERS	1998	4,315.00	4.07614	(6)	17,588.55
364.30	METERS	2006	14,000.00	3.23790	(6)	45,330.65
364.30	METERS	2012	2,738.00	2.11873	(6)	5,801.09
364.30	METERS	2020	10,041.19	1.72318	(6)	17,302.74
371.30	PUMPING EQUIPMENT	1974	1,052.13	13.05738	(3)	13,738.06
371.30	PUMPING EQUIPMENT	1996	451,422.00	3.54000	(3)	1,598,033.88
371.30	PUMPING EQUIPMENT	2006	236,966.95	2.55288	(3)	604,949.28
371.30	PUMPING EQUIPMENT	2020	42,173.00	1.11399	(3)	46,980.13
380.00	TREATMENT AND DISPOSAL EQUIPMENT	1964	84,623.16	16.86667	(7)	1,427,310.63
380.00	TREATMENT AND DISPOSAL EQUIPMENT	1974	327,096.94	8.57627	(7)	2,805,272.06
380.00	TREATMENT AND DISPOSAL EQUIPMENT	1996	1,525,782.76	2.75749	(7)	4,207,335.57
380.00	TREATMENT AND DISPOSAL EQUIPMENT	2020	13,292.63	1.13326	(7)	15,063.99
381.40	PLANT SEWERS	1937	465.84	46.85714	(4)	21,827.93
381.40	PLANT SEWERS	1974	160,611.05	8.94545	(4)	1,436,738.85
381.40	PLANT SEWERS	1996	537,641.12	2.90265	(4)	1,560,586.61
382.00	OUTFALL SEWERS	1937	70,212.80	46.85714	(4)	3,289,971.20
390.00	OFFICE FURNITURE AND EQUIPMENT	2020	2,390.76	1.12360	(8)	2,686.27
390.70	COMPUTERS	2020	6,215.98	1.02409	(9)	6,365.75
390.70	COMPUTERS	2021	2,000.00	1.01734	(9)	2,034.67
391.70	TRANSPORTATION EQUIPMENT	1992	29,103.64	1.23808	(10)	36,032.76
391.70	TRANSPORTATION EQUIPMENT	2002	3,217.22	1.18500	(10)	3,812.41
391.70	TRANSPORTATION EQUIPMENT	2006	4,848.45	1.22192	(10)	5,924.40
391.70	TRANSPORTATION EQUIPMENT	2014	25,656.00	1.09986	(10)	28,218.13
391.70	TRANSPORTATION EQUIPMENT	2020	42,707.00	1.04401	(10)	44,586.64
392.70	STORES EQUIPMENT	1996	7,968.37	2.00445	(11)	15,972.20
393.70	TOOLS, SHOP AND GARAGE EQUIPMENT	2020	104,839.60	1.06112	(12)	111,247.88
394.70	LABORATORY EQUIPMENT	1996	54,138.01	1.42957	(13)	77,394.30
394.70	LABORATORY EQUIPMENT	2021	6,581.00	1.00714	(13)	6,627.98

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

SUMMARY OF REPLACEMENT COST AND TRANSITION FACTORS BY ACCOUNT AND VINTAGE YEAR
OF WASTEWATER SYSTEM AS OF DECEMBER 31, 2021

ACCOUNT	DESCRIPTION	VINTAGE YEAR	BASE COST	TRANSITION FACTOR	FACTOR REFERENCE	REPLACEMENT COST
(1)	(2)	(3)	(4)	(5)	(6)	(7)
395.70	POWER OPERATED EQUIPMENT	1998	49,374.85	1.74378	(14)	86,098.97
395.70	POWER OPERATED EQUIPMENT	1999	20,213.66	1.71256	(14)	34,617.18
396.00	COMMUNICATION EQUIPMENT	2020	8,600.00	1.01097	(15)	8,694.30
396.00	COMMUNICATION EQUIPMENT	2021	1,000.00	1.00798	(15)	1,007.98
397.70	MISCELLANEOUS EQUIPMENT	2018	600.00	1.13646	(16)	681.88
397.70	MISCELLANEOUS EQUIPMENT	2020	1,400.00	1.09478	(16)	1,532.69
	TOTAL COMPANY		**12,898,486.89**			**82,286,856.59**

NOTES : (1) Not trended
(2) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 8
(3) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 9
(4) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 34
(5) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 39
(6) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 40
(7) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 16
(8) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry group data for Office furniture (including fixtures) mfg, not seasonally adjusted
(9) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Computer & peripheral equipment mfg, not seasonally adjusted
(10) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Automobile, light truck and utility vehicle mfg, not seasonally adjusted
(11) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Showcases, partitions, shelving, and lockers mfg, not seasonally adjusted
(12) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Lawn and garden equipment mfg, not seasonally adjusted
(13) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Analytical laboratory instrument mfg, not seasonally adjusted
(14) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Construction machinery mfg, not seasonally adjusted
(15) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Broadcast and wireless communications equipment mfg, not seasonally adjusted
(16) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Audio and video equipment mfg, not seasonally adjusted

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 353.20 LAND AND LAND RIGHTS - COLLECTION

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
NONDEPRECIABLE							
1937	109.00						
	109.00						

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 353.30 LAND AND LAND RIGHTS - PUMPING

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
NONDEPRECIABLE							
1982	1.00						
	1.00						

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 353.40 LAND AND LAND RIGHTS - TREATMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
NONDEPRECIABLE							
1964	10,800.00						
1973	26,100.00						
1996	10,737.50						
	47,637.50						

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - PUMPING

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 65-R3							
NET SALVAGE PERCENT.. 0							
2006	251,761.82	65.00	1.54	3,877.13	50.05	0.2300	57,905
	251,761.82			3,877.13			57,905

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.54

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TREATMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 70-R2.5							
NET SALVAGE PERCENT.. 0							
1937	561,116.73	70.00	1.43	8,023.97	11.32	0.8383	470,379
1964	1,674,937.06	70.00	1.43	23,951.60	23.41	0.6656	1,114,788
1974	8,069,599.39	70.00	1.43	115,395.27	29.94	0.5723	4,618,151
1996	7,515,592.09	70.00	1.43	107,472.97	47.00	0.3286	2,469,398
2010	823,468.62	70.00	1.43	11,775.60	59.31	0.1527	125,752
2020	83,677.26	70.00	1.43	1,196.58	68.58	0.0203	1,698
2021	16,155.26	70.00	1.43	231.02	69.53	0.0067	108
	18,744,546.41			268,047.01			8,800,274

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 355.00 POWER GENERATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 30-S2							
NET SALVAGE PERCENT.. 0							
1996	309,757.08	30.00	3.33	10,314.91	9.57	0.6810	210,945
2020	5,539.61	30.00	3.33	184.47	28.50	0.0500	277
	315,296.69			10,499.38			211,222

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 3.33

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 360.10 FORCE MAINS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 70-R2.5							
NET SALVAGE PERCENT.. 0							
2006	462,504.10	70.00	1.43	6,613.81	55.70	0.2043	94,485
	462,504.10			6,613.81			94,485

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 361.10 GRAVITY MAINS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 75-R1.5							
NET SALVAGE PERCENT.. 0							
1937	22,953,396.89	75.00	1.33	305,280.18	19.96	0.7339	16,844,809
1990	876,691.66	75.00	1.33	11,660.00	50.56	0.3259	285,688
1991	1,209,798.74	75.00	1.33	16,090.32	51.29	0.3161	382,454
1993	330,674.82	75.00	1.33	4,397.98	52.75	0.2967	98,101
1996	5,610,066.28	75.00	1.33	74,613.88	54.97	0.2671	1,498,280
1998	793,746.45	75.00	1.33	10,556.83	56.46	0.2472	196,214
2008	401,889.00	75.00	1.33	5,345.12	64.14	0.1448	58,194
2011	56,861.29	75.00	1.33	756.26	66.50	0.1133	6,444
	32,233,125.13			428,700.57			19,370,184

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.33

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 361.12 MANHOLES

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 65-R1.5							
NET SALVAGE PERCENT.. 0							
1937	3,031,543.28	65.00	1.54	46,685.77	13.18	0.7972	2,416,837
	3,031,543.28			46,685.77			2,416,837

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.54

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 363.20 SERVICES TO CUSTOMERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 60-R1.5							
NET SALVAGE PERCENT.. 0							
1937	9,512,065.35	60.00	1.67	158,851.49	10.12	0.8313	7,907,665
	9,512,065.35			158,851.49			7,907,665

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 364.30 METERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 30-L3							
NET SALVAGE PERCENT.. 0							
1996	100,898.70	30.00	3.33	3,359.93	9.94	0.6687	67,468
1998	17,588.55	30.00	3.33	585.70	10.58	0.6473	11,386
2006	45,330.65	30.00	3.33	1,509.51	15.38	0.4873	22,091
2012	5,801.09	30.00	3.33	193.18	20.66	0.3113	1,806
2020	17,302.74	30.00	3.33	576.18	28.50	0.0500	865
	186,921.73			6,224.50			103,616

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 3.33

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 371.30 PUMPING EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 40-R1.5							
NET SALVAGE PERCENT.. 0							
1974	13,738.06	40.00	2.50	343.45	9.70	0.7575	10,407
1996	1,598,033.88	40.00	2.50	39,950.85	20.99	0.4753	759,466
2006	604,949.28	40.00	2.50	15,123.73	27.91	0.3023	182,846
2020	46,980.13	40.00	2.50	1,174.50	38.77	0.0308	1,445
	2,263,701.35			56,592.53			954,164

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.50

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 380.00 TREATMENT AND DISPOSAL EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 45-S0.5							
NET SALVAGE PERCENT.. 0							
1964	1,427,310.63	45.00	2.22	31,686.30	11.24	0.7502	1,070,797
1974	2,805,272.06	45.00	2.22	62,277.04	15.13	0.6638	1,862,083
1996	4,207,335.57	45.00	2.22	93,402.85	25.75	0.4278	1,799,814
2020	15,063.99	45.00	2.22	334.42	43.54	0.0324	489
	8,454,982.25			187,700.61			4,733,183

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.22

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 381.40 PLANT SEWERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 60-R3							
NET SALVAGE PERCENT.. 0							
1937	21,827.93	60.00	1.67	364.53	4.16	0.9307	20,315
1974	1,436,738.85	60.00	1.67	23,993.54	19.18	0.6803	977,457
1996	1,560,586.61	60.00	1.67	26,061.80	36.09	0.3985	621,894
	3,019,153.39			50,419.87			1,619,666

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 382.00 OUTFALL SEWERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 70-R2.5							
NET SALVAGE PERCENT.. 0							
1937	3,289,971.20	70.00	1.43	47,046.59	11.32	0.8383	2,757,950
	3,289,971.20			47,046.59			2,757,950

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 20-SQUARE							
NET SALVAGE PERCENT.. 0							
2020	2,686.27	20.00	5.00	134.31	18.50	0.0750	201
	2,686.27			134.31			201

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 5.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 390.70 COMPUTERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 5-SQUARE							
NET SALVAGE PERCENT.. 0							
2020	6,365.75	5.00	20.00	1,273.15	3.50	0.3000	1,910
2021	2,034.67	5.00	20.00	406.93	4.50	0.1000	203
	8,400.42			1,680.08			2,113

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 20.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 391.70 TRANSPORTATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 11-S1.5							
NET SALVAGE PERCENT.. 0							
1992	36,032.76	11.00				1.0000	36,033
2002	3,812.41	11.00	9.09	346.55	0.65	0.9409	3,587
2006	5,924.40	11.00	9.09	538.53	1.68	0.8473	5,020
2014	28,218.13	11.00	9.09	2,565.03	4.84	0.5600	15,802
2020	44,586.64	11.00	9.09	4,052.93	9.52	0.1346	5,999
	118,574.34			7,503.04			66,441

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.33

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 392.70 STORES EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 20-SQUARE							
NET SALVAGE PERCENT.. 0							
1996	15,972.20	20.00				1.0000	15,972
	15,972.20						15,972

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 393.70 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 20-SQUARE NET SALVAGE PERCENT.. 0							
2020	111,247.88	20.00	5.00	5,562.39	18.50	0.0750	8,344
	111,247.88			5,562.39			8,344

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 5.00

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 394.70 LABORATORY EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 15-SQUARE							
NET SALVAGE PERCENT.. 0							
1996	77,394.30	15.00				1.0000	77,394
2021	6,627.98	15.00	6.67	442.09	14.50	0.0333	221
	84,022.28			442.09			77,615

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.53

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 395.70 POWER OPERATED EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 15-L2.5							
NET SALVAGE PERCENT.. 0							
1998	86,098.97	15.00	6.67	5,742.80	3.30	0.7800	67,157
1999	34,617.18	15.00	6.67	2,308.97	3.52	0.7653	26,494
	120,716.15			8,051.77			93,651

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 15-SQUARE							
NET SALVAGE PERCENT.. 0							
2020	8,694.30	15.00	6.67	579.91	13.50	0.1000	869
2021	1,007.98	15.00	6.67	67.23	14.50	0.0333	34
	9,702.28			647.14			903

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.67

CITY OF BEAVER FALLS
CITY OF BEAVER FALLS WASTEWATER SYSTEM ASSETS

ACCOUNT 397.70 MISCELLANEOUS EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT DECEMBER 31, 2021

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 15-SQUARE							
NET SALVAGE PERCENT.. 0							
2018	681.88	15.00	6.67	45.48	11.50	0.2333	159
2020	1,532.69	15.00	6.67	102.23	13.50	0.1000	153
	2,214.57			147.71			312

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.67

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma Operations
Earnings Capitalization Model

		Actual			Estimated
					Year 0
		2018	2019	2020	2021
1.	**OPERATING REVENUES (1)**				
2.	Charges for services	3,054,418	3,147,364	3,023,166	3,023,166
3.	Other operating revenue	1,577	1,337	2,249	2,249
4.	Tap Fees	0	0	0	0
5.	**Total Operating Revenues**	3,055,995	3,148,701	3,025,415	3,025,415
6.	**Rate Increase**				
7.	**OPERATING EXPENSES (1)**				
8.	Operating & Maintenance Expenses	2,224,099	2,620,251	2,630,694	2,630,694
9.	**Operating Expenses Before Depreciation**	2,224,099	2,620,251	2,630,694	2,630,694
10.	Depreciation (2)	246,236	243,460	243,460	240,816
11.	**Total Operating Expenses**	2,470,335	2,863,711	2,874,154	2,871,510
12.	**Operating Income**	585,660	284,990	151,261	153,905
13.	Revenues (3)	3,055,995	3,148,701	3,025,415	3,025,415
14.	EBITDA (4)	831,896	528,450	394,721	394,721
15.	EBIT (5)	585,660	284,990	151,261	153,905
16.	EBIT	585,660	284,990	151,261	153,905
17.	(-) Income Taxes	0	0	0	0
18.	Debt Free Net Income	585,660	284,990	151,261	153,905
19.	(+) Depreciation & Amortization	246,236	243,460	243,460	240,816
20.	(-) Capital Expenditures (6)	5,945	2,811	87,357	222,858
21.	(-) Changes in Working Capital (7)	6,418	6,612	6,353	6,353
22.	Debt Free Net Cash Flow	$819,533	$519,027	$301,011	$165,510

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma Operations
Earnings Capitalization Model

		2021	Pro Forma 2021 (11)
		2.85% Capitalization Rate Model (No Growth)	2.85% Capitalization Rate Model (No Growth)
23.	Debt Free Net Cash Flow (10)	$165,510	$405,510
24.	Capitalization Factor: (8)	2.85%	2.85%
25.	Indicated Value (line 23 ÷ line 24)	$5,807,355	$14,228,408
		2.75% Capitalization Rate Model (0.10% Growth)	2.75% Capitalization Rate Model (0.10% Growth)
26.	Debt Free Net Cash Flow (10)	$165,510	$405,510
27.	Capitalization Factor: (9)	2.75%	2.75%
28.	Indicated Value (line 26 ÷ line 27)	$6,018,532	$14,745,805

See last page of this EXHIBIT for notes and assumptions.

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma Operations
Earnings Capitalization Model

Notes: (1) Assumptions:

Charges for services - Pre-2021 are actual. 2021 results are based on 2020 actual. Post-2021 based on customer growth (EDU) and average revenue per customer.

OPERATING EXPENSES - increase at 3.0% annually after 2021 unless noted elsewhere. Assumed economies of scale are shown on lines below.

(2) Depreciation - Pre-2021 based on actual depreciation. Post-2021 based on depreciation rate plus same rate on half of CAPX.

(3) Line 5.

(4) Line 12 + line 10.

(5) Line 12.

(6) Capital Expenditures - Pre-2021 based on financials/budget. Post-2021 years are estimates at 1.70% of prior year-end GROSS Property, plant and equipment.

(7) Changes in Working Capital - based on water industry 0.21% of revenues.

(8) Discount rate is the the current MUNI discount rate. Capitalization rate (K) at 12/31/2021 equal to discount rate, where capitalization rate = K - g.

(9) Discount rate is the current MUNI discount rate. Capitalization rate (K) at 12/31/2021 adjusted for stated growth (g) where capitalization rate = K - g.

(10) Final year shown, line 22.

(11) Debt Free Net Cash Flow adjusted for the removal of line rentals if system is not sold.

Terms:

CAPX - Capital Expenditures
CIP - Capital improvement plan
Dep - Depreciation expense
GROSS PPE - GROSS Property, plant and equipment
IOU - Investor owned utility
MUNI - Large regional municipally owned utility
NET PPE - NET Property, plant and equipment

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Actual			Estimated Year 0	Estimated Year 1	Estimated Year 2
	2018	2019	2020	2021	2022	2023
1. **OPERATING REVENUES (1)**						
2. Charges for services	3,054,418	3,147,364	3,023,166	3,023,166	3,023,166	3,023,630
3. Other operating revenue	1,577	1,337	2,249	2,249	2,249	2,249
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	0	0	0	0
6. **Total Operating Revenues**	3,055,995	3,148,701	3,025,415	3,025,415	3,025,415	3,025,879
7. **Rate Increase**						
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	2,224,099	2,620,251	2,630,694	2,630,694	2,709,615	2,790,903
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	(139,031)	(143,201)	(147,497)
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	0	0	0	(240,000)	(247,200)	(254,616)
14. ADD: Additional O&M	0	0	0	0	0	0
15. **Operating Expenses Before Depreciation**	2,224,099	2,620,251	2,630,694	2,251,664	2,319,213	2,388,790
16. Depreciation (2)	246,236	243,460	243,460	240,816	227,764	231,047
17. **Total Operating Expenses**	2,470,335	2,863,711	2,874,154	2,492,479	2,546,978	2,619,837
18. **Operating Income**	585,660	284,990	151,261	532,936	478,437	406,042
19. Revenues (3)	3,055,995	3,148,701	3,025,415	3,025,415	3,025,415	3,025,879
20. EBITDA (4)	831,896	528,450	394,721	773,752	706,202	637,089
21. EBIT (5)	585,660	284,990	151,261	532,936	478,437	406,042
22. EBIT	585,660	284,990	151,261	532,936	478,437	406,042
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	585,660	284,990	151,261	532,936	478,437	406,042
25. (+) Depreciation & Amortization	246,236	243,460	243,460	240,816	227,764	231,047
26. (-) Capital Expenditures (6)	5,945	2,811	87,357	222,858	221,893	225,090
27. (-) Changes in Working Capital (7)	6,418	6,612	6,353	6,353	6,353	6,354
28. Debt Free Net Cash Flow	$819,533	$519,027	$301,011	$544,540	$477,955	$405,645
29. PV Time Period (mid-year)				(0.5)	0.5	1.5
					1	2
30. Present Value Factor: 2.85% (8)					0.9860	0.9587
31. Present Value Debt Free Net Cash Flow					$471,264	$388,892
					1	2
32. Present Value Factor: 2.75% (9)					0.9865	0.9601
33. Present Value Debt Free Net Cash Flow					$471,503	$389,460

See last page of this EXHIBIT for notes and assumptions.

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
	2024	2025	2026	2027	2028	2029
1. **OPERATING REVENUES (1)**						
2. Charges for services	3,024,557	3,101,598	3,107,047	3,116,058	3,343,851	3,353,548
3. Other operating revenue	2,249	2,249	2,249	2,249	2,249	2,249
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	75,614	0	0	218,124	0	0
6. **Total Operating Revenues**	3,102,420	3,103,847	3,109,296	3,336,431	3,346,100	3,355,797
7. **Rate Increase**	**3%**			**7%**		
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	2,874,630	2,960,869	3,049,695	3,141,186	3,235,422	3,332,484
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(151,922)	(156,480)	(161,174)	(166,010)	(170,990)	(176,120)
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(262,254)	(270,122)	(278,226)	(286,573)	(295,170)	(304,025)
14. ADD: Additional O&M	0	0	0	0	0	0
15. **Operating Expenses Before Depreciation**	2,460,454	2,534,267	2,610,295	2,688,604	2,769,262	2,852,340
16. Depreciation (2)	234,376	237,754	241,180	244,656	248,181	251,758
17. **Total Operating Expenses**	2,694,830	2,772,022	2,851,475	2,933,260	3,017,443	3,104,098
18. **Operating Income**	407,590	331,825	257,821	403,171	328,657	251,699
19. Revenues (3)	3,102,420	3,103,847	3,109,296	3,336,431	3,346,100	3,355,797
20. EBITDA (4)	641,966	569,580	499,001	647,827	576,838	503,457
21. EBIT (5)	407,590	331,825	257,821	403,171	328,657	251,699
22. EBIT	407,590	331,825	257,821	403,171	328,657	251,699
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	407,590	331,825	257,821	403,171	328,657	251,699
25. (+) Depreciation & Amortization	234,376	237,754	241,180	244,656	248,181	251,758
26. (-) Capital Expenditures (6)	228,334	231,624	234,962	238,348	241,783	245,267
27. (-) Changes in Working Capital (7)	6,515	6,518	6,530	7,007	7,027	7,047
28. Debt Free Net Cash Flow	$407,117	$331,438	$257,509	$402,473	$328,028	$251,143
29. PV Time Period (mid-year)	2.5	3.5	4.5	5.5	6.5	7.5
	3	4	5	6	7	8
30. Present Value Factor: 2.85% (8)	0.9322	0.9063	0.8812	0.8568	0.8331	0.8100
31. Present Value Debt Free Net Cash Flow	$379,515	$300,382	$226,917	$344,838	$273,280	$203,426
	3	4	5	6	7	8
32. Present Value Factor: 2.75% (9)	0.9344	0.9094	0.8851	0.8614	0.8383	0.8159
33. Present Value Debt Free Net Cash Flow	$380,411	$301,410	$227,922	$346,690	$274,986	$204,907

See last page of this EXHIBIT for notes and assumptions.

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 9	Estimated Year 10	Estimated Year 11	Estimated Year 12	Estimated Year 13	Estimated Year 14
	2030	2031	2032	2033	2034	2035
1. **OPERATING REVENUES (1)**						
2. Charges for services	3,363,273	3,592,273	3,602,691	3,613,139	3,804,798	3,815,832
3. Other operating revenue	2,249	2,249	2,249	2,249	2,249	2,249
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	218,613	0	0	180,657	0	164,081
6. **Total Operating Revenues**	3,584,135	3,594,522	3,604,940	3,796,045	3,807,047	3,982,162
7. **Rate Increase**	**7%**			**5%**		**4%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	3,432,459	3,535,433	3,641,496	3,750,741	3,863,263	3,979,161
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(181,403)	(186,845)	(192,451)	(198,224)	(204,171)	(210,296)
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(313,146)	(322,540)	(332,216)	(342,183)	(352,448)	(363,022)
14. ADD: Additional O&M	0	0	0	0	0	0
15. **Operating Expenses Before Depreciation**	2,937,910	3,026,047	3,116,829	3,210,334	3,306,644	3,405,843
16. Depreciation (2)	255,386	259,066	262,800	266,587	270,429	274,326
17. **Total Operating Expenses**	3,193,296	3,285,114	3,379,629	3,476,921	3,577,073	3,680,169
18. **Operating Income**	390,839	309,408	225,311	319,124	229,974	301,993
19. Revenues (3)	3,584,135	3,594,522	3,604,940	3,796,045	3,807,047	3,982,162
20. EBITDA (4)	646,225	568,475	488,111	585,711	500,403	576,319
21. EBIT (5)	390,839	309,408	225,311	319,124	229,974	301,993
22. EBIT	390,839	309,408	225,311	319,124	229,974	301,993
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	390,839	309,408	225,311	319,124	229,974	301,993
25. (+) Depreciation & Amortization	255,386	259,066	262,800	266,587	270,429	274,326
26. (-) Capital Expenditures (6)	248,802	252,387	256,025	259,714	263,457	267,254
27. (-) Changes in Working Capital (7)	7,527	7,548	7,570	7,972	7,995	8,363
28. Debt Free Net Cash Flow	$389,896	$308,539	$224,516	$318,026	$228,951	$300,702
29. PV Time Period (mid-year)	8.5	9.5	10.5	11.5	12.5	13.5
	9	10	11	12	13	14
30. Present Value Factor: 2.85% (8)	0.7875	0.7657	0.7445	0.7239	0.7038	0.6843
31. Present Value Debt Free Net Cash Flow	$307,043	$236,248	$167,152	$230,219	$161,136	$205,771
	9	10	11	12	13	14
32. Present Value Factor: 2.75% (9)	0.7941	0.7728	0.7521	0.7320	0.7124	0.6933
33. Present Value Debt Free Net Cash Flow	$309,617	$238,439	$168,858	$232,795	$163,105	$208,477

See last page of this EXHIBIT for notes and assumptions.

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 15	Estimated Year 16	Estimated Year 17	Estimated Year 18	Estimated Year 19	Estimated Year 20
	2036	2037	2038	2039	2040	2041
1. **OPERATING REVENUES (1)**						
2. Charges for services	3,991,454	4,003,029	4,151,136	4,163,174	4,338,082	4,350,662
3. Other operating revenue	2,249	2,249	2,249	2,249	2,249	2,249
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	136,103	0	162,364	0	160,975
6. **Total Operating Revenues**	3,993,703	4,141,381	4,153,385	4,327,787	4,340,331	4,513,886
7. **Rate Increase**		**3%**		**4%**		**4%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	4,098,536	4,221,492	4,348,136	4,478,580	4,612,938	4,751,326
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(216,605)	(223,103)	(229,796)	(236,690)	(243,791)	(251,105)
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(373,912)	(385,130)	(396,683)	(408,584)	(420,841)	(433,467)
14. ADD: Additional O&M	0	0	0	0	0	0
15. **Operating Expenses Before Depreciation**	3,508,018	3,613,259	3,721,657	3,833,306	3,948,306	4,066,755
16. Depreciation (2)	278,279	282,290	286,357	290,484	294,670	298,917
17. **Total Operating Expenses**	3,786,297	3,895,548	4,008,014	4,123,791	4,242,976	4,365,672
18. **Operating Income**	207,406	245,833	145,371	203,996	97,355	148,214
19. Revenues (3)	3,993,703	4,141,381	4,153,385	4,327,787	4,340,331	4,513,886
20. EBITDA (4)	485,685	528,122	431,728	494,481	392,025	447,131
21. EBIT (5)	207,406	245,833	145,371	203,996	97,355	148,214
22. EBIT	207,406	245,833	145,371	203,996	97,355	148,214
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	207,406	245,833	145,371	203,996	97,355	148,214
25. (+) Depreciation & Amortization	278,279	282,290	286,357	290,484	294,670	298,917
26. (-) Capital Expenditures (6)	271,105	275,012	278,975	282,995	287,073	291,210
27. (-) Changes in Working Capital (7)	8,387	8,697	8,722	9,088	9,115	9,479
28. Debt Free Net Cash Flow	$206,193	$244,413	$144,031	$202,397	$95,838	$146,442
29. PV Time Period (mid-year)	14.5	15.5	16.5	17.5	18.5	19.5
	15	16	17	18	19	20
30. Present Value Factor: 2.85% (8)	0.6653	0.6469	0.6290	0.6115	0.5946	0.5781
31. Present Value Debt Free Net Cash Flow	$137,180	$158,111	$90,596	$123,766	$56,985	$84,658
	15	16	17	18	19	20
32. Present Value Factor: 2.75% (9)	0.6748	0.6567	0.6391	0.6220	0.6054	0.5892
33. Present Value Debt Free Net Cash Flow	$139,139	$160,506	$92,050	$125,891	$58,020	$86,284

See last page of this EXHIBIT for notes and assumptions.

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City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

DCF With Capitalization of Terminal Value Model @ 2.85%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$146,442
Divided by Capitalization Factor (8)	2.85%
20th Year Terminal Value	5,138,319
20th Year Present Value Factor (11)	0.5781
Present Value of Terminal Value	2,970,462
Present Value Debt Free Net Cash Flow for 20 Years	4,547,379
Indicated Value	$7,517,841

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 2.85%		Multiples (13)	Terminal Value
Projected EBIT	$148,214	30.1	$4,461,256
Projected EBITDA	447,131	20.3	9,076,764
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			7,553,647
20th Year Present Value Factor (11)			0.5781
Present Value of Terminal Value			4,366,763
Present Value Debt Free Net Cash Flow for 20 Years			4,547,379
Indicated Value			$8,914,142

DCF With Capitalization of Terminal Value Model @ 2.75%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$146,442
Divided by Capitalization Factor (9)	2.75%
20th Year Terminal Value	5,325,167
20th Year Present Value Factor (12)	0.5781
Present Value of Terminal Value	3,078,479
Present Value Debt Free Net Cash Flow for 20 Years	4,547,379
Indicated Value	$7,625,858

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 2.75%		Multiples (13)	Terminal Value
Projected EBIT	$148,214	30.1	$4,461,256
Projected EBITDA	447,131	20.3	9,076,764
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			7,553,647
20th Year Present Value Factor (12)			0.5781
Present Value of Terminal Value			4,366,763
Present Value Debt Free Net Cash Flow for 20 Years			4,547,379
Indicated Value			$8,914,142

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Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

Notes: (1) Assumptions:

Charges for services - Pre-2021 are actual. 2021 results are based on 2020 actual. Post-2021 based on customer growth (EDU) and average revenue per customer. Rate increases (Other rate increase line item) are added year after they occur.

Other (Rate Increase) - Assumed purchase by MUNI at end of 2021 with shown rate increases.

OPERATING EXPENSES - increase at 3.0% annually after 2021 unless noted elsewhere. Assumed economies of scale are shown on lines below.
Wages & Benefits - Post-2020 assumed 15% savings due to economies of scale. Increase at 3.0% afterwards.

Eliminated Expenses - Post-2020 assumed 100% savings due to economies of scale (elimination of line rentals). Increase at 3.0% afterwards.

No Additional O&M.

(2) Depreciation - Pre-2021 based on actual depreciation. Post-2021 based on depreciation rate plus same rate on half of CAPX.
(3) Line 6.
(4) Line 18 + line 16.
(5) Line 18.
(6) Capital Expenditures - Pre-2021 based on financials/budget. Post-2021 years are estimates at 1.70% of prior year-end GROSS Property, plant and equipment.
(7) Changes in Working Capital - based on water industry 0.21% of revenues.
(8) Discount rate is the the current MUNI discount rate. Capitalization rate (K) at 12/31/2021 equal to discount rate, where capitalization rate = K - g.
(9) Discount rate is the current MUNI discount rate. Capitalization rate (K) at 12/31/2021 adjusted for stated growth (g) where capitalization rate = K - g.
(10) Final year shown, line 28.
(11) Final year shown, line 30.
(12) Final year shown, line 30.
(13) Developed on Market Multiples EXHIBIT 17.

Terms:

CAPX - Capital Expenditures
CIP - Capital improvement plan
Dep - Depreciation expense
GROSS PPE - GROSS Property, plant and equipment
IOU - Investor owned utility
MUNI - Large regional municipally owned utility
NET PPE - NET Property, plant and equipment

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Actual			Estimated	Estimated	Estimated
				Year 0	Year 1	Year 2
	2018	2019	2020	2021	2022	2023
1. **OPERATING REVENUES (1)**						
2. Charges for services	3,054,418	3,147,364	3,023,166	3,023,166	3,023,166	3,023,630
3. Other operating revenue	1,577	1,337	2,249	2,249	2,249	2,249
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	0	0	0	250,961
6. **Total Operating Revenues**	3,055,995	3,148,701	3,025,415	3,025,415	3,025,415	3,276,840
7. **Rate Increase**						**8%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	2,224,099	2,620,251	2,630,694	2,630,694	2,709,615	2,790,903
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	(139,031)	(143,201)	(147,497)
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	0	0	0	(240,000)	(247,200)	(254,616)
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: PURTA & Reg Assessment	0	0	0	0	28,431	28,423
16. **Operating Expenses Before Depreciation**	2,224,099	2,620,251	2,630,694	2,251,664	2,347,644	2,417,213
17. Depreciation (2)	246,236	243,460	243,460	240,816	227,764	231,047
18. **Total Operating Expenses**	2,470,335	2,863,711	2,874,154	2,492,479	2,575,409	2,648,260
19. **Operating Income**	585,660	284,990	151,261	532,936	450,006	628,580
20. Revenues (3)	3,055,995	3,148,701	3,025,415	3,025,415	3,025,415	3,276,840
21. EBITDA (4)	831,896	528,450	394,721	773,752	677,771	859,627
22. EBIT (5)	585,660	284,990	151,261	532,936	450,006	628,580
23. EBIT	585,660	284,990	151,261	532,936	450,006	628,580
24. (-) Income Taxes	0	0	0	153,965	130,007	181,597
25. Debt Free Net Income	585,660	284,990	151,261	378,971	319,999	446,983
26. (+) Depreciation & Amortization	246,236	243,460	243,460	240,816	227,764	231,047
27. (-) Capital Expenditures (6)	5,945	2,811	87,357	222,858	221,893	225,090
28. (-) Changes in Working Capital (7)	6,418	6,612	6,353	6,353	6,353	6,881
29. Debt Free Net Cash Flow	$819,533	$519,027	$301,011	$390,575	$319,517	$446,059
30. PV Time Period (mid-year)				(0.5)	0.5	1.5
31. Present Value Factor: 6.59% (8)					0.9686	0.9087
32. Present Value Debt Free Net Cash Flow					$309,484	$405,334
					1	2
33. Present Value Factor: 8.50% (9)					0.9600	0.8848
34. Present Value Debt Free Net Cash Flow					$306,737	$394,673
					1	2
35. Present Value Factor: 6.49% (8)					0.9690	0.9100
36. Present Value Debt Free Net Cash Flow					$309,612	$405,914
					1	2
37. Present Value Factor: 8.40% (9)					0.9605	0.8860
38. Present Value Debt Free Net Cash Flow					$306,896	$395,208

See last page of this EXHIBIT for notes and assumptions.

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 3	Estimated Year 4	Estimated Year 5	Estimated Year 6	Estimated Year 7	Estimated Year 8
	2024	2025	2026	2027	2028	2029
1. **OPERATING REVENUES (1)**						
2. Charges for services	3,275,596	3,277,103	3,282,861	3,522,848	3,533,064	3,543,310
3. Other operating revenue	2,249	2,249	2,249	2,249	2,249	2,249
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	229,800	0	0	212,599
6. **Total Operating Revenues**	3,277,845	3,279,352	3,514,910	3,525,097	3,535,313	3,758,158
7. **Rate Increase**			**7%**			**6%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	2,874,630	2,960,869	3,049,695	3,141,186	3,235,422	3,332,484
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(151,922)	(156,480)	(161,174)	(166,010)	(170,990)	(176,120)
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(262,254)	(270,122)	(278,226)	(286,573)	(295,170)	(304,025)
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: PURTA & Reg Assessment	29,845	29,842	29,842	31,173	31,222	31,271
16. **Operating Expenses Before Depreciation**	2,490,299	2,564,109	2,640,137	2,719,777	2,800,484	2,883,611
17. Depreciation (2)	234,376	237,754	241,180	244,656	248,181	251,758
18. **Total Operating Expenses**	2,724,675	2,801,864	2,881,317	2,964,433	3,048,665	3,135,369
19. **Operating Income**	553,170	477,488	633,593	560,664	486,648	622,789
20. Revenues (3)	3,277,845	3,279,352	3,514,910	3,525,097	3,535,313	3,758,158
21. EBITDA (4)	787,546	715,243	874,773	805,320	734,829	874,547
22. EBIT (5)	553,170	477,488	633,593	560,664	486,648	622,789
23. EBIT	553,170	477,488	633,593	560,664	486,648	622,789
24. (-) Income Taxes	159,811	137,946	183,045	161,976	140,593	179,924
25. Debt Free Net Income	393,359	339,542	450,548	398,688	346,055	442,865
26. (+) Depreciation & Amortization	234,376	237,754	241,180	244,656	248,181	251,758
27. (-) Capital Expenditures (6)	228,334	231,624	234,962	238,348	241,783	245,267
28. (-) Changes in Working Capital (7)	6,883	6,887	7,381	7,403	7,424	7,892
29. Debt Free Net Cash Flow	$392,518	$338,786	$449,385	$397,593	$345,029	$441,464
30. PV Time Period (mid-year)	2.5	3.5	4.5	5.5	6.5	7.5
31. Present Value Factor: 6.59% (8)	0.8525	0.7998	0.7504	0.7040	0.6605	0.6196
32. Present Value Debt Free Net Cash Flow	$334,622	$270,961	$337,218	$279,906	$227,891	$273,531
	3	4	5	6	7	8
33. Present Value Factor: 8.50% (9)	0.8155	0.7516	0.6927	0.6385	0.5884	0.5423
34. Present Value Debt Free Net Cash Flow	$320,098	$254,632	$311,289	$253,863	$203,015	$239,406
	3	4	5	6	7	8
35. Present Value Factor: 6.49% (8)	0.8545	0.8025	0.7535	0.7076	0.6645	0.6240
36. Present Value Debt Free Net Cash Flow	$335,407	$271,876	$338,611	$281,337	$229,272	$275,473
	3	4	5	6	7	8
37. Present Value Factor: 8.40% (9)	0.8174	0.7540	0.6956	0.6417	0.5920	0.5461
38. Present Value Debt Free Net Cash Flow	$320,844	$255,445	$312,592	$255,136	$204,257	$241,083

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Income Approach
City of Beaver Falls Wastewater System Assets
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DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 9	Estimated Year 10	Estimated Year 11	Estimated Year 12	Estimated Year 13	Estimated Year 14
	2030	2031	2032	2033	2034	2035
1. **OPERATING REVENUES (1)**						
2. Charges for services	3,766,800	3,777,724	3,788,679	4,042,845	4,054,570	4,066,328
3. Other operating revenue	2,249	2,249	2,249	2,249	2,249	2,249
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	242,475	0	0	243,980
6. **Total Operating Revenues**	3,769,049	3,779,973	4,033,403	4,045,094	4,056,819	4,312,557
7. **Rate Increase**			**6%**			**6%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	3,432,459	3,535,433	3,641,496	3,750,741	3,863,263	3,979,161
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(181,403)	(186,845)	(192,451)	(198,224)	(204,171)	(210,296)
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(313,146)	(322,540)	(332,216)	(342,183)	(352,448)	(363,022)
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: PURTA & Reg Assessment	32,530	32,582	32,635	34,067	34,124	34,180
16. **Operating Expenses Before Depreciation**	2,970,440	3,058,629	3,149,464	3,244,401	3,340,768	3,440,023
17. Depreciation (2)	255,386	259,066	262,800	266,587	270,429	274,326
18. **Total Operating Expenses**	3,225,826	3,317,696	3,412,264	3,510,988	3,611,197	3,714,349
19. **Operating Income**	543,223	462,277	621,139	534,106	445,622	598,208
20. Revenues (3)	3,769,049	3,779,973	4,033,403	4,045,094	4,056,819	4,312,557
21. EBITDA (4)	798,609	721,344	883,939	800,693	716,051	872,534
22. EBIT (5)	543,223	462,277	621,139	534,106	445,622	598,208
23. EBIT	543,223	462,277	621,139	534,106	445,622	598,208
24. (-) Income Taxes	156,937	133,552	179,447	154,303	128,740	172,822
25. Debt Free Net Income	386,286	328,725	441,692	379,803	316,882	425,386
26. (+) Depreciation & Amortization	255,386	259,066	262,800	266,587	270,429	274,326
27. (-) Capital Expenditures (6)	248,802	252,387	256,025	259,714	263,457	267,254
28. (-) Changes in Working Capital (7)	7,915	7,938	8,470	8,495	8,519	9,056
29. Debt Free Net Cash Flow	$384,955	$327,467	$439,997	$378,182	$315,335	$423,402
30. PV Time Period (mid-year)	8.5	9.5	10.5	11.5	12.5	13.5
31. Present Value Factor: 6.59% (8)	0.5813	0.5454	0.5117	0.4800	0.4503	0.4225
32. Present Value Debt Free Net Cash Flow	$223,774	$178,600	$225,146	$181,527	$141,995	$178,887
	9	10	11	12	13	14
33. Present Value Factor: 8.50% (9)	0.4999	0.4607	0.4246	0.3913	0.3607	0.3324
34. Present Value Debt Free Net Cash Flow	$192,439	$150,864	$186,823	$147,982	$113,741	$140,739
	9	10	11	12	13	14
35. Present Value Factor: 6.49% (8)	0.5860	0.5503	0.5167	0.4852	0.4557	0.4279
36. Present Value Debt Free Net Cash Flow	$225,584	$180,205	$227,346	$183,494	$143,698	$181,174
	9	10	11	12	13	14
37. Present Value Factor: 8.40% (9)	0.5038	0.4648	0.4287	0.3955	0.3649	0.3366
38. Present Value Debt Free Net Cash Flow	$193,940	$152,206	$188,627	$149,571	$115,066	$142,517

See last page of this EXHIBIT for notes and assumptions.

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 15	Estimated Year 16	Estimated Year 17	Estimated Year 18	Estimated Year 19	Estimated Year 20
	2036	2037	2038	2039	2040	2041
1. **OPERATING REVENUES (1)**						
2. Charges for services	4,322,807	4,335,344	4,500,093	4,513,143	4,707,281	4,720,932
3. Other operating revenue	2,249	2,249	2,249	2,249	2,249	2,249
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	151,737	0	180,526	0	195,919
6. **Total Operating Revenues**	4,325,056	4,489,330	4,502,342	4,695,918	4,709,530	4,919,100
7. **Rate Increase**		**3%**		**4%**		**4%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	4,098,536	4,221,492	4,348,136	4,478,580	4,612,938	4,751,326
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(216,605)	(223,103)	(229,796)	(236,690)	(243,791)	(251,105)
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(373,912)	(385,130)	(396,683)	(408,584)	(420,841)	(433,467)
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: PURTA & Reg Assessment	35,625	35,687	36,610	36,674	37,765	37,831
16. **Operating Expenses Before Depreciation**	3,543,643	3,648,946	3,758,267	3,869,980	3,986,071	4,104,586
17. Depreciation (2)	278,279	282,290	286,357	290,484	294,670	298,917
18. **Total Operating Expenses**	3,821,922	3,931,235	4,044,624	4,160,465	4,280,741	4,403,503
19. **Operating Income**	503,134	558,095	457,718	535,453	428,789	515,597
20. Revenues (3)	4,325,056	4,489,330	4,502,342	4,695,918	4,709,530	4,919,100
21. EBITDA (4)	781,413	840,384	744,075	825,938	723,459	814,514
22. EBIT (5)	503,134	558,095	457,718	535,453	428,789	515,597
23. EBIT	503,134	558,095	457,718	535,453	428,789	515,597
24. (-) Income Taxes	145,355	161,234	132,235	154,692	123,877	148,956
25. Debt Free Net Income	357,779	396,861	325,483	380,761	304,912	366,641
26. (+) Depreciation & Amortization	278,279	282,290	286,357	290,484	294,670	298,917
27. (-) Capital Expenditures (6)	271,105	275,012	278,975	282,995	287,073	291,210
28. (-) Changes in Working Capital (7)	9,083	9,428	9,455	9,861	9,890	10,330
29. Debt Free Net Cash Flow	$355,870	$394,710	$323,410	$378,389	$302,619	$364,018
30. PV Time Period (mid-year)	14.5	15.5	16.5	17.5	18.5	19.5
31. Present Value Factor: 6.59% (8)	0.3964	0.3719	0.3489	0.3273	0.3071	0.2881
32. Present Value Debt Free Net Cash Flow	$141,067	$146,793	$112,838	$123,847	$92,934	$104,874
	15	16	17	18	19	20
33. Present Value Factor: 8.50% (9)	0.3064	0.2824	0.2603	0.2399	0.2211	0.2038
34. Present Value Debt Free Net Cash Flow	$109,039	$111,466	$84,184	$90,776	$66,909	$74,187
	15	16	17	18	19	20
35. Present Value Factor: 6.49% (8)	0.4018	0.3773	0.3543	0.3327	0.3125	0.2934
36. Present Value Debt Free Net Cash Flow	$142,989	$148,924	$114,584	$125,890	$94,569	$106,803
	15	16	17	18	19	20
37. Present Value Factor: 8.40% (9)	0.3105	0.2864	0.2643	0.2438	0.2249	0.2075
38. Present Value Debt Free Net Cash Flow	$110,498	$113,045	$85,477	$92,251	$68,059	$75,534

See last page of this EXHIBIT for notes and assumptions.

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Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
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DCF With Capitalization of Terminal Value Model @ 6.59%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$364,018
Divided by Capitalization Factor (8)	6.59%
20th Year Terminal Value	5,523,796
20th Year Present Value Factor (11)	0.2881
Present Value of Terminal Value	1,591,406
Present Value Debt Free Net Cash Flow for 20 Years	4,291,230
Indicated Value	$5,882,636

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 6.59%		Multiples (13)	Terminal Value
Projected EBIT	$515,597	30.1	$15,519,484
Projected EBITDA	814,514	20.3	16,534,639
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			16,199,638
20th Year Present Value Factor (11)			0.2881
Present Value of Terminal Value			4,667,116
Present Value Debt Free Net Cash Flow for 20 Years			4,291,230
Indicated Value			$8,958,346

DCF With Capitalization of Terminal Value Model @ 8.50%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$364,018
Divided by Capitalization Factor (9)	8.50%
20th Year Terminal Value	4,282,566
20th Year Present Value Factor (12)	0.2038
Present Value of Terminal Value	872,787
Present Value Debt Free Net Cash Flow for 20 Years	3,752,860
Indicated Value	$4,625,648

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 8.50%		Multiples (13)	Terminal Value
Projected EBIT	$515,597	30.1	$15,519,484
Projected EBITDA	814,514	20.3	16,534,639
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			16,199,638
20th Year Present Value Factor (12)			0.2038
Present Value of Terminal Value			3,301,486
Present Value Debt Free Net Cash Flow for 20 Years			3,752,860
Indicated Value			$7,054,347

DCF With Capitalization of Terminal Value Model @ 6.49%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$364,018
Divided by Capitalization Factor (8)	6.49%
20th Year Terminal Value	5,608,908
20th Year Present Value Factor (11)	0.2881
Present Value of Terminal Value	1,615,926
Present Value Debt Free Net Cash Flow for 20 Years	4,291,230
Indicated Value	$5,907,157

DCF With Capitalization of Terminal Value Model @ 8.40%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$364,018
Divided by Capitalization Factor (9)	8.40%
20th Year Terminal Value	4,333,549
20th Year Present Value Factor (12)	0.2038
Present Value of Terminal Value	883,177
Present Value Debt Free Net Cash Flow for 20 Years	3,752,860
Indicated Value	$4,636,038

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DCF With Capitalization of Terminal Value Model and
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Notes: (1) Assumptions:

Charges for services - Pre-2021 are actual. 2021 results are based on 2020 actual. Post-2021 based on customer growth (EDU) and average revenue per customer. Rate increases (Other rate increase line item) are added year after they occur.

Other (Rate Increase) - Assumed purchase by IOU at end of 2021 with shown rate increases.

OPERATING EXPENSES - increase at 3.0% annually after 2021 unless noted elsewhere. Assumed economies of scale are shown on lines below.
Wages & Benefits - Post-2020 assumed 15% savings due to economies of scale. Increase at 3.0% afterwards.

Eliminated Expenses - Post-2020 assumed 100% savings due to economies of scale (elimination of line rentals). Increase at 3.0% afterwards.

No Additional O&M.

PURTA & Reg Assessment - 2022 assumed due to IOU purchase at the end of 2022

(2) Depreciation - Pre-2021 based on actual depreciation. Post-2021 based on depreciation rate plus same rate on half of CAPX.

(3) Line 6.

(4) Line 19 + line 17.

(5) Line 19.

(6) Capital Expenditures - Pre-2021 based on financials/budget. Post-2021 years are estimates at 1.70% of prior year-end GROSS Property, plant and equipment.

(7) Changes in Working Capital - based on water industry 0.21% of revenues.

(8) Discount rate is the current lower end of the IOU discount rate. Capitalization rate (K) at 12/31/2021 adjusted for stated growth (g) where capitalization rate = K - g.

(9) Discount rate is the current upper end of the IOU discount rate. Capitalization rate (K) at 12/31/2021 adjusted for stated growth (g) where capitalization rate = K - g.

(10) Final year shown, line 29.

(11) Final year shown, line 31.

(12) Final year shown, line 33.

(13) Developed on Market Multiples EXHIBIT 17.

Terms:

CAPX - Capital Expenditures
CIP - Capital improvement plan
Dep - Depreciation expense
GROSS PPE - GROSS Property, plant and equipment
IOU - Investor owned utility
MUNI - Large regional municipally owned utility
NET PPE - NET Property, plant and equipment

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DCF With Capitalization of Terminal Value Model and
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	Actual			Estimated Year 0	Estimated Year 1	Estimated Year 2
	2018	2019	2020	2021	2022	2023
1. **OPERATING REVENUES (1)**						
2. Charges for services	3,054,418	3,147,364	3,023,166	3,023,166	3,023,166	3,023,630
3. Other operating revenue	1,577	1,337	2,249	2,249	2,249	2,249
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	0	0	0	1,511,815
6. **Total Operating Revenues**	3,055,995	3,148,701	3,025,415	3,025,415	3,025,415	4,537,694
7. **Rate Increase**						**50%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	2,224,099	2,620,251	2,630,694	2,630,694	2,709,615	2,790,903
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	(139,031)	(143,201)	(147,497)
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	0	0	0	(240,000)	(247,200)	(254,616)
14. ADD: Additional O&M	0	0	0	0	0	0
15. **Operating Expenses Before Depreciation**	2,224,099	2,620,251	2,630,694	2,251,664	2,319,213	2,388,790
16. Depreciation (2)	246,236	243,460	243,460	240,690	744,864	754,605
17. **Total Operating Expenses**	2,470,335	2,863,711	2,874,154	2,492,354	3,064,078	3,143,395
18. **Operating Income**	585,660	284,990	151,261	533,061	(38,663)	1,394,299
19. Revenues (3)	3,055,995	3,148,701	3,025,415	3,025,415	3,025,415	4,537,694
20. EBITDA (4)	831,896	528,450	394,721	773,752	706,202	2,148,904
21. EBIT (5)	585,660	284,990	151,261	533,061	(38,663)	1,394,299
22. EBIT	585,660	284,990	151,261	533,061	(38,663)	1,394,299
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	585,660	284,990	151,261	533,061	(38,663)	1,394,299
25. (+) Depreciation & Amortization	246,236	243,460	243,460	240,690	744,864	754,605
26. (-) Capital Expenditures (6)	5,945	2,811	87,357	222,858	726,057	735,552
27. (-) Changes in Working Capital (7)	6,418	6,612	6,353	6,353	6,353	9,529
28. Debt Free Net Cash Flow	$819,533	$519,027	$301,011	$544,540	($26,209)	$1,403,823
29. PV Time Period (mid-year)				(0.5)	0.5	1.5
					1	2
30. Present Value Factor: 2.85% (8)					0.9860	0.9587
31. Present Value Debt Free Net Cash Flow					($25,842)	$1,345,845
					1	2
32. Present Value Factor: 2.75% (9)					0.9865	0.9601
33. Present Value Debt Free Net Cash Flow					($25,855)	$1,347,810

See last page of this EXHIBIT for notes and assumptions.

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
	2024	2025	2026	2027	2028	2029
1. **OPERATING REVENUES (1)**						
2. Charges for services	4,536,836	4,538,923	4,546,898	4,924,891	4,939,173	4,953,497
3. Other operating revenue	2,249	2,249	2,249	2,249	2,249	2,249
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	363,752	0	0	222,907
6. **Total Operating Revenues**	4,539,085	4,541,172	4,912,899	4,927,140	4,941,422	5,178,653
7. **Rate Increase**			**8%**			**4%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	2,874,630	2,960,869	3,049,695	3,141,186	3,235,422	3,332,484
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(151,922)	(156,480)	(161,174)	(166,010)	(170,990)	(176,120)
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(262,254)	(270,122)	(278,226)	(286,573)	(295,170)	(304,025)
14. ADD: Additional O&M	0	0	0	0	0	0
15. **Operating Expenses Before Depreciation**	2,460,454	2,534,267	2,610,295	2,688,604	2,769,262	2,852,340
16. Depreciation (2)	764,474	774,472	784,601	794,861	805,257	815,788
17. **Total Operating Expenses**	3,224,928	3,308,739	3,394,896	3,483,465	3,574,519	3,668,128
18. **Operating Income**	1,314,157	1,232,433	1,518,003	1,443,675	1,366,903	1,510,525
19. Revenues (3)	4,539,085	4,541,172	4,912,899	4,927,140	4,941,422	5,178,653
20. EBITDA (4)	2,078,631	2,006,905	2,302,604	2,238,536	2,172,160	2,326,313
21. EBIT (5)	1,314,157	1,232,433	1,518,003	1,443,675	1,366,903	1,510,525
22. EBIT	1,314,157	1,232,433	1,518,003	1,443,675	1,366,903	1,510,525
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	1,314,157	1,232,433	1,518,003	1,443,675	1,366,903	1,510,525
25. (+) Depreciation & Amortization	764,474	774,472	784,601	794,861	805,257	815,788
26. (-) Capital Expenditures (6)	745,172	754,917	764,790	774,792	784,925	795,190
27. (-) Changes in Working Capital (7)	9,532	9,536	10,317	10,347	10,377	10,875
28. Debt Free Net Cash Flow	$1,323,927	$1,242,451	$1,527,497	$1,453,397	$1,376,858	$1,520,248
29. PV Time Period (mid-year)	2.5	3.5	4.5	5.5	6.5	7.5
	3	4	5	6	7	8
30. Present Value Factor: 2.85% (8)	0.9322	0.9063	0.8812	0.8568	0.8331	0.8100
31. Present Value Debt Free Net Cash Flow	$1,234,165	$1,126,034	$1,346,030	$1,245,271	$1,147,060	$1,231,401
	3	4	5	6	7	8
32. Present Value Factor: 2.75% (9)	0.9344	0.9094	0.8851	0.8614	0.8383	0.8159
33. Present Value Debt Free Net Cash Flow	$1,237,078	$1,129,885	$1,351,987	$1,251,956	$1,154,220	$1,240,370

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City of Beaver Falls Wastewater System Assets
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DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 9	Estimated Year 10	Estimated Year 11	Estimated Year 12	Estimated Year 13	Estimated Year 14
	2030	2031	2032	2033	2034	2035
1. **OPERATING REVENUES (1)**						
2. Charges for services	5,191,416	5,206,471	5,221,570	5,472,364	5,488,234	5,504,150
3. Other operating revenue	2,249	2,249	2,249	2,249	2,249	2,249
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	234,971	0	0	236,678
6. **Total Operating Revenues**	5,193,665	5,208,720	5,458,790	5,474,613	5,490,483	5,743,077
7. **Rate Increase**			**5%**			**4%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	3,432,459	3,535,433	3,641,496	3,750,741	3,863,263	3,979,161
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(181,403)	(186,845)	(192,451)	(198,224)	(204,171)	(210,296)
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(313,146)	(322,540)	(332,216)	(342,183)	(352,448)	(363,022)
14. ADD: Additional O&M	0	0	0	0	0	0
15. **Operating Expenses Before Depreciation**	2,937,910	3,026,047	3,116,829	3,210,334	3,306,644	3,405,843
16. Depreciation (2)	826,457	837,266	848,215	859,308	870,546	881,931
17. **Total Operating Expenses**	3,764,367	3,863,313	3,965,044	4,069,642	4,177,190	4,287,774
18. **Operating Income**	1,429,298	1,345,407	1,493,746	1,404,971	1,313,293	1,455,303
19. Revenues (3)	5,193,665	5,208,720	5,458,790	5,474,613	5,490,483	5,743,077
20. EBITDA (4)	2,255,755	2,182,673	2,341,961	2,264,279	2,183,839	2,337,234
21. EBIT (5)	1,429,298	1,345,407	1,493,746	1,404,971	1,313,293	1,455,303
22. EBIT	1,429,298	1,345,407	1,493,746	1,404,971	1,313,293	1,455,303
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	1,429,298	1,345,407	1,493,746	1,404,971	1,313,293	1,455,303
25. (+) Depreciation & Amortization	826,457	837,266	848,215	859,308	870,546	881,931
26. (-) Capital Expenditures (6)	805,590	816,125	826,799	837,612	848,566	859,664
27. (-) Changes in Working Capital (7)	10,907	10,938	11,463	11,497	11,530	12,060
28. Debt Free Net Cash Flow	$1,439,258	$1,355,609	$1,503,699	$1,415,171	$1,323,743	$1,465,509
29. PV Time Period (mid-year)	8.5	9.5	10.5	11.5	12.5	13.5
	9	10	11	12	13	14
30. Present Value Factor: 2.85% (8)	0.7875	0.7657	0.7445	0.7239	0.7038	0.6843
31. Present Value Debt Free Net Cash Flow	$1,133,416	$1,037,990	$1,119,504	$1,024,442	$931,650	$1,002,848
	9	10	11	12	13	14
32. Present Value Factor: 2.75% (9)	0.7941	0.7728	0.7521	0.7320	0.7124	0.6933
33. Present Value Debt Free Net Cash Flow	$1,142,915	$1,047,615	$1,130,932	$1,035,905	$943,035	$1,016,038

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	Estimated Year 15	Estimated Year 16	Estimated Year 17	Estimated Year 18	Estimated Year 19	Estimated Year 20
	2036	2037	2038	2039	2040	2041
1. **OPERATING REVENUES (1)**						
2. Charges for services	5,757,477	5,774,173	5,999,392	6,016,790	6,257,505	6,275,652
3. Other operating revenue	2,249	2,249	2,249	2,249	2,249	2,249
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	207,870	0	222,621	0	216,510
6. **Total Operating Revenues**	5,759,726	5,984,292	6,001,641	6,241,660	6,259,754	6,494,411
7. **Rate Increase**		**4%**		**4%**		**3%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	4,098,536	4,221,492	4,348,136	4,478,580	4,612,938	4,751,326
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(216,605)	(223,103)	(229,796)	(236,690)	(243,791)	(251,105)
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(373,912)	(385,130)	(396,683)	(408,584)	(420,841)	(433,467)
14. ADD: Additional O&M	0	0	0	0	0	0
15. **Operating Expenses Before Depreciation**	3,508,018	3,613,259	3,721,657	3,833,306	3,948,306	4,066,755
16. Depreciation (2)	893,466	905,150	916,988	928,980	941,129	953,438
17. **Total Operating Expenses**	4,401,484	4,518,409	4,638,645	4,762,286	4,889,435	5,020,193
18. **Operating Income**	1,358,242	1,465,883	1,362,996	1,479,374	1,370,319	1,474,218
19. Revenues (3)	5,759,726	5,984,292	6,001,641	6,241,660	6,259,754	6,494,411
20. EBITDA (4)	2,251,708	2,371,033	2,279,984	2,408,354	2,311,448	2,427,656
21. EBIT (5)	1,358,242	1,465,883	1,362,996	1,479,374	1,370,319	1,474,218
22. EBIT	1,358,242	1,465,883	1,362,996	1,479,374	1,370,319	1,474,218
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	1,358,242	1,465,883	1,362,996	1,479,374	1,370,319	1,474,218
25. (+) Depreciation & Amortization	893,466	905,150	916,988	928,980	941,129	953,438
26. (-) Capital Expenditures (6)	870,906	882,296	893,835	905,524	917,367	929,364
27. (-) Changes in Working Capital (7)	12,095	12,567	12,603	13,107	13,145	13,638
28. Debt Free Net Cash Flow	$1,368,706	$1,476,170	$1,373,546	$1,489,722	$1,380,936	$1,484,654
29. PV Time Period (mid-year)	14.5	15.5	16.5	17.5	18.5	19.5
	15	16	17	18	19	20
30. Present Value Factor: 2.85% (8)	0.6653	0.6469	0.6290	0.6115	0.5946	0.5781
31. Present Value Debt Free Net Cash Flow	$910,600	$954,934	$863,960	$910,965	$821,105	$858,278
	15	16	17	18	19	20
32. Present Value Factor: 2.75% (9)	0.6748	0.6567	0.6391	0.6220	0.6054	0.5892
33. Present Value Debt Free Net Cash Flow	$923,603	$969,401	$877,833	$926,607	$836,019	$874,758

See last page of this EXHIBIT for notes and assumptions.

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

DCF With Capitalization of Terminal Value Model @ 2.85%	
	Terminal Value
Projected Debt Free Net Cash Flow (10)	$1,484,654
Divided by Capitalization Factor (8)	2.85%
20th Year Terminal Value	52,093,123
20th Year Present Value Factor (11)	0.5781
Present Value of Terminal Value	30,115,034
Present Value Debt Free Net Cash Flow for 20 Years	20,219,657
Indicated Value	$50,334,691

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 2.85%			
		Multiples (13)	Terminal Value
Projected EBIT	$1,474,218	30.1	$44,373,958
Projected EBITDA	2,427,656	20.3	49,281,422
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			47,661,959
20th Year Present Value Factor (11)			0.5781
Present Value of Terminal Value			27,553,378
Present Value Debt Free Net Cash Flow for 20 Years			20,219,657
Indicated Value			$47,773,036

DCF With Capitalization of Terminal Value Model @ 2.75%	
	Terminal Value
Projected Debt Free Net Cash Flow (10)	$1,484,654
Divided by Capitalization Factor (9)	2.75%
20th Year Terminal Value	53,987,418
20th Year Present Value Factor (12)	0.5781
Present Value of Terminal Value	31,210,126
Present Value Debt Free Net Cash Flow for 20 Years	20,219,657
Indicated Value	$51,429,783

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 2.75%			
		Multiples (13)	Terminal Value
Projected EBIT	$1,474,218	30.1	$44,373,958
Projected EBITDA	2,427,656	20.3	49,281,422
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			47,661,959
20th Year Present Value Factor (12)			0.5781
Present Value of Terminal Value			27,553,378
Present Value Debt Free Net Cash Flow for 20 Years			20,219,657
Indicated Value			$47,773,036

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City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With MUNI Ownership
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Notes: (1) Assumptions:

Charges for services - Pre-2021 are actual. 2021 results are based on 2020 actual. Post-2021 based on customer growth (EDU) and average revenue per customer. Rate increases (Other rate increase line item) are added year after they occur.

Other (Rate Increase) - Assumed purchase by MUNI at end of 2021 with shown rate increases.

OPERATING EXPENSES - increase at 3.0% annually after 2021 unless noted elsewhere. Assumed economies of scale are shown on lines below.
Wages & Benefits - Post-2020 assumed 15% savings due to economies of scale. Increase at 3.0% afterwards.

Eliminated Expenses - Post-2020 assumed 100% savings due to economies of scale (elimination of line rentals). Increase at 3.0% afterwards.

No Additional O&M.

(2) Depreciation - Pre-2021 based on actual depreciation. Post-2021 based on depreciation rate plus same rate on half of CAPX.
(3) Line 6.
(4) Line 18 + line 16.
(5) Line 18.
(6) Capital Expenditures - Pre-2021 based on financials/budget. Post-2021 years are estimates at 1.54% of prior year-end GROSS Property, plant and equipment.
(7) Changes in Working Capital - based on water industry 0.21% of revenues.
(8) Discount rate is the the current MUNI discount rate. Capitalization rate (K) at 12/31/2021 equal to discount rate, where capitalization rate = K - g.
(9) Discount rate is the current MUNI discount rate. Capitalization rate (K) at 12/31/2021 adjusted for stated growth (g) where capitalization rate = K - g.
(10) Final year shown, line 28.
(11) Final year shown, line 30.
(12) Final year shown, line 30.
(13) Developed on Market Multiples EXHIBIT 17.

Terms:

CAPX - Capital Expenditures
CIP - Capital improvement plan
Dep - Depreciation expense
GROSS PPE - GROSS Property, plant and equipment
IOU - Investor owned utility
MUNI - Large regional municipally owned utility
NET PPE - NET Property, plant and equipment

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Actual			Estimated Year 0	Estimated Year 1	Estimated Year 2
	2018	2019	2020	2021	2022	2023
1. **OPERATING REVENUES (1)**						
2. Charges for services	3,054,418	3,147,364	3,023,166	3,023,166	3,023,166	3,023,630
3. Other operating revenue	1,577	1,337	2,249	2,249	2,249	2,249
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	0	0	0	3,930,719
6. **Total Operating Revenues**	3,055,995	3,148,701	3,025,415	3,025,415	3,025,415	6,956,598
7. **Rate Increase**						**130%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	2,224,099	2,620,251	2,630,694	2,630,694	2,709,615	2,790,903
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	(139,031)	(143,201)	(147,497)
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	0	0	0	(240,000)	(247,200)	(254,616)
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: PURTA & Reg Assessment	0	0	0	0	84,493	84,467
16. **Operating Expenses Before Depreciation**	2,224,099	2,620,251	2,630,694	2,251,664	2,403,706	2,473,257
17. Depreciation (2)	246,236	243,460	243,460	240,690	744,864	754,605
18. **Total Operating Expenses**	2,470,335	2,863,711	2,874,154	2,492,354	3,148,571	3,227,862
19. **Operating Income**	585,660	284,990	151,261	533,061	(123,156)	3,728,736
20. Revenues (3)	3,055,995	3,148,701	3,025,415	3,025,415	3,025,415	6,956,598
21. EBITDA (4)	831,896	528,450	394,721	773,752	621,709	4,483,341
22. EBIT (5)	585,660	284,990	151,261	533,061	(123,156)	3,728,736
23. EBIT	585,660	284,990	151,261	533,061	(123,156)	3,728,736
24. (-) Income Taxes	0	0	0	154,001	(35,580)	1,077,232
25. Debt Free Net Income	585,660	284,990	151,261	379,060	(87,576)	2,651,504
26. (+) Depreciation & Amortization	246,236	243,460	243,460	240,690	744,864	754,605
27. (-) Capital Expenditures (6)	5,945	2,811	87,357	222,858	726,057	735,552
28. (-) Changes in Working Capital (7)	6,418	6,612	6,353	6,353	6,353	14,609
29. Debt Free Net Cash Flow	$819,533	$519,027	$301,011	$390,539	($75,122)	$2,655,948
30. PV Time Period (mid-year)				(0.5)	0.5	1.5
31. Present Value Factor: 6.59% (8)					0.9686	0.9087
32. Present Value Debt Free Net Cash Flow					($72,763)	$2,413,460
					1	2
33. Present Value Factor: 8.50% (9)					0.9600	0.8848
34. Present Value Debt Free Net Cash Flow					($72,117)	$2,349,983
					1	2
35. Present Value Factor: 6.49% (8)					0.9690	0.9100
36. Present Value Debt Free Net Cash Flow					($72,793)	$2,416,913
					1	2
37. Present Value Factor: 8.40% (9)					0.9605	0.8860
38. Present Value Debt Free Net Cash Flow					($72,154)	$2,353,170

See last page of this EXHIBIT for notes and assumptions.

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 3	Estimated Year 4	Estimated Year 5	Estimated Year 6	Estimated Year 7	Estimated Year 8
	2024	2025	2026	2027	2028	2029
1. **OPERATING REVENUES (1)**						
2. Charges for services	6,956,482	6,959,682	6,971,911	7,271,814	7,292,903	7,314,052
3. Other operating revenue	2,249	2,249	2,249	2,249	2,249	2,249
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	278,876	0	0	219,422
6. **Total Operating Revenues**	6,958,731	6,961,931	7,253,036	7,274,063	7,295,152	7,535,723
7. **Rate Increase**			**4%**			**3%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	2,874,630	2,960,869	3,049,695	3,141,186	3,235,422	3,332,484
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(151,922)	(156,480)	(161,174)	(166,010)	(170,990)	(176,120)
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(262,254)	(270,122)	(278,226)	(286,573)	(295,170)	(304,025)
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: PURTA & Reg Assessment	106,807	106,792	106,782	108,410	108,500	108,591
16. **Operating Expenses Before Depreciation**	2,567,261	2,641,059	2,717,077	2,797,014	2,877,762	2,960,931
17. Depreciation (2)	764,474	774,472	784,601	794,861	805,257	815,788
18. **Total Operating Expenses**	3,331,735	3,415,531	3,501,678	3,591,875	3,683,019	3,776,719
19. **Operating Income**	3,626,996	3,546,400	3,751,358	3,682,188	3,612,133	3,759,004
20. Revenues (3)	6,958,731	6,961,931	7,253,036	7,274,063	7,295,152	7,535,723
21. EBITDA (4)	4,391,470	4,320,872	4,535,959	4,477,049	4,417,390	4,574,792
22. EBIT (5)	3,626,996	3,546,400	3,751,358	3,682,188	3,612,133	3,759,004
23. EBIT	3,626,996	3,546,400	3,751,358	3,682,188	3,612,133	3,759,004
24. (-) Income Taxes	1,047,839	1,024,555	1,083,767	1,063,784	1,043,545	1,085,976
25. Debt Free Net Income	2,579,157	2,521,845	2,667,591	2,618,404	2,568,588	2,673,028
26. (+) Depreciation & Amortization	764,474	774,472	784,601	794,861	805,257	815,788
27. (-) Capital Expenditures (6)	745,172	754,917	764,790	774,792	784,925	795,190
28. (-) Changes in Working Capital (7)	14,613	14,620	15,231	15,276	15,320	15,825
29. Debt Free Net Cash Flow	$2,583,846	$2,526,780	$2,672,171	$2,623,197	$2,573,600	$2,677,801
30. PV Time Period (mid-year)	2.5	3.5	4.5	5.5	6.5	7.5
31. Present Value Factor: 6.59% (8)	0.8525	0.7998	0.7504	0.7040	0.6605	0.6196
32. Present Value Debt Free Net Cash Flow	$2,202,729	$2,020,919	$2,005,197	$1,846,731	$1,699,863	$1,659,166
	3	4	5	6	7	8
33. Present Value Factor: 8.50% (9)	0.8155	0.7516	0.6927	0.6385	0.5884	0.5423
34. Present Value Debt Free Net Cash Flow	$2,107,127	$1,899,128	$1,851,013	$1,674,912	$1,514,306	$1,452,171
	3	4	5	6	7	8
35. Present Value Factor: 6.49% (8)	0.8545	0.8025	0.7535	0.7076	0.6645	0.6240
36. Present Value Debt Free Net Cash Flow	$2,207,897	$2,027,741	$2,013,480	$1,856,175	$1,710,157	$1,670,948
	3	4	5	6	7	8
37. Present Value Factor: 8.40% (9)	0.8174	0.7540	0.6956	0.6417	0.5920	0.5461
38. Present Value Debt Free Net Cash Flow	$2,112,036	$1,905,192	$1,858,762	$1,683,306	$1,523,571	$1,462,347

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DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 9	Estimated Year 10	Estimated Year 11	Estimated Year 12	Estimated Year 13	Estimated Year 14
	2030	2031	2032	2033	2034	2035
1. **OPERATING REVENUES (1)**						
2. Charges for services	7,555,321	7,577,231	7,599,205	7,849,880	7,872,645	7,895,475
3. Other operating revenue	2,249	2,249	2,249	2,249	2,249	2,249
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	227,976	0	0	236,864
6. **Total Operating Revenues**	7,557,570	7,579,480	7,829,430	7,852,129	7,874,894	8,134,588
7. **Rate Increase**			**3%**			**3%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	3,432,459	3,535,433	3,641,496	3,750,741	3,863,263	3,979,161
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(181,403)	(186,845)	(192,451)	(198,224)	(204,171)	(210,296)
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(313,146)	(322,540)	(332,216)	(342,183)	(352,448)	(363,022)
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: PURTA & Reg Assessment	109,931	110,026	110,120	111,511	111,610	111,708
16. **Operating Expenses Before Depreciation**	3,047,841	3,136,073	3,226,949	3,321,845	3,418,254	3,517,551
17. Depreciation (2)	826,457	837,266	848,215	859,308	870,546	881,931
18. **Total Operating Expenses**	3,874,298	3,973,339	4,075,164	4,181,153	4,288,800	4,399,482
19. **Operating Income**	3,683,272	3,606,141	3,754,266	3,670,976	3,586,094	3,735,106
20. Revenues (3)	7,557,570	7,579,480	7,829,430	7,852,129	7,874,894	8,134,588
21. EBITDA (4)	4,509,729	4,443,407	4,602,481	4,530,284	4,456,640	4,617,037
22. EBIT (5)	3,683,272	3,606,141	3,754,266	3,670,976	3,586,094	3,735,106
23. EBIT	3,683,272	3,606,141	3,754,266	3,670,976	3,586,094	3,735,106
24. (-) Income Taxes	1,064,097	1,041,814	1,084,608	1,060,545	1,036,023	1,079,072
25. Debt Free Net Income	2,619,175	2,564,327	2,669,658	2,610,431	2,550,071	2,656,034
26. (+) Depreciation & Amortization	826,457	837,266	848,215	859,308	870,546	881,931
27. (-) Capital Expenditures (6)	805,590	816,125	826,799	837,612	848,566	859,664
28. (-) Changes in Working Capital (7)	15,871	15,917	16,442	16,489	16,537	17,083
29. Debt Free Net Cash Flow	$2,624,171	$2,569,551	$2,674,632	$2,615,638	$2,555,514	$2,661,218
30. PV Time Period (mid-year)	8.5	9.5	10.5	11.5	12.5	13.5
31. Present Value Factor: 6.59% (8)	0.5813	0.5454	0.5117	0.4800	0.4503	0.4225
32. Present Value Debt Free Net Cash Flow	$1,525,431	$1,401,433	$1,368,609	$1,255,506	$1,150,748	$1,124,365
	9	10	11	12	13	14
33. Present Value Factor: 8.50% (9)	0.4999	0.4607	0.4246	0.3913	0.3607	0.3324
34. Present Value Debt Free Net Cash Flow	$1,311,823	$1,183,792	$1,135,649	$1,023,499	$921,774	$884,589
	9	10	11	12	13	14
35. Present Value Factor: 6.49% (8)	0.5860	0.5503	0.5167	0.4852	0.4557	0.4279
36. Present Value Debt Free Net Cash Flow	$1,537,764	$1,414,024	$1,381,983	$1,269,107	$1,164,548	$1,138,735
	9	10	11	12	13	14
37. Present Value Factor: 8.40% (9)	0.5038	0.4648	0.4287	0.3955	0.3649	0.3366
38. Present Value Debt Free Net Cash Flow	$1,322,057	$1,194,327	$1,146,615	$1,034,485	$932,507	$895,766

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	Estimated Year 15	Estimated Year 16	Estimated Year 17	Estimated Year 18	Estimated Year 19	Estimated Year 20
	2036	2037	2038	2039	2040	2041
1. **OPERATING REVENUES (1)**						
2. Charges for services	8,155,923	8,179,576	8,383,769	8,408,082	8,634,844	8,659,886
3. Other operating revenue	2,249	2,249	2,249	2,249	2,249	2,249
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	179,951	0	201,794	0	216,497
6. **Total Operating Revenues**	8,158,172	8,361,776	8,386,018	8,612,125	8,637,093	8,878,632
7. **Rate Increase**		**2%**		**2%**		**2%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	4,098,536	4,221,492	4,348,136	4,478,580	4,612,938	4,751,326
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(216,605)	(223,103)	(229,796)	(236,690)	(243,791)	(251,105)
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(373,912)	(385,130)	(396,683)	(408,584)	(420,841)	(433,467)
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: PURTA & Reg Assessment	113,154	113,255	114,382	114,485	115,739	115,847
16. **Operating Expenses Before Depreciation**	3,621,172	3,726,514	3,836,039	3,947,791	4,064,045	4,182,602
17. Depreciation (2)	893,466	905,150	916,988	928,980	941,129	953,438
18. **Total Operating Expenses**	4,514,638	4,631,664	4,753,027	4,876,771	5,005,174	5,136,040
19. **Operating Income**	3,643,534	3,730,112	3,632,991	3,735,354	3,631,919	3,742,592
20. Revenues (3)	8,158,172	8,361,776	8,386,018	8,612,125	8,637,093	8,878,632
21. EBITDA (4)	4,537,000	4,635,262	4,549,979	4,664,334	4,573,048	4,696,030
22. EBIT (5)	3,643,534	3,730,112	3,632,991	3,735,354	3,631,919	3,742,592
23. EBIT	3,643,534	3,730,112	3,632,991	3,735,354	3,631,919	3,742,592
24. (-) Income Taxes	1,052,617	1,077,629	1,049,571	1,079,144	1,049,261	1,081,235
25. Debt Free Net Income	2,590,917	2,652,483	2,583,420	2,656,210	2,582,658	2,661,357
26. (+) Depreciation & Amortization	893,466	905,150	916,988	928,980	941,129	953,438
27. (-) Capital Expenditures (6)	870,906	882,296	893,835	905,524	917,367	929,364
28. (-) Changes in Working Capital (7)	17,132	17,560	17,611	18,085	18,138	18,645
29. Debt Free Net Cash Flow	$2,596,344	$2,657,777	$2,588,963	$2,661,580	$2,588,283	$2,666,786
30. PV Time Period (mid-year)	14.5	15.5	16.5	17.5	18.5	19.5
31. Present Value Factor: 6.59% (8)	0.3964	0.3719	0.3489	0.3273	0.3071	0.2881
32. Present Value Debt Free Net Cash Flow	$1,029,191	$988,427	$903,289	$871,135	$794,862	$768,301
	15	16	17	18	19	20
33. Present Value Factor: 8.50% (9)	0.3064	0.2824	0.2603	0.2399	0.2211	0.2038
34. Present Value Debt Free Net Cash Flow	$795,520	$750,556	$673,907	$638,513	$572,269	$543,491
	15	16	17	18	19	20
35. Present Value Factor: 6.49% (8)	0.4018	0.3773	0.3543	0.3327	0.3125	0.2934
36. Present Value Debt Free Net Cash Flow	$1,043,211	$1,002,779	$917,269	$885,508	$808,838	$782,435
	15	16	17	18	19	20
37. Present Value Factor: 8.40% (9)	0.3105	0.2864	0.2643	0.2438	0.2249	0.2075
38. Present Value Debt Free Net Cash Flow	$806,165	$761,187	$684,263	$648,893	$582,105	$553,358

See last page of this EXHIBIT for notes and assumptions.

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

DCF With Capitalization of Terminal Value Model @ 6.15%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$2,666,786
Divided by Capitalization Factor (8)	6.15%
20th Year Terminal Value	43,362,376
20th Year Present Value Factor (11)	0.3123
Present Value of Terminal Value	13,542,070
Present Value Debt Free Net Cash Flow for 20 Years	27,946,970
Indicated Value	$41,489,040

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 6.15%		Multiples (13)	Terminal Value
Projected EBIT	$3,742,592	30.1	$112,652,015
Projected EBITDA	4,696,030	20.3	95,329,414
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			101,045,872
20th Year Present Value Factor (11)			0.3123
Present Value of Terminal Value			31,556,626
Present Value Debt Free Net Cash Flow for 20 Years			27,946,970
Indicated Value			$59,503,596

DCF With Capitalization of Terminal Value Model @ 6.15%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$2,666,786
Divided by Capitalization Factor (9)	6.15%
20th Year Terminal Value	43,362,376
20th Year Present Value Factor (12)	0.3123
Present Value of Terminal Value	13,542,070
Present Value Debt Free Net Cash Flow for 20 Years	27,946,970
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20th Year Present Value Factor (12)			0.3123
Present Value of Terminal Value			31,556,626
Present Value Debt Free Net Cash Flow for 20 Years			27,946,970
Indicated Value			$59,503,596

DCF With Capitalization of Terminal Value Model @ 6.05%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$2,666,786
Divided by Capitalization Factor (8)	6.05%
20th Year Terminal Value	44,079,110
20th Year Present Value Factor (11)	0.3123
Present Value of Terminal Value	13,765,906
Present Value Debt Free Net Cash Flow for 20 Years	27,946,970
Indicated Value	$41,712,876

DCF With Capitalization of Terminal Value Model @ 6.05%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$2,666,786
Divided by Capitalization Factor (9)	6.05%
20th Year Terminal Value	44,079,110
20th Year Present Value Factor (12)	0.3123
Present Value of Terminal Value	13,765,906
Present Value Debt Free Net Cash Flow for 20 Years	27,946,970
Indicated Value	$41,712,876

See last page of this EXHIBIT for notes and assumptions.

Income Approach
City of Beaver Falls Wastewater System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

Notes: (1) Assumptions:

Charges for services - Pre-2021 are actual. 2021 results are based on 2020 actual. Post-2021 based on customer growth (EDU) and average revenue per customer. Rate increases (Other rate increase line item) are added year after they occur.

Other (Rate Increase) - Assumed purchase by IOU at end of 2021 with shown rate increases.

OPERATING EXPENSES - increase at 3.0% annually after 2021 unless noted elsewhere. Assumed economies of scale are shown on lines below.
Wages & Benefits - Post-2020 assumed 15% savings due to economies of scale. Increase at 3.0% afterwards.

Eliminated Expenses - Post-2020 assumed 100% savings due to economies of scale (elimination of line rentals). Increase at 3.0% afterwards.

No Additional O&M.

PURTA & Reg Assessment - 2022 assumed due to IOU purchase at the end of 2022.

(2) Depreciation - Pre-2021 based on actual depreciation. Post-2021 based on depreciation rate plus same rate on half of CAPX.

(3) Line 6.

(4) Line 19 + line 17.

(5) Line 19.

(6) Capital Expenditures - Pre-2021 based on financials/budget. Post-2021 years are estimates at 1.54% of prior year-end GROSS Property, plant and equipment.

(7) Changes in Working Capital - based on water industry 0.21% of revenues.

(8) Discount rate is the current lower end of the IOU discount rate. Capitalization rate (K) at 12/31/2021 adjusted for stated growth (g) where capitalization rate = K - g.

(9) Discount rate is the current upper end of the IOU discount rate. Capitalization rate (K) at 12/31/2021 adjusted for stated growth (g) where capitalization rate = K - g.

(10) Final year shown, line 29.

(11) Final year shown, line 31.

(12) Final year shown, line 33.

(13) Developed on Market Multiples EXHIBIT 17.

Terms:

CAPX - Capital Expenditures
CIP - Capital improvement plan
Dep - Depreciation expense
GROSS PPE - GROSS Property, plant and equipment
IOU - Investor owned utility
MUNI - Large regional municipally owned utility
NET PPE - NET Property, plant and equipment

Market Multiples Method
City of Beaver Falls Wastewater System Assets
2021 Operations
Market Multiple Method

	A	B	C	D (Col B × Col C)	E (Col A × Col D)
	Subject Company Statistic (1)	Comparison Group's Valuation Multiples 12/31/2021	Beaver Falls' Wastewater Growth & Risk Adjustment	Beaver Falls' Wastewater Risk Adjusted Valuation Multiples 12/31/2021	Beaver Falls' Wastewater Market Multiples Valuation
Risk Adjusted Multiple					
1. City of Beaver Falls Wastewater System Assets					
2. Investor Provided Capital	$8,146,961	2.31	90.00%	2.08	$16,945,679
3. Gross PP&E	$12,898,487	1.62	102.00%	1.65	21,282,504
4. Net PP&E	$7,850,687	2.03	102.00%	2.07	16,250,922
5. Revenues	$3,025,415	9.69	90.00%	8.72	26,381,619
6. EBITDA	$773,752	22.55	90.00%	20.30	15,707,155
7. EBIT	$532,936	33.47	90.00%	30.12	16,052,027
8. Customers	3,259	$10,788	104.00%	$11,220	36,565,980
9. Population	15,580	$3,446	104.00%	$3,584	55,838,720
10.					
11. Average					$25,628,076

Conclusion of Market Multiple Method Valuation For Domestic Customers

		Low	High		Conclusion
12.	Capital Items	$16,250,922	$21,282,504		$18,766,713
13.	(Items 2-4)				
14.	Income Statement Items	15,707,155	26,381,619		-
15.	(Items 5 -7)				
16.	Demographics Items	36,565,980	55,838,720		46,202,350
17.	(Items 8-9)				
				Conclusion *	$39,343,441

* - Conclusion based on weighting of 25% Capital Items and 75% Demographics Items

Market Multiples Method
City of Beaver Falls Wastewater System Assets
Development of Market Multiples Method for the Market Multiples Method

	Latest Quarter End			Latest 12 Months			2020		12/31/2021
	Gross PP&E	Net PP&E	Invest. Total Capital	12 Mos. Rev.	12 Mos. EBITDA	12 Mos. EBIT	Customers	Population	Enterprise Value
	($ Mill)	($ Mill)	($ Mill)	($ Mill)	($ Mill)	($ Mill)			($ Mill)
American States Water Co	$2,202.419	$1,614.705	$1,292.917	$506.429	$183.194	$143.991	286,341	1,000,000	$4,427.527
American Water Works Company Inc	$26,972.000	$20,680.000	$18,040.000	$3,902.000	$1,939.000	$1,310.000	3,496,000	15,000,000	$45,375.219
Artesian Resources Corp	$743.292	$585.751	$347.983	$89.945	$39.770	$27.949	95,640	300,000	$607.616
California Water Service Group	$4,124.024	$2,796.369	$2,305.564	$806.735	$261.185	$152.127	543,000	2,000,000	$4,829.636
Essential Utilities, Inc.	$12,348.442	$10,012.155	$10,907.411	$1,816.455	$891.370	$598.766	1,798,803	5,000,000	$19,339.578
Middlesex Water Co	$1,063.753	$865.947	$693.048	$143.744	$59.269	$36.773	122,200	500,000	$2,430.317
SJW Corp.	$3,616.710	$2,486.932	$2,569.103	$569.649	$199.528	$104.677	389,293	1,614,866	$3,737.653
York Water Company (The)	$464.886	$368.286	$285.060	$54.783	$30.849	$22.190	72,681	202,000	$786.746
Average	$6,441.941	$4,926.268	$4,555.136	$986.218	$450.521	$299.559	850,495	3,202,108	$10,191.787
Max	$26,972.000	$20,680.000	$18,040.000	$3,902.000	$1,939.000	$1,310.000	3,496,000	15,000,000	$45,375.219
Min	$464.886	$368.286	$285.060	$54.783	$30.849	$22.190	72,681	202,000	$607.616
Median	$2,909.565	$2,050.819	$1,799.241	$538.039	$191.361	$124.334	337,817	1,307,433	$4,082.590

	Enterprise Value as a Multiple of								
	Invest. Capital	Gross PP&E	Net PP&E	Rev.	EBITDA	EBIT	Customers	Population	Population Per Customer
	(x)	(x)	(x)	(x)	(x)	(x)	($)	($)	
American States Water Co	3.42	2.01	2.74	8.74	24.17	30.75	$15,462	$4,428	3.49
American Water Works Company Inc	2.52	1.68	2.19	11.63	23.40	34.64	$12,979	$3,025	4.29
Artesian Resources Corp	1.75	0.82	1.04	6.76	15.28	21.74	$6,353	$2,025	3.14
California Water Service Group	2.09	1.17	1.73	5.99	18.49	31.75	$8,894	$2,415	3.68
Essential Utilities, Inc.	1.77	1.57	1.93	10.65	21.70	32.30	$10,751	$3,868	2.78
Middlesex Water Co	3.51	2.28	2.81	16.91	41.00	66.09	$19,888	$4,861	4.09
SJW Corp.	1.45	1.03	1.50	6.56	18.73	35.71	$9,601	$2,315	4.15
York Water Company (The)	2.76	1.69	2.14	14.36	25.50	35.45	$10,825	$3,895	2.78
Average	2.41	1.53	2.01	10.20	23.53	36.05	$11,844	$3,354	3.55
Max	3.51	2.28	2.81	16.91	41.00	66.09	$19,888	$4,861	4.29
Min	1.45	0.82	1.04	5.99	15.28	21.74	$6,353	$2,025	2.78
Median	2.31	1.62	2.03	9.69	22.55	33.47	$10,788	$3,446	3.59

Market Multiples Method
City of Beaver Falls Wastewater System Assets
Quantification of the Effective Risk/Growth Adjustments

		Net PP&E	Gross PP&E	Invest. Capital
Comparable Group Multiple		2.03	1.62	2.31
Ratio to Net PPE			79.80%	
Not Contributed Multiple (NPPE = ICAP mult.)		2.31	1.84	
Base Risk Factor	x	90%	90%	
Subject Company Adjusted Multiple		2.08	1.66	
Subject Company Adjusted Multiple		2.08	1.66	
Comparable Group Multiple	÷	2.03	1.62	
Effective Risk/Growth Adjustment		102%	102%	

		Net PP&E	Gross PP&E
Plant Assets		100%	100%
Ratio of Known "Cost Free" Capital		25%	25%
Plant Assets Less Known "Cost Free" Capital		75%	75%
Comparable Group Multiple		2.03	1.62
Plant Assets Less Known "Cost Free" Capital	÷	75%	75%
Mulitple Without "Cost Free" Capital		2.71	2.16
Base Risk Factor	x	90%	90%
Subject Company Adjusted Multiple		2.44	1.94
Subject Company Adjusted Multiple		2.44	1.94
Comparable Group Multiple	÷	2.03	1.62
Effective Risk/Growth Adjustment		120%	120%

		Net PP&E	Customers
Comparable Group Multiple		2.03	10,788.00
Implied Capitalization Rate (1÷Multiple)		49.26%	0.0093%
Ratio of Net PP&E Mult. to Invest. Capital Mult.		113.79%	
Less 1	-	1.00	
Difference in Capital Source due to Contributions		13.79%	
Assumed Investor Financed (1-Difference in Capital Source)		86.21%	86.21%
Implied Capitalization Rate (1÷Multiple)	x		0.0093%
Not Contributed Cap. Rate			0.0080%
Not Contributed Multiple (1÷Cap. Rate)			12,513.63
Base Risk Factor	x		90%
Subject Company Adjusted Multiple			11,262.27
Subject Company Adjusted Multiple			11,262.27
Comparable Group Multiple	÷		10,788.00
Effective Risk/Growth Adjustment			104%

Selected Transactions Method
For City of Beaver Falls Wastewater System Assets
Summary

		Median	Mid-Point	Domestic Customers Value
	All Selected Transactions Companies (N = 20)			
1.	Asset Items			$17,153,574
2.	Ex-Ante (page 2)	$16,325,842	$18,728,321	
3.	Ex-Post (page 3)	$13,622,300	$19,937,831	
4.	Demographics Items			$32,187,074
5.	Ex-Ante (page 2)	$29,334,550	$35,039,597	
6.	Ex-Post (page 3)	$29,334,550	$35,039,597	
7.			Indicated Value *	$28,428,699
	Fully Integrated Selected Transactions Companies (N = 8)			
8.	Asset Items			$16,481,126
9.	Ex-Ante (page 2)	$16,458,845	$18,149,391	
10.	Ex-Post (page 3)	$15,275,966	$16,040,301	
11.	Demographics Items			$44,805,181
12.	Ex-Ante (page 2)	$45,215,617	$44,394,744	
13.	Ex-Post (page 3)	$45,215,617	$44,394,744	
14.			Indicated Value *	$37,724,167
	Mostly Collection/Distribution Selected Transactions Companies (N = 12)			
15.	Asset Items			$16,413,471
16.	Ex-Ante (page 2)	$14,556,628	$18,728,321	
17.	Ex-Post (page 3)	$12,431,106	$19,937,831	
18.	Demographics Items			$26,066,232
19.	Ex-Ante (page 2)	$19,145,128	$32,987,336	
20.	Ex-Post (page 3)	$19,145,128	$32,987,336	
21.			Indicated Value *	$23,653,042
	Integrated, Excluding Wholesale Selected Transactions Companies (N = 6)			
22.	Asset Items			$15,968,735
23.	Ex-Ante (page 2)	$15,706,676	$17,768,688	
24.	Ex-Post (page 3)	$14,359,274	$16,040,301	
25.	Demographics Items			$43,319,366
26.	Ex-Ante (page 2)	$42,243,988	$44,394,744	
27.	Ex-Post (page 3)	$42,243,988	$44,394,744	
28.			Indicated Value *	$36,481,708

Conclusion of Selected Transactions Method Valuation For Domestic Customers

		Indicated Values	Weight	
29.	Integrated, Excluding Wholesale Transactions	$36,481,708	75%	$27,361,281
30.	Mostly Collection/Distribution Transactions	23,653,042	25%	5,913,260
31.			Conclusion	$33,274,541

* - Indicated Value based on weighting of 25% Asset Items and 75% Demographics Items

Selected Transactions Method - Ex-Ante
For City of Beaver Falls Wastewater System Assets
Based on 2016 - 2021 Acquisitions of Assets of Water or Sewer System, Without Discount for Customer Contributions

Name	Service	System	Announced Purchase Price was:	Investor Provided Capital	Gross PP&E	Net PP&E	Revenues	EBITDA	EBIT	Customers	Population
			Selected Transactions' Metrics								
Municipal Authority of the City of Mckeesport	WW	INT	$156,000,000	$83,903,219	$91,435,797	$73,813,794	$13,047,844	$6,180,616	$3,811,679	12,780	46,468
New Garden Township/Authority's WW System's Assets	WW	INT	$29,500,000	$23,001,140	$25,988,330	$17,967,319	$2,261,294	$907,386	$499,638	1,796	12,085
Limerick Township Wastewater System's Assets	WW	INT	$75,100,000	$43,501,755	$60,847,250	$36,113,701	$4,418,775	$2,487,775	$893,600	5,416	18,798
Steelton Borough (Water) Authority	W	INT	$22,500,000	NA	NA	NA	NA	NA	NA	2,472	5,932
Exeter Township Wastewater System Assets	WW	INT	$96,000,000	NA	NA	NA	$7,735,788	$4,660,967	$4,660,967	8,984	27,609
Kane Borough Authority Wastewater System	WW	INT	$17,560,000	$10,809,115	$20,265,926	$8,897,773	$1,433,978	$684,830	$181,672	2,019	4,645
Borough of Royersford Wastewater System Assets	WW	INT	$13,000,000	$4,702,972	$6,883,116	$4,545,699	$863,000	$280,365	$280,365	1,596	5,154
York City Sewer Authority Wastewater System Assets	WW	INT	$235,000,000	$100,493,098	$120,654,506	$78,592,332	$24,641,181	$9,759,797	$6,150,926	13,747	80,929
Sadsbury Township Wastewater Utility	WW	C/D	$9,250,000	NA	NA	NA	NA	NA	NA	998	3,850
East Bradford Township Wastewater System Assets	WW	C/D	$5,000,000	$1,298,627	NA	NA	$1,130,372	$49,804	$49,804	1,248	9,942
Township of Mahoning Water System Assets	W	C/D	$4,734,800	NA	NA	NA	$753,857	$151,916	$91,468	1,186	4,218
Township of Mahoning Sewer System Assets	WW	C/D	$4,765,200	NA	NA	NA	$1,193,055	($173,564)	($244,337)	1,451	4,218
Cheltenham Township Wastewater System Assets	WW	C/D	$50,250,000	NA	NA	NA	$9,290,500	$4,506,168	$4,506,168	10,219	37,841
East Norriton Township Wastewater System Assets	WW	C/D	$21,000,000	$4,055,138	NA	NA	$3,320,000	$612,827	$612,827	4,966	14,296
Valley Township Water System Assets	W	C/D	$7,325,000	NA	NA	NA	$698,550	$78,704	$78,704	1,669	7,493
Valley Township Wastewater System Assets	WW	C/D	$13,950,000	NA	NA	NA	$2,743,957	($408,562)	($408,562)	3,125	7,493
Upper Pottsgrove Township Wastewater System Assets	WW	C/D	$13,750,000	NA	$15,295,347	$11,548,897	$1,380,242	$858,878	$858,878	1,428	5,530
Lower Makefield Township Wastewater System Assets	WW	C/D	$53,000,000	$16,525,411	NA	$17,592,071	$10,012,924	$4,053,817	$3,520,813	11,151	33,197
Willistown Township Wastewater Systems Assets	WW	C/D	$17,500,000	$9,866,721	$8,673,707	$4,887,532	$2,148,508	$297,618	($8,933)	2,294	11,214
East Whiteland Township Wastewater System Assets	WW	C/D	$54,930,000	$42,513,245	$48,672,940	$34,143,673	$4,328,000	$1,942,553	$1,209,102	3,895	14,720
				Subject Company's Metrics							
City of Beaver Falls Wastewater System Assets				$8,146,961	$12,898,487	$7,850,687	$3,025,415	$773,752	$532,936	3,259	15,580
				Subject Company's Selected Transactions Multiples Valuations							
Municipal Authority of the City of Mckeesport	WW	INT	$27,918,020	$15,147,523	$22,006,304	$16,591,847	$36,171,856	$19,529,645	$21,811,382	$39,781,221	$52,304,382
New Garden Township/Authority's WW System's Assets	WW	INT	$28,203,960	$10,448,845	$14,641,394	$12,889,807	$39,468,438	$25,155,413	$31,465,995	$53,530,345	$38,031,444
Limerick Township Wastewater System's Assets	WW	INT	$34,163,758	$14,064,646	$15,919,805	$16,325,842	$51,418,926	$23,357,714	$44,789,033	$45,190,343	$62,243,749
Steelton Borough (Water) Authority	W	INT	$44,378,984	NA	NA	NA	NA	NA	NA	$29,663,228	$59,094,740
Exeter Township Wastewater System Assets	WW	INT	$30,691,294	NA	NA	NA	$37,544,959	$15,936,638	$10,976,658	$34,824,577	$54,173,639
Kane Borough Authority Wastewater System	WW	INT	$29,443,642	$13,235,185	$11,176,269	$15,493,547	$37,048,189	$19,840,072	$51,512,358	$28,344,745	$58,898,773
Borough of Royersford Wastewater System Assets	WW	INT	$30,167,353	$22,519,907	$24,361,108	$22,451,757	$45,574,038	$35,877,408	$24,711,236	$26,545,739	$39,297,633
York City Sewer Authority Wastewater System Assets	WW	INT	$29,555,692	$19,051,416	$25,122,513	$23,474,446	$28,853,021	$18,630,675	$20,361,149	$55,711,428	$45,240,890
Sadsbury Township Wastewater Utility	WW	C/D	$33,819,315	NA	NA	NA	NA	NA	NA	$30,206,162	$37,432,468
East Bradford Township Wastewater System Assets	WW	C/D	$32,804,214	$31,367,594	NA	NA	$13,382,387	$77,679,654	$53,503,315	$13,056,891	$7,835,446
Township of Mahoning Water System Assets	W	C/D	$20,240,864	NA	NA	NA	$19,001,927	$24,115,652	$27,587,119	$13,010,719	$17,488,901
Township of Mahoning Sewer System Assets	WW	C/D	$1,750,164	NA	NA	NA	$12,083,859	($21,243,405)	($10,393,639)	$10,702,817	$17,601,189
Cheltenham Township Wastewater System Assets	WW	C/D	$13,529,934	NA	NA	NA	$16,363,716	$8,628,398	$5,942,971	$16,025,516	$20,689,067
East Norriton Township Wastewater System Assets	WW	C/D	$23,795,180	$42,189,978	NA	NA	$19,136,661	$26,514,467	$18,262,335	$13,781,514	$22,886,122
Valley Township Water System Assets	W	C/D	$36,574,437	NA	NA	NA	$31,724,522	$72,013,236	$49,600,464	$14,303,280	$15,230,682
Valley Township Wastewater System Assets	WW	C/D	$2,863,846	NA	NA	NA	$15,380,904	($26,419,083)	($18,196,638)	$14,548,176	$29,005,872
Upper Pottsgrove Township Wastewater System Assets	WW	C/D	$20,302,817	NA	$11,595,304	$9,346,949	$30,139,248	$12,387,188	$8,531,907	$31,380,427	$38,738,698
Lower Makefield Township Wastewater System Assets	WW	C/D	$17,756,720	$26,128,786	NA	$23,651,929	$16,014,003	$10,116,103	$8,022,465	$15,489,822	$24,873,934
Willistown Township Wastewater Systems Assets	WW	C/D	($107,024,644)	$14,449,767	$26,023,881	$28,109,693	$24,642,572	$45,496,794	($1,044,094,809)	$24,861,595	$24,313,358
East Whiteland Township Wastewater System Assets	WW	C/D	$28,287,749	$10,526,427	$14,556,628	$12,630,107	$38,397,885	$21,879,547	$24,211,490	$45,960,685	$58,139,226

Definitions: Where "INT" is "Fully Integrated Assets" and "C/D" is "Mostly Collection/Distribution Assets".
Where "WW" is wastewater and "W" is water.

Selected Transactions Method - Ex-Post
For City of Beaver Falls Wastewater System Assets
Based on 2016 - 2021 Acquisitions of Assets of Water or Sewer System, Without Discount for Customer Contributions

			Ex-Post Selected Transactions' Metrics								
Name	Service	System	Announced Purchase Price was:	Investor Provided Capital	Ex-POST - OCN - Gross PP&E	Ex-Post - OCNLD - Net PP&E	Revenues	EBITDA	EBIT	Customers	Population
Municipal Authority of the City of Mckeesport	WW	INT	$156,000,000	$83,903,219	$108,231,570	$80,085,602	$13,047,844	$6,180,616	$3,811,679	12,780	46,468
New Garden Township/Authority's WW System's Assets	WW	INT	$29,500,000	$23,001,140	$27,146,852	$18,567,728	$2,261,294	$907,386	$499,638	1,796	12,085
Limerick Township Wastewater System's Assets	WW	INT	$75,100,000	$43,501,755	$63,480,402	$46,153,867	$4,418,775	$2,487,775	$893,600	5,416	18,798
Steelton Borough (Water) Authority	W	INT	$22,500,000	NA	$19,739,906	$14,433,435	NA	NA	NA	2,472	5,932
Exeter Township Wastewater System Assets	WW	INT	$96,000,000	NA	$68,404,345	$42,678,351	$7,735,788	$4,660,967	$4,660,967	8,984	27,609
Kane Borough Authority Wastewater System	WW	INT	$17,560,000	$10,809,115	$21,023,527	$13,503,901	$1,433,978	$684,830	$181,672	2,019	4,645
Borough of Royersford Wastewater System Assets	WW	INT	$13,000,000	$4,702,972	$7,666,493	$5,453,064	$863,000	$280,365	$280,365	1,596	5,154
York City Sewer Authority Wastewater System Assets	WW	INT	$235,000,000	$100,493,098	$155,875,776	$115,727,779	$24,641,181	$9,759,797	$6,150,926	13,747	80,929
Sadsbury Township Wastewater Utility	WW	C/D	$9,250,000	NA	$7,480,601	$6,128,876	NA	NA	NA	998	3,850
East Bradford Township Wastewater System Assets	WW	C/D	$5,000,000	$1,298,627	$8,294,931	$5,473,948	$1,130,372	$49,804	$49,804	1,248	9,942
Township of Mahoning Water System Assets	W	C/D	$4,734,800	NA	$5,294,272	$3,507,138	$753,857	$151,916	$91,468	1,186	4,218
Township of Mahoning Sewer System Assets	WW	C/D	$4,765,200	NA	$4,931,649	$3,234,859	$1,193,055	($173,564)	($244,337)	1,451	4,218
Cheltenham Township Wastewater System Assets	WW	C/D	$50,250,000	NA	$19,818,216	$15,408,458	$9,290,500	$4,506,168	$4,506,168	10,219	37,841
East Norriton Township Wastewater System Assets	WW	C/D	$21,000,000	$4,055,138	$16,916,212	$9,251,450	$3,320,000	$612,827	$612,827	4,966	14,296
Valley Township Water System Assets	W	C/D	$7,325,000	NA	$6,843,616	$4,983,659	$698,550	$78,704	$78,704	1,669	7,493
Valley Township Wastewater System Assets	WW	C/D	$13,950,000	NA	$13,389,108	$8,832,690	$2,743,957	($408,562)	($408,562)	3,125	7,493
Upper Pottsgrove Township Wastewater System Assets	WW	C/D	$13,750,000	NA	$15,295,347	$11,548,897	$1,380,242	$858,878	$858,878	1,428	5,530
Lower Makefield Township Wastewater System Assets	WW	C/D	$53,000,000	$16,525,411	$32,003,924	$19,808,274	$10,012,924	$4,053,817	$3,520,813	11,151	33,197
Willistown Township Wastewater Systems Assets	WW	C/D	$17,500,000	$9,866,721	$19,641,520	$13,367,274	$2,148,508	$297,618	($8,933)	2,294	11,214
East Whiteland Township Wastewater System Assets	WW	C/D	$54,930,000	$42,513,245	$43,447,309	$32,955,596	$4,328,000	$1,942,553	$1,209,102	3,895	14,720

			Subject Company's Metrics							
City of Beaver Falls Wastewater System Assets			$8,146,961	$12,898,487	$7,850,687	$3,025,415	$773,752	$532,936	3,259	15,580

			Ex-Post Subject Company's Selected Transactions Multiples Valuations							
Municipal Authority of the City of Mckeesport	WW	INT	$27,328,721	$15,147,523	$18,591,285	$15,292,476	$36,171,856	$19,529,645	$21,811,382	$39,781,221	$52,304,382
New Garden Township/Authority's WW System's Assets	WW	INT	$28,073,754	$10,448,845	$14,016,556	$12,473,000	$39,468,438	$25,155,413	$31,465,995	$53,530,345	$38,031,444
Limerick Township Wastewater System's Assets	WW	INT	$33,637,280	$14,064,646	$15,259,456	$12,774,370	$51,418,926	$23,357,714	$44,789,033	$45,190,343	$62,243,749
Steelton Borough (Water) Authority	W	INT	$28,924,561	NA	$14,701,993	$12,238,283	NA	NA	NA	$29,663,228	$59,094,740
Exeter Township Wastewater System Assets	WW	INT	$27,031,096	NA	$18,101,990	$17,659,210	$37,544,959	$15,936,638	$10,976,658	$34,824,577	$54,173,639
Kane Borough Authority Wastewater System	WW	INT	$28,732,700	$13,235,185	$10,773,522	$10,208,758	$37,048,189	$19,840,072	$51,512,358	$28,344,745	$58,898,773
Borough of Royersford Wastewater System Assets	WW	INT	$29,389,211	$22,519,907	$21,871,843	$18,715,887	$45,574,038	$35,877,408	$24,711,236	$26,545,739	$39,297,633
York City Sewer Authority Wastewater System Assets	WW	INT	$27,904,537	$19,051,416	$19,445,898	$15,941,820	$28,853,021	$18,630,675	$20,361,149	$55,711,428	$45,240,890
Sadsbury Township Wastewater Utility	WW	C/D	$23,859,165	NA	$15,949,388	$11,848,642	NA	NA	NA	$30,206,162	$37,432,468
East Bradford Township Wastewater System Assets	WW	C/D	$26,471,395	$31,367,594	$7,774,921	$7,170,955	$13,382,387	$77,679,654	$53,503,315	$13,056,891	$7,835,446
Township of Mahoning Water System Assets	W	C/D	$17,619,793	NA	$11,535,440	$10,598,794	$19,001,927	$24,115,652	$27,587,119	$13,010,719	$17,488,901
Township of Mahoning Sewer System Assets	WW	C/D	$4,682,663	NA	$12,463,148	$11,564,675	$12,083,859	($21,243,405)	($10,393,639)	$10,702,817	$17,601,189
Cheltenham Township Wastewater System Assets	WW	C/D	$17,993,858	NA	$32,704,708	$25,602,628	$16,363,716	$8,628,398	$5,942,971	$16,025,516	$20,689,067
East Norriton Township Wastewater System Assets	WW	C/D	$22,075,476	$42,189,978	$16,012,345	$17,820,388	$19,136,661	$26,514,467	$18,262,335	$13,781,514	$22,886,122
Valley Township Water System Assets	W	C/D	$29,745,275	NA	$13,805,774	$11,538,968	$31,724,522	$72,013,236	$49,600,464	$14,303,280	$15,230,682
Valley Township Wastewater System Assets	WW	C/D	$5,736,732	NA	$13,438,826	$12,399,063	$15,380,904	($26,419,083)	($18,196,638)	$14,548,176	$29,005,872
Upper Pottsgrove Township Wastewater System Assets	WW	C/D	$20,302,817	NA	$11,595,304	$9,346,949	$30,139,248	$12,387,188	$8,531,907	$31,380,427	$38,738,698
Lower Makefield Township Wastewater System Assets	WW	C/D	$17,876,413	$26,128,786	$21,360,500	$21,005,687	$16,014,003	$10,116,103	$8,022,465	$15,489,822	$24,873,934
Willistown Township Wastewater Systems Assets	WW	C/D	($111,070,087)	$14,449,767	$11,492,162	$10,277,864	$24,642,572	$45,496,794	($1,044,094,809)	$24,861,595	$24,313,358
East Whiteland Township Wastewater System Assets	WW	C/D	$28,563,515	$10,526,427	$16,307,429	$13,085,433	$38,397,885	$21,879,547	$24,211,490	$45,960,685	$58,139,226

Definitions: Where "INT" is "Fully Integrated Assets" and "C/D" is "Mostly Collection/Distribution Assets".
Where "WW" is wastewater and "W" is water.

Summar of Selected Transactions Method - Wall Street Transactions
For City of Beaver Falls Wastewater System Assets
Based on Recent Walls Sreet Transactions Without Discount for Cost Free Capital

	City of Beaver Falls Wastewater System Assets's Domestic Customers Indicated Value
Based on Recent SJW Group's Purchase of Connecticut Water Service Inc.	$40,051,121
Based on Recent Aquarion Water Company's Purchase of New England Service Company, Inc.	$33,180,898

Summar of Selected Transactions Method - Wall Street Transactions

For City of Beaver Falls Wastewater System Assets

Based on Recent SJW Group's Bid and Purchase of Connecticut Water Service Inc., With and Without Discount for Cost Free Capital

Connecticut Water Service Inc. (*Financial information reported in 000 of $*)			City of Beaver Falls Wastewater System Assets			
Purchase Price was: $1,106,267						
	Subject Company Statistics	Transaction Multiple	City of Beaver Falls Wastewater System Assets's Company Statistics	Selected Transactions Multiples Valuation		Domestic Customers Indicated Value *
Investor Provided Capital	$573,223	1.93	$8,146,961	$15,722,877		
Gross PP&E	$939,050	1.18	$12,898,487	$15,195,326		
Net PP&E	$697,723	1.59	$7,850,687	$12,447,571	$14,085,224	
Revenues	$107,054	10.33	$3,025,415	$31,263,819		
EBITDA	$48,920	22.61	$773,752	$17,497,461		
EBIT	$32,236	34.32	$532,936	$18,289,159		$27,851,509
Customers	135,645	$8,156	3,259	$26,579,117		
Population	450,000	$2,458	15,580	$38,301,424	$32,440,270	
Average				$21,912,094		
	Subject Company Statistics	Transaction Multiple				
Investor Provided Capital	$573,223	1.93	$8,146,961	$15,722,877		
Gross PP&E (Less "Cost Free" Capital)	$646,723	1.71	$12,898,487	$22,063,820		
Net PP&E (Less "Cost Free" Capital)	$480,521	2.30	$7,850,687	$18,074,041	$18,893,348	
Revenues	$107,054	10.33	$3,025,415	$31,263,819		
EBITDA	$48,920	22.61	$773,752	$17,497,461		
EBIT	$32,236	34.32	$532,936	$18,289,159		$40,051,121
Customers (Adj. "Cost Free" Capital)	93,419	$11,842	3,259	$38,593,238		
Population (Adj. "Cost Free" Capital)	309,914	$3,570	15,580	$55,614,186	$47,103,712	
Average				$27,139,825		

* - Indicated Value based on weighting of 25% Capital Items and 75% Demographics Items

Summar of Selected Transactions Method - Wall Street Transactions

For City of Beaver Falls Wastewater System Assets

Based on Recent Aquarion Water Company's Purchase of New England Service Company, Inc., With and Without Discount for Cost Free Capital

New England Service Company, Inc.			City of Beaver Falls Wastewater System Assets			
Purchase Price was: $49,290,414			City of Beaver Falls Wastewater System Assets's Company Statistics	Selected Transactions Multiples Valuation		Domestic Customers Indicated Value *
	Subject Company Statistics	Transaction Multiple				
Investor Provided Capital	$26,734,587	1.84	$8,146,961	$15,020,508		
Gross PP&E	$54,517,263	0.90	$12,898,487	$11,661,843		
Net PP&E	$36,566,790	1.35	$7,850,687	$10,582,378	$12,801,443	
Revenues	$7,994,088	6.17	$3,025,415	$18,654,280		
EBITDA	$2,729,953	18.06	$773,752	$13,970,399		
EBIT	$1,559,860	31.60	$532,936	$16,840,375		$20,424,355
Customers	9,515	$5,180	3,259	$16,882,549		
Population	26,437	$1,864	15,580	$29,048,101	$22,965,325	
Average				$16,582,554		
	Subject Company Statistics	Transaction Multiple				
Investor Provided Capital	$26,734,587	1.84	$8,146,961	$15,020,508		
Gross PP&E (Less "Cost Free" Capital)	$32,535,719	1.51	$12,898,487	$19,540,732		
Net PP&E (Less "Cost Free" Capital)	$21,822,937	2.26	$7,850,687	$17,731,967	$17,280,620	
Revenues	$7,994,088	6.17	$3,025,415	$18,654,280		
EBITDA	$2,729,953	18.06	$773,752	$13,970,399		
EBIT	$1,559,860	31.60	$532,936	$16,840,375		$33,180,898
Customers (Adj. "Cost Free" Capital)	5,679	$8,680	3,259	$28,288,614		
Population (Adj. "Cost Free" Capital)	15,778	$3,124	15,580	$48,673,366	$38,480,990	
Average				$22,340,030		

* - Indicated Value based on weighting of 25% Capital Items and 75% Demographics Items

Market Approach
City of Beaver Falls Wastewater System Assets
Determination of the Value of Ultimate Whole Customers and the
Market Approach Conclusion

1.	Integrated, Excluding Wholesale Transactions		$36,481,708
2.	Mostly Collection/Distribution Transactions	−	$23,653,042
3.	Market Value of Treatment Only		$12,828,666
4.	Number of Ultimate Customers		7,019
5.	Number of Domestic Customers	−	3,259
6.	Number of Ultimate Wholesale Customers		3,760
7.	Market Value of Treatment Only		$12,828,666
8.	Number of Domestic Customers	÷	3,259
9.	Treatment Value Per Domestic Customer		$3,936
10.	Ultimate Wholesale Customer Equivalency Factor *	×	97%
11.	Treatment Value Per Ultimate Wholesale Customer		$3,818
12.	Number of Ultimate Wholesale Customers	×	3,760
13.	Value of Ultimate Wholesale Customers		$14,355,680
14.	Selected Transactions Method - Domestic Customers		$33,274,541
15.	Market Multiples Method - Domestic Customers		$39,343,441
16.	Market Approach - Domestic Customers **		$36,308,991
17.	Market Value of Ultimate Wholesale Customers	+	$14,355,680
18.	Conclusion - Market Approach		$50,664,671

* Based on the review of flows and revenues, see Exhbit 2, page 2.
** Median of lines 14 and 15.

City of Beaver Falls Wastewater System Assets
Summary of Approach Results and
Fair Market Value Conclusion at Appraisal Date

Valuation Approach	Indicated Value	Conclusion	Consideration
Cost Approach	$32,994,154		25.00%
Income Approach	45,450,675		37.50%
Market Approach	50,664,671		37.50%
		Conclusion $44,292,000	

WORKPAPERS

Daily Bond Yields and Key Indicators

Updated by 11 am ET with data from the previous business day.

Data as of 6-Dec-21

Moody's Daily Long-term Corporate Bond Yield Averages

	Utilities	Industrial	Corporate
Aaa	NA	2.54	2.54
Aa	2.82	2.57	2.7
A	2.95	2.81	2.88
Baa	3.19	3.24	3.22
Avg	2.99	2.79	2.89

Moody's Daily Treasury Yield Averages

Short-Term (3-5 yrs)	1.07
Medium-Term (5-10 yrs)	1.3
Long-Term (10+ yrs)	1.75

Moody's Daily Public Utility Common Stock Yield Averages

Price	518.33
Yield	3.74
New Dividend	19.38

Moody's Commodity and Scrap Price Indexes

Spot Commodity Index	9,266.03
Industrial Metals Index	2,907.66

* Moody's “Aaa” Utilities Index was suspended on 12/10/01. Since 2000, TVA was the only issuer left in the index as a decade of deregulation, debt growth, competition, and consolidation eliminated the rest of the Aaa universe.

Index Name: S&P Municipal Bond Revenue Index

As of:	16-Jun-22
12/27/2021	2.68%
12/28/2021	2.68%
12/29/2021	2.68%
12/30/2021	2.69%
12/31/2021	2.68%
1/3/2022	2.70%
1/4/2022	2.71%
1/5/2022	2.71%
1/6/2022	2.75%

FED H.15

DATE	DAAA	DBAA	DGS10	DGS20	DGS30
2021-12-27	2.73	3.34	1.48	1.92	1.88
2021-12-28	2.71	3.35	1.49	1.94	1.90
2021-12-29	2.70	3.40	1.55	2.00	1.96
2021-12-30	2.71	3.37	1.52	1.97	1.93
2021-12-31	2.68	3.34	1.52	1.94	1.90
2022-01-03	2.79	3.45	1.63	2.05	2.01
2022-01-04	2.82	3.50	1.66	2.10	2.07
2022-01-05	2.84	3.51	1.71	2.12	2.09
2022-01-06	2.81	3.51	1.73	2.12	2.09

FED H.15

		10-yr T-bond	20-yr T-bond	30-yr T-bond
Spot	12/31/21	1.52	1.94	1.90

FED H.15		**AAA Corp**	**BAA CORP**		A Rated Utility		
	12/31/21	2.68	3.34	Spread	0.14	0.12	
Moody's Spot ===>		2.54	3.22	Moody's Spot ===>	2.95	2.95	
		0.14	0.12	Implied	3.09	3.07	3.08

Moody's Daily Long-term Corporate Bond Yield Averages

	12/6/2021	Utilities	Industrial	Corporate
Spot	Aaa	NA	2.54	2.54
	Aa	2.82	2.57	2.7
	A	2.95	2.81	2.88
	Baa	3.19	3.24	3.22
	Avg	2.99	2.79	2.89

S&P Municipal Bond Revenue Index

12/31/21 2.68%

Utilities
Aa
A **3.08**
Baa

		Decade Spread	**Annual Spread**
10-Year	1.52		
20-Year	1.94	0.420	0.042
30-Year	1.90	-0.040	

REVENUE BOND INDEX	2.68
10-20 Yr	0.21
20-30 Yr	-0.04
	2.85

30-Yr Rev Bond Est. **2.85**

2020 Lt Debt	3.02	3.08
Prf Stk	5.76	191%
Pref Stock Est.	191%	**5.87**

	12/31/21
A-Rated Rev Bonds	**2.85**
A-Rated PU Bonds	**3.08**
A-Rated PU Pref Stk	**5.87**
30-yr T-bond	**1.90**

	SBBI	SBBI
Equity Risk Premium	7.46	7.46
Beta (Value Line Med.)	0.80	0.80
Risk Adjusted Equity Premium	5.97	5.97
Yield (RF)	1.90	1.90
Size Premium	2.48	0.00
	10.35	7.87

High 10.35
Low 7.87

0.80

12.33 Total Return SBBI 1926-2021
4.87 Income Return SBBI 1926-2021

1.90 30-yr T-bond

	Recent Market Value (Mill $)	Market Quartile Name	Market Quartile	Quartile Size Premium	Value Line Beta
American States Water Co	3,820.69	Mid-Cap	2	2.48	0.65
American Water Works Co Inc	34,285.22	Large-Cap	1	0	0.9
Artesian Resources Corp	434.89	Mico-Cap	4	6.21 -	
California Water Service Gp	3,780.41	Mid-Cap	2	2.48	0.7
Essential Utilities, Inc.	13,569.77	Large-Cap	1	0	1
Middlesex Water Co	2,104.89	Low-Cap	3	3.95	0.7
SJW Corp	2,183.28	Low-Cap	3	3.95	0.8
York Water Co	652.35	Low-Cap	3	3.95	0.85
Average	7,603.940	Mid-Cap	2	2.48	0.80
Median	2,981.846	Mid-Cap	2	2.48	0.80

6/17/2022

9/30/21							12/31/21		Book Ratios					Market Ratios			
Company Name	Ticker Symbol	LT Debt-Total Qtly	Preferred S	Minority In	Common Equity-Total-Qtly	Invested Capital-Total Qtly	Market Value-Mnthly		LTD	Pref	Equity			LTD	Pref	Equity	
AMERICAN ST.	**AWR**	613.982	0.000	0.000	678.935	1,292.917	3,820.686	AMERICA	0.475	0.000	0.525	1.000		0.138	0.000	0.862	1.000
AMERICAN W/	**AWK**	10,490.000	0.000	0.000	6,866.000	17,356.000	34,285.219	AMERICA	0.604	0.000	0.396	1.000		0.234	0.000	0.766	1.000
ARTESIAN RES	**ARTN.A**	145.301	0.000	0.000	174.642	319.943	434.885	ARTESIAI	0.454	0.000	0.546	1.000		0.250	0.000	0.750	1.000
CALIFORNIA W	**CWT**	1,064.904	0.000	4.689	1,115.971	2,185.564	3,780.411	CALIFORI	0.487	0.000	0.513	1.000		0.220	0.000	0.780	1.000
ESSENTIAL UT	**WTRG**	5,712.218	0.000	0.000	5,127.862	10,840.080	13,569.765	ESSENTIA	0.527	0.000	0.473	1.000		0.296	0.000	0.704	1.000
MIDDLESEX W	**MSEX**	278.624	2.084	0.000	362.340	643.048	2,104.891	MIDDLES	0.433	0.003	0.564	1.000		0.117	0.001	0.882	1.000
SJW GROUP	**SJW**	1,446.320	0.000	0.000	1,000.711	2,447.031	2,183.280	SJW GROI	0.591	0.000	0.409	1.000		0.398	0.000	0.602	1.000
THE YORK WA	**YORW**	134.400	0.000	0.000	150.660	285.060	652.347	THE YORI	0.471	0.000	0.529	1.000		0.171	0.000	0.829	1.000
									0.505	0.000	0.494		Avg	0.228	0.000	0.772	
									0.481	0.000	0.519		Med	0.227	0.000	0.773	

Assumptions:	12/31/2021
Debt Cost	3.08
Pref. Stock Cost	5.87
Equity Cost	10.35
Equity Cost	7.87

Ratio	Cost	Wt	Shield	Overall	
22.70%	3.080	0.70	0.72	0.5033952	
0.00%	5.870	0.00	1	0	
77.30%	10.350	8.00	1	8.00055	
		8.70		**8.50**	**<<<<ANSWER**
22.70%	3.080	0.70	0.72	0.5033952	
0.00%	5.870	0.00	1	0	
77.30%	7.868	6.08	1	6.081964	
		6.78		**6.59**	**<<<<ANSWER**

	ROE
Public Meeting held October 7, 2021	9.8

DSIC Weighted Cost of Capital

Assumptions:	12/31/2021
Debt Cost	3.08
Pref. Stock Cost	5.87
DSIC Equity Cost	9.8

	Ratio	Cost	Wt	Shield	Overall	
Debt	48.10%	3.080	1.48	0.72	1.066666	
Pref	0.00%	5.870	0.00	1	0	
Equity	51.90%	9.800	5.09	1	5.0862	
			6.57		**6.15**	**<<<<ANSWER**

71.59.88.179

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Aqua America's Pennsylvania Subsidiary Enters Agreement to Purchase Cheltenham Township Wastewater System

July 02, 2018 07:00 AM Eastern Daylight Time

BRYN MAWR, Pa.--(BUSINESS WIRE)--Aqua America announced today that its Pennsylvania subsidiary has signed an asset purchase agreement with Cheltenham Township to purchase its wastewater system, which serves approximately 10,500 connections in Montgomery County, for $50.25 million. The agreement must be approved by the Pennsylvania Public Utility Commission.

The transaction will be Aqua Pennsylvania's fourth acquisition application referred to the Pennsylvania PUC since Act 12, commonly referred to as fair market value legislation, was enacted last year. Aqua Pennsylvania has asset purchase agreements with the 2,100-customer New Garden Township wastewater system in Chester County and the 5,400-customer Limerick Township wastewater system in Montgomery County. The company also has an agreement, signed in December 2017, with East Bradford Township in Chester County to purchase its 1,200-customer wastewater collection system. Aqua already provides water service to East Bradford, as it does with Cheltenham.

These four systems, including Cheltenham, total more than 19,000 wastewater connections and would nearly double Aqua Pennsylvania's current 22,000-customer wastewater operation.

The new law encourages a consolidation of the fragmented industry for the benefit of customers, the environment, and local governments. This transaction will benefit customers by leveraging compliance expertise, purchasing power gained through economies of scale and operational efficiencies to ultimately benefit service to our customers at affordable rates.

"We are pleased with the momentum we are gaining to reach agreements with municipal systems," said Aqua America Chairman and CEO Christopher Franklin. "Act 12 is having its intended impact, allowing municipalities to be compensated for the fair value of their water and wastewater assets and enabling utility professionals to bring expertise to systems in need."

Aqua Pennsylvania President Marc Lucca says his team is ready to work with the Cheltenham community on making needed system improvements.

"As with our pending agreements with New Garden, East Bradford and Limerick, the Aqua Pennsylvania team is looking forward to assuming Cheltenham's sewer utility responsibilities so the township can direct its attention and capital to other priorities," said Lucca. "We are anxious to begin the work necessary to help the township meet the requirements of an outstanding Pennsylvania Department of Environmental Protection consent order, specifically related to inflow and infiltration issues there."

In total, Aqua has plans to spend nearly $50 million over the next 10 years to improve Cheltenham's wastewater system.

Aqua America is one of the largest U.S.-based, publicly traded water utilities and serves nearly 3 million people in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Indiana and Virginia. Aqua America is listed on the New York Stock Exchange under the ticker symbol WTR. Visit AquaAmerica.com for more information.

Forward-Looking Statements

This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 including, among others: the company's ability to successfully close the acquisition of the wastewater systems noted in this release. There are important factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements including: general economic business conditions, the successful integration of the customers and the facilities, the success of the company's growth efforts including its ability to utilize Act 12, and other factors discussed in our Annual Report on Form 10-K, which is on file with the Securities and Exchange Commission.

Cheltenham Township
1329 Proceeding
Cheltenham Twp. - Water Accounts reported for Sewer Billing

Type of Service	Gallons	Customers[1]
Commercial	280,938,300	534
Industrial	364,400	14
Public	9,962,700	23
Residential	484,692,800	9,648
Total	**775,958,200**	**10,219**

1. Customers include all Active and Inactive Accounts

The following table breaks down the above total figures by customer class as of December 31, 2017, 2016, and 2015 :

	2017	2016	2015
Customers:			
Residential	118,493	111,494	110,254
Commercial	9,386	8,626	8,569
Industrial	536	479	478
Public Authority	1,072	948	964
Fire Protection	3,178	2,876	2,815
Other (including non-metered accounts)	2,980	545	553
Total	135,645	124,968	123,633
Water Revenues *(in thousands):*			
Residential	$ 62,831	$ 59,884	$ 58,439
Commercial	13,676	12,250	11,816
Industrial	3,196	3,176	3,229
Public Authority	3,845	3,510	3,193
Fire Protection	20,235	18,486	18,016
Other (including non-metered accounts)	3,271	1,361	1,348
Total	$ 107,054	$ 98,667	$ 96,041
Customer Water Consumption *(millions of gallons):*			
Residential	6,408	6,583	6,551
Commercial	2,026	1,954	1,941
Industrial	711	724	777
Public Authority	575	539	503
Total	9,720	9,800	9,772

The Regulated Companies own various small, discrete parcels of land that are no longer required for water supply purposes. At December 31, 2017 , this land totaled over 600 acres. Over the past several years, we have been disposing of these land parcels through sales and/or donations, primarily to towns and municipalities. For more information, please refer to *Segments of Our Business* below.

Additional information on land dispositions can be found in Item 7 – "Management's Discussion and Analysis of Financial Conditions and Results of Operations – Commitments and Contingencies".

Competition

Our Regulated Companies face competition from a few small privately-owned water systems operating within, or adjacent to, our franchise areas and from municipal and public authority systems whose service areas in some cases overlap portions of our franchise areas.

Employees

As of December 31, 2017 , we employed a total of 294 people. Our employees are not covered by collective bargaining agreements.

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DEALS AUGUST 6, 2018 / 5:11 PM / 6 MONTHS AGO

SJW Group makes $1.1 billion all-cash offer for Connecticut Water

3 MIN READ

NEW YORK (Reuters) - SJW Group (SJW.N) and Connecticut Water Service Inc (CTWS.O) said on Monday they were changing from a merger to an acquisition agreement, with SJW offering to buy the New England utility for $1.1 billion in cash instead of combining stock.

The switch to an all-cash offer is worth $70 per Connecticut Water share, a 33 percent premium to Connecticut Water's share price prior to the original deal announced in March, according to a joint statement.

It was also higher than the implied $61.86 per share value of the Clinton, Connecticut-based firm under the merger-of-equals transaction, which would have created a combined company in which existing SJW shareholders would hold 60 percent of the stock.

SJW closed 2.3 percent lower, while Connecticut Water was 9 percent higher at $68.50.

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To pay for the acquisition, SJW will initially utilize a $975 million bridge loan from financial adviser JP Morgan Chase (JPM.N). Ultimately, the purchase would be covered by debt and between $450 million and $500 million of equity finance.

The new deal aims to conclude in the first quarter of 2019, subject to approvals from Connecticut Water's shareholders, as well as regulators in Connecticut and Maine.

The duo's original all-stock merger announcement in March triggered competing offers from Eversource Energy (ES.N) and California Water Service Group (CWT.N).

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"We have converted from a stock-for-stock deal to a cash offer, which will resolve any further market distractions from the inferior proposals," SJW Chief Executive Eric Thornburg told Reuters, in reference to the actions by Eversource and CalWater.

Switching to an acquisition, versus a merger structure, means that SJW shareholders will no longer be required to vote on approving the deal, the statement said.

RBS sounds alarm over Brexit

CalWater has an open tender offer to acquire SJW that runs until Sept. 28.

However, asked if the change was aimed at heading off any shareholder challenge to the deal, Thornburg told Reuters it "wasn't a consideration" and it had received nothing but support from its shareholders.

CalWater declined to comment. A spokesman for Eversource said the company was evaluating developments but, as it has made clear, it will be disciplined in pursuing this or any other transaction.

Reporting by David French in New York; Additional Reporting by Liana B. Baker; Editing by Lisa Shumaker

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425 1 tm2112545d1_425.htm 425

Filed by Eversource Energy
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to Rule 425 under the Securities Act of 1933

Subject Company: New England Service Company





JOINT NEWS RELEASE

New England Service Company To be Acquired by Aquarion Water Company

Region's largest private water company expands operations in
Connecticut, Massachusetts and New Hampshire

BRIDGEPORT, CONN. – April 8, 2021 – Aquarion Company (Aquarion), parent of Aquarion Water Company, and New England Service Company (NESC) (OTC Pink Sheets Trading Symbol: NESW) today announced that they have entered into a definitive agreement whereby Aquarion will acquire all outstanding shares of NESC and NESC will become a wholly-owned subsidiary of Aquarion. Aquarion is a water supply company and holding company based in Bridgeport, Connecticut, providing regulated water service to customers in Connecticut, Massachusetts, and New Hampshire. NESC is a holding company based in Plainville, Connecticut providing regulated water service to customers in Connecticut, Massachusetts, and New Hampshire.

Under the agreement, which was unanimously approved by the Boards of Directors of both Aquarion and NESC, the acquisition will be executed through a stock-for-stock transaction that is structured to be a tax-free reorganization. The agreement provides that the stockholders of NESC will receive 0.51208 shares of the common shares of Aquarion's parent, Eversource Energy (Eversource) (NYSE: ES), in exchange for each share of NESC common stock. The fixed exchange ratio implies a $44.90 per share price based on the $87.68 closing price of Eversource Energy common shares on April 6, 2021. In connection with the exchange, Eversource Energy will issue approximately 463,000 shares of ES Common Stock at closing.

The merger includes NESC's Valley Water System in Connecticut, Colonial Water Company and Mountain Water Systems in Massachusetts, and Abenaki Water Company in New Hampshire, as well as unregulated service operations throughout New England. The merger will add nearly 10,000 customers to Aquarion's existing base of 216,000 customers. Under the agreement, all NESC employees will be retained.

"This merger will create long-term benefits for customers, employees, and the communities we serve," said Donald Morrissey, President of Aquarion Water Company. "We will make investments in these water systems focused on reliability and water quality and deliver a superior customer experience. We also welcome NESC's dedicated employees to the Aquarion team. I'm confident that we share a similar passion for delivering superior water service to customers and the communities we serve and being great stewards of the environment."

Over the last ten years, Aquarion has integrated over 70 water systems into its operations, strengthening the company's ability to deliver high-quality water to communities throughout the region.

"I am pleased to announce the NESC and Aquarion combination and look forward to working with Aquarion's leadership team on a smooth transition for our customers and employees," said Don Vaughan, NESC Chairman. He also noted, "Aquarion is well-positioned to deliver the reliable high-quality water service that our customers expect." NESC President, Nicholas LaChance, added "The stockholders, customers and employees of NESC will benefit from this deal with Aquarion. We view this transaction with Aquarion as a win for all of our stakeholders, and we look forward to working closely with their team."

The completion of the transaction will require approval by the stockholders of NESC, and the NESC Board of Directors has resolved to recommend the adoption of the merger agreement by the stockholders. The transaction is also subject to the approval of regulatory authorities, including the Connecticut Public Utilities Regulatory Authority, Massachusetts Department of Public Utilities, and New Hampshire Public Utilities Commission, and satisfaction of several other conditions. The parties plan to file all required regulatory applications over the coming months with an anticipated closing by the end of 2021.

Advisors and Counsel

Ropes & Gray LLP served as counsel to Aquarion Company and Eversource Energy in the transaction. Boenning & Scattergood, Inc. provided a fairness opinion to the Board of Directors of New England Service Company. Cranmore, FitzGerald and Meaney served as counsel to New England Service Company.

About Aquarion Water Company:

Aquarion Water Company is the public water supply company for more than 625,000 people in 52 cities and towns throughout Connecticut, as well as serving customers in Massachusetts and New Hampshire. It is the largest investor-owned water utility in New England and among the seven largest in the U.S. Based in Bridgeport, CT, Aquarion has been in the public water supply business since 1857. Across its operations, Aquarion strives to act as a responsible steward of the environment and to assist the communities it serves in promoting sustainable practices. Aquarion Company is a wholly-owned subsidiary of Eversource.

For more information on Aquarion Water Company, please visit www.aquarionwater.com or www.facebook.com/aquarionwater.

About New England Service Company

Headquartered in Plainville, Connecticut, NESC is predominantly involved in the operation, management and financing of water systems and other related activities. NESC was formed in 1997 to operate in both regulated and unregulated water markets. NESC is the sole stockholder of four regulated water companies.

For more information on New England Service Company please visit
www.NewEnglandServiceCompany.com

This news release includes statements concerning Aquarion and Aquarion Water Company's expectations, beliefs, plans, objectives, goals, strategies, assumptions of future events, future financial performance or growth and other statements that are not historical facts, including statements regarding the planned merger with New England Service Company, the timing of such transaction and benefits anticipated from such transaction. These statements are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Generally, readers can identify these forward-looking statements through the use of words or phrases such as "will," "estimate," "expect," "anticipate," "intend," "plan," "project," "believe," "forecast," "should," "could" and other similar expressions. Forward-looking statements involve risks and uncertainties that may cause actual results or outcomes to differ materially from those included in the forward-looking statements. Factors that may cause actual results to differ materially from those included in the forward-looking statements include, but are not limited to: the transaction is subject to conditions to closing, including regulatory approvals, that may not be satisfied; it may take longer than anticipated to consummate the transaction; we may not realize the benefits we anticipate from the transaction; unforeseen liabilities; risks relating to integration of the acquired business; and other presently unknown or unforeseen factors.

Other risk factors are detailed in Eversource Energy's reports filed with the Securities and Exchange Commission (SEC) and updated as necessary, and are available on Eversource Energy's website at www.eversource.com and on the SEC's website at www.sec.gov. All such factors are difficult to predict and contain uncertainties that may materially affect Aquarion or Aquarion Water Company's actual results, many of which are beyond our control. You should not place undue reliance on the forward-looking statements; each speaks only as of the date on which such statement is made, except as required by federal securities laws, and Aquarion Water Company undertakes no obligation to update any forward-looking statement or statements to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events.

Additional Information

This communication does not constitute an offer to buy or solicitation of any offer to sell securities. This communication relates to a proposed business combination transaction between Aquarion Company and New England Service Company. In connection with the proposed business combination, Eversource Energy will file a registration statement with the SEC. This communication is not a substitute for any registration statement, prospectus/proxy statement or other document Eversource Energy, Aquarion Company and/or New England Service Company may file with the SEC in connection with the proposed transaction. INVESTORS AND SECURITY HOLDERS OF NEW ENGLAND SERVICE COMPANY ARE URGED TO READ CAREFULLY THE REGISTRATION STATEMENT, PROSPECTUS, PROXY STATEMENT AND OTHER DOCUMENTS FILED WITH THE SEC WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT EVERSOURCE ENERGY, AQUARION COMPANY, NEW ENGLAND SERVICE COMPANY AND THE PROPOSED TRANSACTION. Investors and security holders may obtain free copies of these documents (when they are available) and other related documents filed with the SEC at the SEC's web site at www.sec.gov or by directing a request to Eversource's Investor Relations department at (860) 665-5154 or by email to jeffrey.kotkin@eversource.com.

Certain Information Regarding Participants

This filing may be deemed solicitation material in respect of the proposed business combination transaction between Aquarion Company and New England Service Company. The directors, trustees, executive officers and certain other members of management and employees of Eversource Energy, Aquarion Company and New England Service Company may be deemed "participants" in the solicitation of proxies from stockholders of New England Service Company in favor of the proposed merger. You can find information about Eversource's trustees and executive officers in Eversource's annual report on Form 10-K for the year ended December 31, 2020, which was filed with the SEC on February 17, 2021 and its proxy statement for its 2021 annual meeting filed with the SEC on March 26, 2021. Information regarding the persons who may, under the rules of the SEC, be considered participants in the solicitation of the stockholders of New England Service Company in connection with the proposed merger will be set forth in the registration statement, prospectus/proxy statement or other documents filed with the SEC if any when they become available. You may obtain these documents (when they become available) free of charge at the SEC's web site at www.sec.gov and from Investor Relations at Eversource as described above.

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VALLEY WATER SYSTEMS, INC.

Notes to Financial Statements
Years Ended December 31, 2020 and 2019

1. Description of the Company

Valley Water Systems, Inc. (the "Company"), a wholly owned subsidiary of New England Service Company ("NESC"), is a public utility distributing water to approximately 6,760 customers in the towns of Plainville, Farmington, and Southington, Connecticut area. As a public utility operating in Connecticut, the Company functions under rules and regulations prescribed by the State of Connecticut Public Utilities Regulatory Authority ("PURA").

2. Summary of Significant Accounting Policies

Basis of Presentation

The Company maintains its accounts in accordance with the PURA Uniform System of Accounts as prescribed for Water Utilities Class A. The Company prepares its financial statements in accordance with accounting principles generally accepted in the United States of America which include the provisions of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 980, *Regulated Operations* ("ASC 980"). Under ASC 980, regulated companies defer costs and credits on the balance sheet as regulatory assets and liabilities when it is probable that those costs and credits will be recognized in the rate setting process in a period different from the period in which they would have been reflected in income by an unregulated company. These deferred regulatory assets and liabilities are then reflected in the income statement in the period in which the same amounts are reflected in rates charged for service.

Use of Estimates

The preparation of financial statements require management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported revenues and expenses. Accordingly, actual results could differ from these estimates.

Cash and Cash Equivalents

Cash and cash equivalents includes cash balances held in bank accounts and highly liquid debt instruments with maturities of three months or less at the time of purchase.

From time to time, the Company had on deposit at financial institutions cash and cash equivalents which exceed current federal deposit insurance limitations. The Company had not experienced any losses in such accounts to date and believes it is not exposed to any significant credit risk on cash and cash equivalents.

Accounts Receivable

Accounts receivable are stated at the amount management expects to collect from outstanding balances. The Company continuously monitors the creditworthiness of customers and establishes, when necessary, an allowance for amounts that may become uncollectible in the future based on current economic trends, historical payment and bad debt write-off experience.

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CONSUMPTION INFORMATION (Dover Division)

1. Estimated total population of territory covered by franchise		
2. Estimated population reached by the distributing system		
3. Estimated population actually supplied		1,809
4. Total consumption during the year in gallons		50,866,736
5. Average daily consumption (in gallons)		138,429
6. Day on which the greatest amount was pumped		8/13/2020
7. Gallons pumped on above day		368,000
8. Week during which greatest amount was pumped	8/9/20-8/15/20	
9. Gallons pumped during above week		1,906,000
10. Gallons per day per service		218
11. Consumption metered		50,866,736
12. Consumption metered,	100 percent of total consumption	

13. CUSTOMERS

Number Being Supplied at Beginning of Year	Discontinued Since	Connected Since	Number Being Supplied at Close of Year
637	1	0	636

Name of City, Town, or District	Number of Customers as of December 31
Dover, MA	636

Sixty-four of these connections represent contractual service to Town of Dover plus one master meter at town connection.

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CONSUMPTION INFORMATION (Plymouth Division)

1. Estimated total population of territory covered by franchise	2,513
2. Estimated population reached by the distributing system	2,513
3. Estimated population actually supplied	2,513
4. Total consumption during the year (GALS)	101,211,880
5. Average daily consumption	294,414
6. Day on which the greatest amount was pumped	7/27/2020
7. Gallons pumped on above day	724,300
8. Week during which greatest amount was pumped	7/26/2020-8/1/2020
9. Gallons pumped during above week	4,544,900
10. Gallons per day per service	219
11. Consumption metered	101,211,880
12. Consumption metered,	100% percent of total consumption

13. CUSTOMERS

Number Being Supplied at Beginning of Year	Discontinued Since	Connected Since	Number Being Supplied at Close of Year
853	0	9	862

Name of City, Town, or District	Number of Customers as of December 31
Plymouth, MA	862

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CONSUMPTION INFORMATION (Springdale Division)

1. Estimated total population of territory covered by franchise		115
2. Estimated population reached by the distributing system		115
3. Estimated population actually supplied		115
4. Total consumption during the year (GALS)		7,463,606
5. Average daily consumption		20,448
6. Day on which the greatest amount was pumped		6/27/2020
7. Gallons pumped on above day		88,000
8. Week during which greatest amount was pumped	6/21/20-6/27/20	
9. Gallons pumped during above week		407,000
10. Gallons per day per service		418
11. Consumption metered		7,463,606
12. Consumption metered,	100 percent of total consumption	

13. CUSTOMERS

Number Being Supplied at Beginning of Year	Discontinued Since	Connected Since	Number Being Supplied at Close of Year
41	0	1	42

Name of City, Town, or District	Number of Customers as of December 31
Dover, MA	42

A-6 LIST OF TOWNS SERVED

List by operating divisions the towns served directly, indicating those in which franchise is for limited area by an asterisk (*) after name. Give population of the area and the number of customers.

Line No.	Town	Population of Area	Number of Customers	Line No.	Town	Population of Area	Number of Customers
					Sub Totals Forward:	30,120	725
1	Belmont N. H.	7,356	160	16			
2	Bow, N.H.	7,519	95	17			
3	Carroll, N.H.	763	409	18			
4	Belmont, NH	7,356	22	19			
5	Gilford, NH	7,126	39	20			
6				21			
7				22			
8				23			
9				24			
10				25			
11				26			
12				27			
13				28			
14				29			
15	Sub Totals Forward:	30,120	725	30	Total	30,120	725

A-7 PAYMENTS TO INDIVIDUALS

List names of all individuals, partnerships, or corporations to whom payments totaling $10,000 or more for services rendered were made or accrued during the year, and the amount paid or accrued to each. Where payments or accruals to the individual members of a partnership or firm together total $10,000 or more, list each individual and the amount paid or due each.

Line No.	Name	Address	Amount
1	NESC	Plainville,, Ct.	222,877
2	City of Laconia	Laconia, NH	91,004
3	Rowell's Services	Northfield, NH	57,242
4	Eversource	Boston, MA	43,226
5	CoBank	Greenwood Village, CO	43,000
6	Stephen P. St. Cyr & Associates	Biddeford, Me.	40,959
7	NH Brown Law	Somersworth, NH	37,206
8	PKF O'Conner Davies	Shelton, Ct.	36,020
9	State of NH	Concord, NH	16,544
10	Fortin Construction	Londonderry, NH	16,155
11	Town of Carroll	Carroll, NH	15,201
12	Town of Belmont	Belmont, NH	14,953
13	Harcros Chemicals	Chicago, IL	12,909
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30	Total		$ 647,296

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CONSUMPTION INFORMATION

1. Estimated total population of territory covered by franchise	1100	
2. Estimated population reached by the distributing system	1100	
3. Estimated population actually supplied	1100	
4. Total consumption during the year	31,956,826	gals.
5. Average daily consumption	87,553	gals.
6. Day on which the greatest amount was pumped	7/20/2020	
7. Gallons pumped on above day	173,596	
8. Week during which greatest amount was pumped	7/16/20-7/25/20	
9. Gallons pumped during above week	975,066	
10. Gallons per day per service	180	
11. Consumption metered	31,956,826	gals.
12. Consumption metered,	100	% of total consumption

13. CUSTOMERS

Number Being Supplied at Beginning of Year	Discontinued Since	Connected Since	Number Being Supplied at Close of Year
487	0		487

Name of City, Town, or District	Number of Customers as of December 31
Sheffield, MA	
*487 metered customers, 3 fixed fee customers	490

Wastewater treatment is provided by the Borough of West Chester pursuant to a Sewer Capacity Agreement dated November 14, 2017, by and between the Borough and East Bradford Township. Copies of West Chester's 2017 Chapter 94 Reports to DEP for the Goose Creek WWTP and for the Taylor Run WWTP are attached hereto as **Exhibit E3** and **Exhibit E4**.

15. The Goose Creek WWTP has a permitted treatment capacity of 1.672 MGD. The Taylor Run WWTP has a permitted treatment capacity of 1.50 MGD. The elevation of the Goose Creek WWTP is generally about EL 370. The elevation of the Taylor Run WWTP is generally about EL 260. The elevation of the Requested Territory ranges from approximately EL 365 to EL 280.

16. Water service in the Requested Territory is provided by both Aqua Pennsylvania, Inc. and private wells.

17. The original cost, by year and major plant category, of the East Bradford Township used and useful plant in service is $8,294,931 with a related calculation depreciation reserve of $2,820,983. The original cost value includes a series of capped sewers along the North Benjamin Drive area of the Township. The capped sewers include approximately 3,300 linear feet of 8" Gravity PVC pipe and 20 manholes, with an estimated original cost value of approximately $100,000 as estimated by Aqua. The pipe and manholes are included in the totals on page 2-11 and 2-12 of Exhibit W. Aqua will categorize the capped sewer pipe and manholes as plant held for future use in its asset allocation upon closing. The area of capped sewers along North Benjamin Drive is not included in the Requested Territory.

18. Tentative journal entries to record the transaction are presented in Section IV.

IV. ASSET PURCHASE AGREEMENT

19. The *Assets Purchase Agreement* is dated December 20, 2017. The *First Amendment to Assets Purchase Agreement* is dated April 18, 2018. The purchase price is Five Million Dollars

($5,000,000.00). In addition to the purchase price, Section 1.5 of the Agreement provides that Aqua will assume certain defined liabilities and pay certain out-of-pocket costs incurred by East Bradford Township.

20. The purchase price and Agreement are based on arm's length negotiations. Aqua and East Bradford Township are not affiliated with each other. Aqua will use short term debt initially for the purchase of the assets with the expectation that the short term debt will be converted to long term debt and equity capital at a later date.

21. The wastewater system assets to be acquired are the "Assets" and have the meaning specified in Section 1.1 of the Agreement. The Assets include the assets, properties and rights of East Bradford Township that comprise the wastewater system or that are owned by East Bradford Township and used by it solely in connection with operation of the system.

22. "Excluded Assets," which are those assets not being transferred to Aqua, have the meaning specified in Section 1.4 of the Agreement. Excluded Assets include customer service laterals that run from the curb area to individual customer residences or structures; piping and fixtures internal to each customer residence or structure; cash and cash equivalents; and the items set forth in Schedule 1.4 of the Agreement.

23. "Assumed Liabilities" has the meaning specified in Section 1.6 of the Agreement and include the liabilities and obligations under the Assumed Contracts that arise after Closing, liabilities incurred or arising from and after Closing under or from failure to comply with permits, approvals or licenses related to the system that are transferred to Aqua and the obligation to provide wastewater service after Closing. The Assumed Contracts, which are listed in Schedule 1.6 of the APA and attached hereto as **Exhibit F1** and **Exhibit F2**, are the Sewer Capacity Agreement dated November 14, 2017, by and between the Borough of West Chester and East Bradford Township and the Intergovernmental Cooperation Agreement dated March 15, 1999, between East Bradford and Birmingham Township.

East Bradford Township

	# of Customers	Annual Gallons Treated (2017)
Residential- Single Family	399	23,783,560
Residential- Townhomes	814	36,390,635
Commercial		
Bradford Retail - The Bistro		112,800
Bradford Retail - Strip Stores		688,000
Brookworth Plaza - Dunkin Donuts		147,200
Brookworth Plaza - CVS		35,300
Brookworth Plaza - empty building		-
Brookworth Plaza - Strip Stores		142,000
Brookworth Plaza - PNC Bank		17,000
Countryside Food Mart		52,700
Antique Ice Museum		3,600
Mrs. Mike's Restaurant		103,110
Brandywine Hall Nursing Home		8,281,000
Daily Local News - now empty building		24,400
Bradford Plaza - Strip Stores		1,991,430
Bradford Plaza - Giant Food Store		2,527,700
Bradford Plaza - Walgreens		47,000
Bradford Plaza - Giant Gas Station		6,200
Chester County Art Association		120,100
Industrial		
Diesel Systems		66,300
Chem Service		173,400
Other Class(?)*		
Goddard School		252,800
Hillsdale Elementary School		649,700
WCU S Campus Apts - 144		24,200
WCU S Campus Apts - 167		583,900
WCU S Campus Apts - 168		500,900
WCU S Campus Apts - 169		441,900
WCU S Campus Apts - 170		570,900
WCU S Campus Apts - 171		318,900
WCU S Campus Apts - 172		422,000
WCU S Campus Apts - 173		306,400
WCU S Campus Apts - 174		424,500
WCU S Campus Apts - 175		323,400
WCU S Campus Apts - 176		340,000
WCU S Campus Apts - 177		356,000
University Student Housing 1		4,463,500
University Student Housing 2		5,429,000
Total		90,121,435

*May include church, school, public, etc… (please insert a line for each)

420,000
153,300,000

35
399
814
1,248

Q. How many customers will the acquisition add?

A. The acquisition of East Norriton will add 4,966 customers to Aqua's existing 28,000 wastewater customers. This is an increase in customers of 17.7% (or about 20%).[23]

Q. Will the acquisition increase rates for the customers to be acquired?

A. Yes. Aqua witness Packer states that he reasonably expects that rates for East Norriton customers will increase under Aqua ownership.[24] As discussed above, Aqua calculates that if the entire revenue deficiency resulting from the acquisition is applied to East Norriton Township customers, the adjusted average bill for customers using four thousand gallons per month would increase from approximately $39 per month to $52 per month, which would be a 35% rate increase.[25]

Q. Will the acquisition increase rates for existing Aqua customers?

A. Yes. Mr. Packer's testimony shows that, as a result of the acquisition, rates for existing Aqua water customers and existing Aqua wastewater customers will increase if the revenue deficiency is not fully borne by the East Norriton Township customers. Mr. Packer's schedules show estimated increases to existing total Aqua water and wastewater customers ranging from $0.17 per month to $1.66 per month ($2.04 per year to $19.92 per year).[26] If the costs were spread to only existing wastewater customers, and not water customers, the

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[23] Exhibit U, Direct Testimony of William C. Packer, p. 9, lines 2-3 and 11-12, p. 16, lines 11-12.

[24] Exhibit U, Direct Testimony of William C. Packer, p. 18, lines 17-20 and Appendix A, p.1; Response to OCA-II-4, Attachment 1, p. 22 (attached as OCA Exhibit DJG-12).

[25] Exhibit U, Direct Testimony of William C. Packer, Appendix A, pp. 1-2 ($38.52 + $13.42 = $51.94). ($13.42 ÷ $38.52) x 100 = 34.84%.

[26] Exhibit U, Direct Testimony of William C. Packer, Appendix A, p. 1.

Q. Describe the scope and organization of your testimony.

A. My testimony addresses the application filed by Aqua Pennsylvania Wastewater, Inc. ("Aqua" or the "Company") for the acquisition of the East Norriton Township (the "Township") wastewater collection system assets. My testimony responds to the fair market value ("FMV") approaches addressed in the testimonies of Harold Walker, III of Gannett Fleming, who sponsors the FMV appraisals commissioned by the Company, and Jerome C. Weinert, who sponsors the appraisal commissioned by the Township. I also discuss the sufficiency of the notices sent to the customers of Aqua and the Township regarding the impact on rates of the proposed acquisition.

II. EXECUTIVE SUMMARY

A. Overview

Q. Please summarizes Aqua's application in this proceeding.

A. Aqua's application proposes to acquire the Township's wastewater assets under Sections 1102 and 1329 of the Public Utility Code (the "Code"). According to Section 1329(c)(2) of the Code, the ratemaking rate base is the lesser of the negotiated purchase price and the average of two FMV appraisals. The FMV estimated by Gannett Fleming and AUS Consultants is $24.2 million and $25.1 million, respectively. The purchase price negotiated by Aqua and the Township is $21 million. Thus, the proposed rate base in the application is $21 million.

Report by Class

Account	Name / Service Address	Tax ID	Book	Status	Alert Code
97990.00	F M BROWN SONS INC	43-5345-07-68-8539		A	
	790 DANIEL BOONE ROAD	BIRDSBORO	PA	19508-8737	
99991.00	DIEROLF, CANDACE			A	
	21 PINE AVENUE	BIRDSBORO	PA	19508	
99992.00	TELFORD, MARK			A	
	19-6 CRANBERRY RIDGE	READING	PA	19606-3934	

Total Class: R: 8,708

Class: TRAILER PARK

20000.00	KLIEWER, KIM B	43-5325-08-79-	100	A	
	4851 PERKIOMEN AVENUE	READING	PA	19606	
(610)670-0191					
20010.00	KL MHC LLC	43-5335-14-34-	201	A	
	44 KEYSTONE ROAD	READING	PA	19606-3655	
20020.00	BORDIC MOBILE HOME PARK	43-5335-09-16-	200	A	
	214 BORDIC ROAD	READING	PA	19606-3605	
20030.00	KL MHC LLC	43-5335-10-35-	201	A	
	44 KEYSTONE ROAD	READING	PA	19606-3655	
20060.00	ALSACE TOWNSHIP		101	A	
	240 SPIES CHURCH ROAD	READING	PA	19606	
20070.00	KL MHC LLC	43-5335-14-34-2494		A	
	44 KEYSTONE ROAD	READING	PA	19606-3655	
91230.00	PENN VIEW MOBILE PARK	43-5327-14-42-	200	A	
	BROADWAY AVENUE	READING	PA	19606	
(610)779-4202					

Total Class: T: 7

Total: 8,984

Exeter Township supervisors agree to sell municipal wastewater system for $96 million

readingeagle.com/news/article/exeter-township-supervisors-agree-to-sell-municipal-wastewater-system-for-96-million

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Adjust font size: A A A

The sale to Pennsylvania American Water Co. will keep taxes steady for 10 years and do other things for Exeter, the township manager said.

Written by Mike Urban

Exeter Township, PA —

The Exeter Township supervisors have agreed to sell the township's wastewater treatment plant and system to a private company for $96 million, a move they expect will save taxpayers money and put the township on much better financial footing.

The supervisors voted 4-1 on April 23 to approve the sale to Pennsylvania American Water Co., which supplies water to the township and operates 15 wastewater treatment systems statewide.

The two sides must finalize the asset purchase agreement, and the sale will require Pennsylvania Utility Commission approval, meaning the earliest the company is likely to take ownership would be early next year.

Township Manager John A. Granger said that if the sale goes through as planned, it will allow the township to hold real estate taxes steady for 10 years or more; pay for future capital projects including equipment replacement, township building relocation and storm sewer improvements; and still leave $48 million in the bank.

The current property tax rate is 2.14 mills, but that would have increased 32.6 percent to 2.8 mills in 2019 if the township retained ownership of the plant, he said.

The township is expected to raise sewer rates 29 percent before the sale is completed, but that rate hike would likely have been higher if the township held onto the system and made necessary upgrades, said Supervisor John Cusatis.

And the supervisors plan to enact a homestead tax exemption that would more than cover the rate increase for most homeowners, he said.

There are about 9,000 properties in Exeter connected to the wastewater system, and Pennsylvania American spokesman Terry M. Maenza said that they shouldn't notice any changes in sewer service once the company takes control of the system.

"It should be seamless," he said.

The company plans to retain the township's six wastewater employees, he said.

Cusatis and fellow Supervisors Lisa VanderLaan, William F. White and David G. Speece Jr. voted for the sale, saying it was a tough decision but the economic benefits were too good to turn down.

"The sale will pay off the library and sewer debt, stabilize the tax base and improve the township's credit rating," Cusatis said.

Supervisor Gary E. Lloyd Jr. voted against the sale, saying he didn't want to lose the valuable asset.

Cusatis said that most Exeter residents he spoke with support the move, but at the April 23 meeting several expressed concern about selling public property to private industry and giving up control of the wastewater system.

A written handout from resident Sherrie Greene noted that: "I have done some research and read that many municipalities have taken this route, then regretted it later. Once our sewer system is sold, it is gone forever and we cannot get it back."

Pennsylvania American, headquartered in Hershey, is a subsidiary of American Water Works Co., based in Vorhees, N.J.

This would be Pennsylvania American's first wastewater treatment system in Berks.

(Correspondent Valdis I. Lacis contributed to this story.)

Contact Mike Urban: 610-371-5023 or murban@readingeagle.com.

1. The collection of a DSIC prior to inclusion of the acquired assets in a base rate case;
2. The accrual of Allowance for Funds Used During Construction (AFUDC) on non-DSIC eligible post-acquisition improvements; and
3. The deferral of depreciation for book and ratemaking purposes on non-DSIC eligible post-acquisition improvements.

Q. Please briefly summarize the Acquisition Transaction that the Joint Applicants are proposing.

A. Under the terms of the Proposed Transaction, PAWC would acquire the wastewater utility assets of Kane for $17.56 million.

Q. Please describe the Kane wastewater utility.

A. Kane owns and operates a sanitary wastewater collection system that provides sanitary wastewater service to approximately 2,019 customers in Kane Borough and a portion of Westmore Township in McKean County. The breakout of Kane's customer count is: 1,847 residential, 162 commercial, 3 industrial, and 7 municipal. The $17.56 million purchase price for a wastewater utility assets serving 2,019 customers equates to a cost of approximately $8,700 per customer.

Q. Does the Application provide the terms of the Proposed Transaction?

A. Yes, the Asset Purchase Agreement ("APA") dated November 4, 2019 was included with the Application. The APA states that the purchase price is Seventeen Million, Five Hundred Sixty Thousand Dollars ($17,560,000). The Application indicates that the purchase price is based on arm's length negotiations. PAWC and Kane Borough are not affiliated with each other.

	Service Address	Customer Number	Edu Purchased	Group Code	Drainage Basin	SPA Amt	SPA Qty	SWR Amt	SWR Qty	Swr Base Amt	PEN Amt	INT Amt
3793	900 FOXMEADOW DR	12133	16	King Road	SOUTHEAST (6)	-	116,300.00	F	-	$ 1,348.80	-	-
3794	1000 FOXMEADOW DR	12134	16	King Road	SOUTHEAST (6)	-	94,400.00	F	-	$ 1,348.80	-	-
3795	1100 FOXMEADOW DR	12135	16	King Road	SOUTHEAST (6)	$ 216.44	153,200.00	F	-	$ 1,348.80	-	-
3796	1200 FOXMEADOW DR	12136	16	King Road	SOUTHEAST (6)	$ 69.15	130,400.00	F	-	$ 1,348.80	-	-
3799	1500 FOXMEADOW CIR	12139	16	King Road	SOUTHEAST (6)	$ 43.95	126,500.00	F	-	$ 1,348.80	-	-
3800	1600 FOXMEADOW CIR	12140	16	King Road	SOUTHEAST (6)	-	82,300.00	F	-	$ 1,348.80	-	-
3801	1700 FOXMEADOW CIR	12141	16	King Road	SOUTHEAST (6)	-	84,300.00	F	-	$ 1,348.80	-	-
3802	1800 FOXMEADOW CIR	12142	16	King Road	SOUTHEAST (6)	-	92,500.00	F	-	$ 1,348.80	-	-
3803	1900 FOXMEADOW DR	12143	16	King Road	SOUTHEAST (6)	-	111,200.00	F	-	$ 1,348.80	-	-
3804	2000 FOXMEADOW CIR	12144	16	King Road	SOUTHEAST (6)	$ 8.42	121,000.00	F	-	$ 1,348.80	-	-
3805	2100 FOXMEADOW CIR	12145	16	King Road	SOUTHEAST (6)	$ 160.88	144,600.00	F	-	$ 1,348.80	-	-
3806	2200 FOXMEADOW DR	12146	16	King Road	SOUTHEAST (6)	-	101,000.00	F	-	$ 1,348.80	-	-
3807	2300 FOXMEADOW DR	12147	16	King Road	SOUTHEAST (6)	$ 176.38	147,000.00	F	-	$ 1,348.80	-	-
3808	2400 FOXMEADOW CIR	12148	16	King Road	SOUTHEAST (6)	$ 94.99	134,400.00	F	-	$ 1,348.80	-	-
3809	2500 FOXMEADOW CIR	12149	16	King Road	SOUTHEAST (6)	$ 107.26	136,300.00	F	-	$ 1,348.80	-	-
161	640 N LEWIS RD	275	17	King Road	SOUTHEAST (6)	$ 1,932.95	306,700.00	F	-	$ 84.30	-	-
3674	7-27 W RIDGE PIKE/STRP ML	12005	18	King Road	SOUTHEAST (6)	$ 63.37	92,100.00	F	-	$ 927.30	-	-
3727	125 SUNSET RD	12065	18	King Road	282 GRATERFORD RD (20)	$ 1,198.45	193,000.00	F	-	$ 84.30	-	-
3772	15 KEYSTONE DR	12112	18	King Road	TRINLEY (5)	$ 2,452.98	387,200.00	F	-	$ 84.30	-	-
5199	256 SWAMP PIKE/SCHOOL	60965	18	Possum Hollow	RAVENS CLAW (18)	$ 2,015.24	334,400.00	F	-	$ 252.90	-	-
162	339 N LEWIS RD	276	19	King Road	SOUTHEAST (6)	$ 1,256.59	202,000.00	F	-	$ 84.30	-	-
3706	W RIDGE PIKE/STRIP/BANK	12039	19	King Road	SOUTH LIMERICK (3)	$ 1,373.73	272,500.00	F	-	$ 674.40	-	-
3745	542 N LEWIS RD	12084	19	King Road	TRINLEY (5)	$ 112.65	32,400.00	F	-	$ 168.60	-	-
3411	70 BUCKWALTER RD/1350/APPLEB	11737	20	King Road	SOUTHEAST (6)	$ 3,375.47	530,000.00	F	-	$ 84.30	-	-
5389	206 JONES BLVD/MICROCOAX	70011	20	Possum Hollow	BROOKE EVANS (16)	$ 14,938.23	2,319,900.00	F	-	$ 84.30	-	-
3445	70 BUCKWALTER RD/1250/TEXAS	11771	21	King Road	SOUTHEAST (6)	$ 2,419.39	382,000.00	F	-	$ 84.30	-	-
3707	22 ANCHOR PARKWAY	12040	23	King Road	SOUTHEAST (6)	$ 1,958.79	310,700.00	F	-	$ 84.30	-	-
3773	77 GRATERFORD RD	12113	23	King Road	282 GRATERFORD RD (20)	$ 1,208.14	194,500.00	F	-	$ 84.30	-	-
64	677 ELM ST	170	24	Royersford	ORCHARD TERRACE (OT)	-	12,000.00	F	-	$ 2,023.20	-	-
3863	430 W LINFIELD TRAPPE RD	12208	24	King Road	TRINLEY (5)	$ 4,782.46	747,800.00	F	-	$ 84.30	-	-
794	1101 ENTERPRISE DR	2573	28	King Road	TRINLEY (5)	$ 1,182.95	190,600.00	F	-	$ 84.30	-	-
2502	196 W RIDGE PK/FLEA MRKT	10679	29	King Road	RIDGE PIKE (10)	$ 629.07	247,000.00	F	-	$ 1,686.00	$ 1.80	-
3869	420 LINFIELD TRAPPE RD	12214	30	King Road	TRINLEY (5)	$ 852.20	139,400.00	F	-	$ 84.30	-	-
5410	14 W LIGHTCAP RD	70032	34	Possum Hollow	POSSUM HOLLOW (17)	$ 7,741.14	1,205,800.00	F	-	$ 84.30	-	-
3401	19 W LINFIELD TRAPPE RD	11727	36	King Road	SOUTHEAST (6)	$ 5,421.59	846,736.00	F	-	$ 84.30	-	-
107	475 N LEWIS RD	216	52	King Road	SOUTHEAST (6)	$ 3,921.34	614,500.00	F	-	$ 84.30	-	-
3761	88 ANCHOR PARKWAY	12101	52	King Road	SOUTHEAST (6)	$ 3,746.92	587,500.00	F	-	$ 84.30	-	-
2292	420 W LINFIELD TRAPPE RD	10357	59	King Road	TRINLEY (5)	$ 5,568.64	869,500.00	F	-	$ 84.30	-	-
167	350 S LEWIS RD	282	60	King Road	SOUTHEAST (6)	$ 3,791.50	594,400.00	F	-	$ 84.30	-	-
2465	827 N LEWIS RD	10630	80	King Road	SOUTH LIMERICK (3)	-	150,200.00	F	-	$ 6,744.00	-	-
3091	FOX RIDGE APTS	11378	97	King Road	SOUTH LIMERICK (3)	$ 2,050.04	1,043,000.00	F	-	$ 8,177.10	-	-
2685	165 W RIDGE PIKE/TRLR PK	10913	115	King Road	SOUTHEAST (6)	$ 6,018.69	1,792,000.00	F	-	$ 9,694.50	-	-
5397	EXELON LIM GEN STA	70019	137	Possum Hollow	POSSUM HOLLOW (17)	N	-	$ 8,659.75	1,348,000.00	$ 84.30	$ 1,041.07	-
5400	18 LIGHTCAP RD	70022	200	Possum Hollow	POSSUM HOLLOW (17)	$ 4,006.31	1,278,500.00	F	-	$ 7,418.40	-	-
		5416	**8402**			**$ 299,707.92**	**89,160,697**	**$ 25,039.14**	**7,288,556**	**$ 600,843.05**	**$ 14,296.74**	**$ 1,169.98**

ASSET PURCHASE AGREEMENT

7. Aqua and Limerick are parties to an Asset Purchase Agreement dated November 16, 2016. Aqua Exhibit 1, Application ¶ 5 and ¶ 18; *see also* Aqua Exhibit No. 1, Exhibit C.

8. The negotiated purchase price, which is based on arms' length negotiation, is Seventy-Five Million One Hundred Thousand Dollars ($75,100,000.00). Aqua and Limerick are not affiliated with each other. Aqua Exhibit No. 1, Application ¶ 18 and Aqua St. No. 1 at 6, lines 6 through 10.

9. Aqua will use short term credit lines to fund the transaction. The short term credit funding will be converted to a mix of long-term debt and equity capital shortly after closing. Aqua St. No. 1 at 7, lines 18 through 20; *see also* Aqua Exhibit No. 1, Application ¶ 18.

ASSETS BEING TRANSFERRED

10. The wastewater system assets to be transferred are the "Acquired Assets" and have the meaning specified in Section 2.01 of the Agreement. The Acquired Assets include all real property Limerick owns and uses in the operation of the wastewater system and all sanitary wastewater related treatment and conveyance facilities, including the Possum Hollow Waste Water Treatment Plant ("PHWWTP"), the King Road Waste Water Treatment Plant ("KRWWTP") and all pipes, pumping stations, manholes and pipelines and billing and collections related assets necessary to run the system. Aqua Exhibit No. 1, Application ¶ 19.

11. Acquired Assets also include the contracts identified on Schedule 4.15 of the Agreement to which Limerick is a party (the "Assigned Contracts"). Since contract parties, other than Limerick, are identified by name, Schedule 4.15 and the Assigned Contracts are considered CONFIDENTIAL. Copies of CONFIDENTIAL Schedule 4.15 and the CONFIDENTIAL Assigned Contracts were included with the Application as Confidential Exhibit F and admitted into evidence as CONFIDENTIAL Aqua Exhibit No. 4. Aqua Exhibit No. 1, Application ¶ 20 and Tr. 13 and 20.

$5,572,770. Exh. A-14-a, SWPA St. 1 at 11-12. The allocated purchase price for the water system is $4,734,800 and the wastewater system is $4,765,200. Appendix A-14, SWPA St. 2 at 4-5.

The valuation experts were paid $59,145 for the Fair Market Value Appraisal Reports for both the water and wastewater systems. Exh. A-8-a. SWPA also indicates that it will incur transaction and closing costs of approximately $1,000,000 between the Water System and the Wastewater System, which will be included in rate base. Appendix A-14, SWPA St.1 at 5-6; Appendix A-12.

OCA will examine the ratemaking rate base claims to determine if the claims are reasonable and appropriate for ratemaking purposes.

2. Proposed Rates: SWPA proposes to charge customers of the Mahoning Township system the Mahoning Township water and wastewater rates in effect at closing. Application at 6, 11; Appendix A-13. Those rates will remain in effect until SWPA's next base rate case but SWPA may impose any fee or surcharge permitted by its Commission-approved tariff. Id.

The proposed rates do not appear to match the existing Mahoning Township rates. The OCA will investigate this apparent discrepancy. The OCA will investigate the impacts on the current customers as well as on Mahoning Township customers of the various assumptions and proposals.

3. The OCA submits that additional information is necessary to determine how the transaction will substantially and affirmatively benefit Suez's existing customers.

4. Conditions: Whether any conditions should be imposed upon the proposed transfer to ensure that Suez's customers are treated in a fair and just manner in accord with Pennsylvania law and Commission rules and regulations.

MAHONING TOWNSHIP CUSTOMER LIST

Customer No	Name	Service Address	Service	SWR EDUs	EDU	Count
11470.01	T & S REALTY	304 HOLLOW DR	Sewer	1	1	1431
11471.01	T & S REALTY	306 HOLLOW DR	Sewer	1	1	1432
11472.01	T & S REALTY	308 HOLLOW DR	Sewer	1	1	1433
11473.01	T & S REALTY	310 HOLLOW DR	Sewer	1	1	1434
11474.01	T & S REALTY	312 HOLLOW DR	Sewer	1	1	1435
11475.01	DAVID & JOANNE BROOKO\	32 TERRE LANE	Sewer	1	1	1436
11476.02	JAYA SUGUNARAJ & JESSITA	214 ABBEY RD	Sewer	1	1	1437
11478.01	DAVID BULBIN & BARBARA	74 WOODLAND DR	Sewer	1	1	1438
11479.01	JEFFREY MOLINARO	1318 BLOOM RD	Sewer	1	1	1439
11480.01	CRYSTAL DOMETITA	91 WOODLAND DR	Sewer	1	1	1440
11482.01	AYUSA SINHA	672 LOWER ST	Sewer	1	1	1441
11483.01	MADIAN YAHYA	676 LOWER ST	Sewer	1	1	1442
11484.01	JEFF WATSON	168 KASEVILLE RD	Sewer	1	1	1443
11485.01	ANWER & SARAH QURESHI	656 LOWER ST	Sewer	1	1	1444
11486.01	ROSS & ASHLEY PETERS	83 TERRE LN	Sewer	1	1	1445
11488.01	QUESHI ANWER	664 LOWER STREET	Sewer	1	1	1446
11489.01	MATHUR HERSH	660 LOWER STREET	Sewer	1	1	1447
11490.01	PRASANNA SANKEPALLI & S	668 LOWER ST	Sewer	1	1	1448
11491.01	MARK GATSKI & CATHERINI	82 DELWOOD DR	Sewer	1	1	1449
11492.01	JONATHAN & LAURA SPAHF	78 TERRE LN	Sewer	1	1	1450
11166.02	DANKO HOLDINGS LP	1301 BLOOM RD	Sewer	0	1	1451
	TOTALS				2195	1451

eport Criteria:
Customer.Final bill date = {IS NULL}

5/30/18

stomer #	Name	Service Address	Meter ID	Customer Type	Size
11104.01	ANIMAL CARE	32 ENTERPRISE DR	0049503582	Commercial	1
11107.01	EMMANUEL HOME	MONTOUR BLVD. 11107	8280982952	Commercial	1
11120.02	REDEEMER ORTHODOX PRESBYTER	1820 MONTOUR BLVD.	1540802894	Commercial	1
11121.01	FAB-TEX	29 WOODBINE LANE	0004695133	Commercial	1
11137.01	GEISINGER HEALTH SYSTEMS - MCB	MCBRIDE	1541355520	Commercial	1
11151.01	ROAT-KRINER ROAT	1133 BLOOM RD.	1541286282	Commercial	1
11157.01	TRINITY METHODIST CHURCH	84 LOMBARD AVE	1018010545	Commercial	1
11159.01	VINTAGE KNOLLS ASSISTED LIVING	9 JUSTIN DR 101	1541313242	Commercial	1
11160.01	GEISINGER COMMUNITY HEALTH - VI	44 WOODBINE LANE	0048920994	Commercial	1
11165.01	RINEHART DENTAL	20 WESNER LANE	1481726108	Commercial	1
Total 1: 10				10	10
11110.01	BUSY BEAVER	23 WESNER LN	0053635505	Commercial	1.5
11139.01	MEADOWS COMM.	77 TOWER VIEW CIRCLE	0051583844	Commercial	1.5
11148.01	SHANER HOTEL GRP	43 PINE BARN PLACE	1832339361	Commercial	1.5
11170.01	HAWKINS CHEVROLET	1856 MONTOUR BLVD.	1852732193	Commercial	1.5
11439.01	GEORGE HEIM CAR WASH	1802 MONTOUR BLVD	1541551330	Commercial	1.5
Total 1.5: 5				5	5
11102.01	ATLANTIC EQUIP	15 ENTERPRISE DR	0048304212	Commercial	2
11108.01	EMMANUEL NAZARETH	1707 MONTOUR BLVD. 11108	1007034764	Commercial	2
11117.01	T & S REALTY	1083 BLOOM RD	0046645520	Commercial	2
11126.01	GUM REALTY GROUP LLC	74 SCHOOL HOUSE RD STE 101	0022379100	Commercial	2
11134.01	MARIA JOSEPH AL CENTER	MONTOUR BLVD. 11134	1832120637	Commercial	2
11136.01	GEISINGER HEALTH SYSTEMS - HUG	HUGHES CENTER SOUTH	0052693508	Commercial	2
11146.01	SHANER HOTEL GRP	43 PINE BARN PLACE A	0043702654	Commercial	2
11166.02	DANKO HOLDINGS LP	1301 BLOOM RD	1548931502	Commercial	2
Total 2: 8				8	8
11101.01	NAILS TO TAILS GROOMING SALON	938 BLOOM RD.	1810172132	Commercial	3/4
11109.01	BROKENSHIRE JOHN	769 BLOOM RD.	1541276964	Commercial	3/4
11111.01	CERO JAMES PATRICK	795 BLOOM RD	1541282452	Commercial	3/4
11113.01	COLE'S HARDWARE	25 ENTERPRISE ROAD	1541310306	Commercial	3/4
11115.01	HAWKINS JAMES	1581 MONTOUR BLVD.	1852924202	Commercial	3/4
11116.01	HAWKINS COLLISION CENTER	MONTOUR BLVD. 11116	1541425432	Commercial	3/4

Commercial Water Meters
70

Residential Water Meters
1116

+ 1 = 15 Wesner Lane added 5/24/18

Total Meters
=
1186

37

21. Second, Ms. Vicari used inconsistent purchase price values to calculate the average costs per customer. Id. at 21-22.

(a) Incorrect Use of Projected Customers

Ms. Vicari used an incorrect number of customers for MACM. In Appendix A-17-a, it states that MACM has 12,780 customers, yet Ms. Vicari used 21,953 customers. OCA St. 1 at 20-21. She explained that she used that number because she counted the individual connections for each bulk customer. Id. She never supplied her calculation of the individual connections for the four bulk customers. Id.

Ms. Vicari does not necessarily apply that logic to the other acquisitions in her sample group by reflecting individual connections for any bulk customers. OCA St. 1S at 16-17. By using the actual number of customers for the other systems, she achieved a higher average cost per customer. She then multiplied this overstated cost per customer times the unsupported number of bulk customers' individual connection, compounding the error. Ms. Everette was not able to confirm whether all of the customer numbers in Ms. Vicari's sample group were consistently counted. She therefore used the 21,953 customer number used by Ms. Vicari to minimize the issues in the proceeding.

(b) Inconsistent Purchase Price Values

Similar to the problem with the customer count, MACM witness Vicari did not use consistent purchase price values. OCA St. 1 at 21-22. For the comparative acquisitions, she used the purchase price plus the value of capital improvements required by the agreement of sale. For MACM, however, she uses only the purchase price and does not consider the $62.7 million of capital investments that PAWC anticipates making over the next 10 years. Including the cost

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Pittsburgh Post-Gazette

McKeesport sewer system to be sold for $156 million

September 16, 2016 12:00 AM

By Deana Carpenter

The Municipal Authority of the City of McKeesport has agreed to sell its sewer system to Pennsylvania American Water for approximately $156 million.

The sale is needed to bring the city to more stable financial ground and avoid Act 47, the program for financially distressed municipalities, or municipal bankruptcy, McKeesport Mayor Michael Cherepko said at the Sept. 7 council meeting.

“It became very clear to this administration that the only way to save our community from municipal bankruptcy, while continuing to offer the same level of services our residents deserve, would be to transfer our local sewage system to a regional or national utility company,” Mr. Cherepko said in a news release.

A purchase agreement was signed by both parties last Friday following votes by city council and the municipal authority to sell the sewer system. The sale is expected to be finalized in the second half of next year pending regulatory approvals and other closing conditions.

The system serves 22,000 customers in McKeesport and the communities of Dravosburg, Duquesne, East McKeesport, Elizabeth Township, Glassport, Liberty, Lincoln, North Versailles, Port Vue, Versailles and White Oak.

“We look forward to closing the proposed acquisition and to providing wastewater services that reflect our commitment to environmental stewardship and quality customer service,” said

Kathy L. Pape, president of Pennsylvania American Water, said that after the deal is closed, the company looks forward “to welcoming the Municipal Authority of the City of McKeesport’s employees and customers to the Pennsylvania American Water family.”

She said the company also looks forward to “providing wastewater services that reflect our commitment to environmental stewardship and quality customer service.”

The next step is approval of the acquisition by the Pennsylvania Public Utility Commission along with other approvals, such as from the state Department of Environmental Protection.

In June, state Auditor General Eugene DePasquale said McKeeesport erred when it accidentally spent $729,275 in state funds earmarked for pension costs and subsequently couldn't pay its $2.3 million annual pension obligation last year.

McKeesport officials said then they would remedy the shortfall through "the sale of an asset in the near future."

“The total proceeds of the pending sale of the Municipal Authority of the City of McKeesport will solidify the City of McKeesport’s financial position for years to come,” Mr. Cherepko said this week. “The down payment associated with this

EXHIBIT 22
Page 40 or 307

sale will generate enough revenue to cover all of the city's outstanding financial obligations, including the minimum municipal obligations associated with the city's pension funds."

Deana Carpenter, freelance writer: suburbanliving@post-gazette.com.

EAST END SEWER ACCOUNTS

Type	2015-4	2015-3	2015-2	2015-1	2014-4	2014-3	2014-2	2014-1
CO1	2,070,000	2,060,000	1,831,000	2,284,000	2,971,000	2,665,000	1,498,000	1,278,000
CO2	739,000	1,050,000	885,000	793,000	1,028,000	1,061,000	873,000	873,000
IND								
MIX	15,000	9,000	10,000	4,000	17,000	14,000	12,000	18,000
RES	13,780,000	13,367,000	12,924,000	13,280,000	12,700,000	14,137,000	14,241,000	12,874,000
Grand Total	**16,604,000**	**16,486,000**	**15,650,000**	**16,361,000**	**16,716,000**	**17,877,000**	**16,624,000**	**15,043,000**
# DAYS	94	90	89	91	87	94	93	91

Type	2015-4 GPD	2015-3 GPD	2015-2 GPD	2015-1 GPD	2014-4 GPD	2014-3 GPD	2014-2 GPD	2014-1 GPD
CO1	22,021	22,889	20,573	25,099	34,149	28,351	16,108	14,044
CO2	7,862	11,667	9,944	8,714	11,816	11,287	9,387	9,593
IND								
MIX	160	100	112	44	195	149	129	198
RES	146,596	148,522	145,213	145,934	145,977	150,394	153,129	141,473
Grand Total	**176,638**	**183,178**	**175,843**	**179,791**	**192,138**	**190,181**	**178,753**	**165,308**

Type	Total Units	Total Active Units	Total Accounts
CO1	145	109	65
CO2	40	16	13
IND			
MIX	8	7	3
RES	1,043	1012	823
Grand Total	**1,236**	**1,144**	**904**

Type	2015 Total	2014 Total
CO1	8,245,000	8,412,000
CO2	3,467,000	3,835,000
IND		
MIX	38,000	61,000
RES	53,351,000	53,952,000
Grand Total	**65,101,000**	**66,260,000**

Service Area	Total Units	Total Active Units	Total Accounts
BP	290	282	107
BR	52	51	52
BW	99	90	56
CR	5	4	5
CW	110	109	110
EE	1		1
GL	132	110	70
HD	127	110	112
PD	31	31	31
PM	48	47	48
PS	66	66	66
SC	65	37	40
SH	132	132	132
SRO	2	2	2
WB	76	73	72
Grand Total	**1,236**	**1,144**	**904**

SOUTH END SEWER ACCOUNTS

Type	2015-4	2015-3	2015-2	2015-1	2014-4	2014-3	2014-2	2014-1
CO1	163,000	68,000	33,000	27,000	277,000	265,000	28,000	25,000
RES	7,444,000	7,494,000	7,172,000	7,565,000	7,109,000	7,576,000	7,233,000	7,750,000
Grand Total	**7,607,000**	**7,562,000**	**7,205,000**	**7,592,000**	**7,386,000**	**7,841,000**	**7,261,000**	**7,775,000**
# DAYS	94	90	89	91	87	94	93	91

Type	2015-4 GPD	2015-3 GPD	)15-2 GPD	2015-1 GPD	2014-4 GPD	2014-3 GPD	2014-2 GPD	2014-1 GPD
CO1	1,734	756	371	297	3,184	2,819	301	275
RES	79,191	83,267	80,584	83,132	81,713	80,596	77,774	85,165
Grand Total	**80,926**	**84,022**	**80,955**	**83,429**	**84,897**	**83,415**	**78,075**	**85,440**

Type	Total Units	Total Active Units	Total Accounts
CO1	6	2	2
RES	611	605	607
Grand Total	**617**	**607**	**609**

Type	2015 Total	2014 Total
CO1	291,000	595,000
RES	29,675,000	29,668,000
Grand Total	**29,966,000**	**30,263,000**

Service Area	Total Units	Total Active Units	Total Accounts
ES	178	174	174
HGN	129	125	125
HGS	30	29	30
MG	21	21	21
WS	259	258	259
Grand Total	**617**	**607**	**609**

AVONDALE SEWER ACCOUNTS SEWER ACCOUNTS

Type	2015-4	2015-3	2015-2	2015-1	2014-4	2014-3	2014-2	20144
CO1	2,833,000	3,044,000	2,895,000	3,014,000	2,844,000	2,681,000	2,598,000	2,992,000
CO2	191,000	208,000	235,000	228,000	224,000	195,000	192,000	179,000
MIX	301,000	312,000	255,000	273,000	227,000	258,000	276,000	332,000
RES	4,090,000	3,750,000	3,588,000	4,089,000	3,506,000	4,183,000	4,716,000	3,705,000
TWP	31,000	24,000	20,000	19,000	21,000	22,000	19,000	74,000
Grand Total	**7,446,000**	**7,338,000**	**6,993,000**	**7,623,000**	**6,822,000**	**7,339,000**	**7,801,000**	**7,282,000**
# DAYS	94	90	89	91	87	94	93	91

Type	2015-4 GPD	2015-3 GPD	)15-2 GPD	2015-1 GPD	2014-4 GPD	2014-3 GPD	2014-2 GPD	2014-1 GPD
CO1	30,138	33,822	32,528	33,121	32,690	28,521	27,935	32,879
CO2	2,032	2,311	2,640	2,505	2,575	2,074	2,065	1,967
MIX	3,202	3,467	2,865	3,000	2,609	2,745	2,968	3,648
RES	43,511	41,667	40,315	44,934	40,299	44,500	50,710	40,714
TWP	330	267	225	209	241	234	204	813
Grand Total	**79,213**	**81,533**	**78,573**	**83,769**	**78,414**	**78,074**	**83,882**	**80,022**

Type	Total Units	Total Active Units	Total Accounts
CO1	397	48	38
CO2	4	4	4
MIX	8	22	8
RES	306	282	230
TWP	3	3	3
Grand Total	**718**	**359**	**283**

Type	2015 Total	2014 Total
CO1	11,786,000	11,115,000
CO2	862,000	790,000
MIX	1,141,000	1,093,000
RES	15,517,000	16,110,000
TWP	94,000	136,000
Grand Total	**29,400,000**	**29,244,000**

Service Area	Total Units	Total Active Units	Total Accounts
41	308	76	46
BH	123	120	121
BH2	6	6	6
RR	130	119	79
TK	151	38	31
Grand Total	**718**	**359**	**283**

Dilworth Paxson LLP

The PA PUC Approves First Wastewater Sale Under New Act 12

06/14/2017

June 14, 2017 (Philadelphia, PA) - On June 14, 2017, the Pennsylvania Public Utility Commission approved, in a four-to-one vote, Aqua Pennsylvania Wastewater, Inc.'s application to acquire the wastewater system of New Garden Township and its Sewer Authority, and to begin providing wastewater service to the residents of New Garden and Kennett Townships in Chester County. The transaction is the first to be approved using the fair market valuation approach established by the Pennsylvania State Legislature and Governor Tom Wolf with Act 12 of 2016 (Act of Apr. 14, 2016, P.L. 76, No. 12, 66 Pa. C.S. § 1329).

Act 12 is changing the landscape for municipal sales of water and wastewater systems to PUC-regulated public utility companies. The new law allows the parties to the transaction to opt in to a new method of valuation, which takes the value of the system for ratemaking purposes as either the lower of the average of two independent fair market value appraisals—one obtained by the utility buyer and one by the municipal seller—or by the negotiated purchase price. Prior to Act 12, system value for ratemaking was based on depreciated original cost, which would likely always result in a lower sale price than fair market value. In addition, the new law requires the PUC to act within six months of the acceptance of the application.

Act 12 became effective mid-June 2016, and the PUC issued its final implementation order in October 2016. The New Garden transaction was the first Act 12 application, submitted for approval in December 2016. Aqua, New Garden, and the Authority agreed to a negotiated purchase price of $29,500,000, which turned out to be less than the average of the two appraisals commissioned by Aqua and New Garden. The valuation for ratemaking purposes was therefore set at $29,500,000.

A protest to Aqua's application for PUC approval pursuant to Act 12 in the New Garden transaction was filed by the Bureau of Investigation and Enforcement, which sought a review of both of the fair market appraisals used, additional information about the proposed rate freeze agreed to by the parties, and a determination of whether the transaction was in the public interest under Section 1102 of the Public Utility Code.

An additional protest was filed by the Office of Consumer Advocates requesting further information to determine whether supplementary conditions should be imposed on the transaction to ensure that Aqua's existing customers are treated in a fair and just manner; how the transaction will substantially and affirmatively benefit Aqua's existing customers; and whether the agreement sufficiently provides for safe, adequate, and reasonable service at just and reasonable rates.

An evidentiary hearing was held before an administrative law judge on February 16, 2017. After the hearing, the judge recommended the denial of Aqua's application, concluding that Aqua had failed to demonstrate by a preponderance of the evidence that the acquisition was in the public interest because it failed to demonstrate that the transaction will result in affirmative public benefits to its existing customers. The judge also concluded that Aqua had failed to support its rate stabilization plan with evidence to show its basis and impact. The judge did

Related Lawyers

Skye C.A. Nickalls

Marc A. Feller

Related Practices

Corporate and Business

Related Offices

Philadelphia, PA

invest in necessary capital improvements and resources, and experienced managerial and operating personnel necessary to provide safe and reliable sewer services to the residents of the TOS and surrounding areas. PAWC is currently the water provider within TOS and is the operator of TOS's System pump station.

Q. PLEASE DESCRIBE PAWC'S HISTORICAL RELATIONSHIP WITH TOS.

A. Since PAWC's acquisition of the water and wastewater assets of the City of Coatesville Authority ("CCA") in March 2001, PAWC has been the regional wastewater (and water) provider in the City of Coatesville and surrounding communities. . PAWC's treats the wastewater from the communities of Sadsbury Township, City of Coatesville, East Fallowfield Township, Caln Township, West Caln Township, Valley Township, West Sadsbury Township, Highland Township, West Brandywine Township and Parksburg Borough. TOS has been a bulk wastewater customer of PAWC since PAWC's acquisition of CCA's water and wastewater system assets. We maintain a relationship with TOS and other local municipalities by participating in local events, providing environmental and firefighting grants, offering the "H2O Assistance Program," and supporting economic growth through infrastructure improvements in the communities we serve.

Q. HOW MANY CUSTOMERS DOES THE TOS SYSTEM CURRENTLY SERVE AND HOW MANY CUSTOMERS DOES PAWC CURRENTLY SERVE?

A. As of December 31, 2016, TOS furnished wastewater services to 998 customers. This number includes 950 residential and 48 commercial customer connections. Of these

interest in discussing the potential acquisition of the System and the use of Section 1329, the fair market value approach. TOS's representatives executed the Letter of Interest on December 6 and 7, 2016 and returned it to PAWC. This "Letter of Interest" was extended through amendments on March 9, 2017, May 2, 2017, June 6, 2017, and July 5, 2017 to allow the parties to enter into a definitive agreement. Through these extensions, PAWC and TOS jointly retained the services of Herbert E. MacCombie, Jr., P.E., of Media Pennsylvania to complete the Engineer's Assessment of Tangible Assets pursuant to Section 1329. The Engineer's Assessment of Tangible Assets is included as **Schedule 1.1** of the APA and included with the UVE fair market valuation reports at **Appendix A-5**. PAWC, pursuant to Section 1329, retained the services of AUS Consultants of Greenfield Wisconsin to complete an appraisal of the System. TOS retained the services of Herbert, Rowland & Grubic, Inc. of Harrisburg, Pennsylvania to also complete an appraisal of the System. These appraisals accompany the Application at **Appendix A-5** (together with electronic working documents at **Appendix A-4**) and are included as **Schedule 2.2** of the APA. After receipt of the two appraisals and subsequent arms-length negotiations, on May 1, 2018 TOS's Board of Supervisors approved the APA, which was subsequently executed by PAWC and TOS that day too. This APA includes a negotiated purchase price of $9,250,000.

Q. CAN YOU PLEASE PROVIDE AN OVERVIEW OF THE APA?

A. Yes. The APA is attached as **Appendix A-24-a** to the Application **(PAWC Exhibit KEG-1)**. The APA sets forth the terms and conditions pursuant to which the TOS will sell, and PAWC will purchase, the System, as well as substantially all assets, properties and rights

Elizabeth Rose Triscari, Esquire
Pennsylvania-American Water Company
800 West Hersheypark Drive
Hershey, PA 17033
(717) 520-4606
elizabeth.triscari@amwater.com

The Applicant's attorneys are authorized to receive all notices and communications regarding this Application.

6. PAWC is a regulated public utility corporation duly organized and existing under the laws of the Commonwealth of Pennsylvania, and is engaged in the business of collecting, treating, storing, supplying, distributing and selling water to the public, and collecting, treating, transporting and disposing of wastewater for the public. Water and wastewater services are furnished by PAWC to the public in a service territory encompassing more than 400 communities across the Commonwealth with a combined population of over 2,400,000. A description of PAWC's existing certificated water and wastewater service territory is found in **Appendix B**, along with a detailed corporate history, outlining all of the mergers, acquisitions and consolidations, which have created PAWC as it exists on the date of this Application.

7. Steelton is a municipal water authority, organized by the Borough of Steelton in accordance with the Municipality Authorities Act, 53 Pa. C.S. §5601, et seq., with its offices located at 123 North Front Street, Steelton, Pennsylvania. Steelton owns and operates the Steelton System, providing water service to the public in the Borough of Steelton and a portion of Swatara Township (the "Service Area"), in Dauphin County, Pennsylvania.

8. As of November 30, 2018, Steelton furnishes water service to 2,472 customers including 2,289 residential, 124 commercial, 13 industrial, 34 institutional, 11 municipal, and one bulk sales customer connection.

PENNSYLVANIA REAL-TIME NEWS

Steelton water sale closer to completion as Pa. American Water signs $22.5 million agreement

Updated Nov 15, 2018;
Posted Nov 15, 2018



Pennsylvania American Water announced today it signed an agreement to acquire the water assets of the Steelton Borough Authority. Pending regulatory approvals, the sale should be complete by the third quarter of 2019.

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8
shares

By Steve Marroni | smarroni@pennlive.com

The sale of Steelton's water system is one step closer to completion.

Pennsylvania American Water announced today it has signed an agreement to acquire the water assets of the Steelton Borough Authority for $22.5 million.

The two will next seek approval of the acquisition from the Pennsylvania Public Utility Commission and other necessary approvals from the Pennsylvania Department of Environmental Protection, according to the company.

Cust No	Name	Customer Type	Group Code	Service No	Description	Unit/Share
)33438358	Morath, Christina	Commercial	None	1	SEWER	1
)33453937	Baeder, William	Commercial	None	1	SEWER	1
)33521786	Sanders, Debra	Commercial	None	1	SEWER	1
)33757653	Advanced Auto Parts	Commercial	None	1	SEWER	1
)34016546	Nelson's Ice Cream	Commercial	None	1	SEWER	1
)34030702	Pitcher, Paul	Commercial	None	1	SEWER	1
)34083232	Beck, Katharine G	Commercial	None	1	SEWER	1
)34862572	LK Miller Properties LLC	Commercial	None	1	SEWER	1
)02939458	Fuhrman, Steve	Commercial	None	1	SEWER	1
)03198199	Sarangpur Realty LLC	Commercial	None	1	SEWER	1
)03373167	Wilhelm, Rosemarie	Commercial	None	1	SEWER	1
)04397982	Pragi Enterprises LLC	Commercial	None	1	SEWER	1
)06085025	Plank Jr, Robert E	Commercial	None	1	SEWER	1
)06197065	LD Hedge Associates LLC	Commercial	None	1	SEWER	1
)06197096	LD Hedge Associates LLC	Commercial	None	1	SEWER	1
)07394708	Fissinger, Matthew	Commercial	None	1	SEWER	1
)07425268	Snyder, Joseph	Commercial	None	1	SEWER	1
)07461417	Varlotta, Michael	Commercial	None	1	SEWER	1
)07487679	CG Complex LLC	Commercial	None	1	SEWER	1
)07519040	Bristol Road Partners Inc.	Commercial	None	1	SEWER	1
)08908308	Superior Credit Union	Commercial	None	1	SEWER	1
)09217890	Hoff Properties LLC	Commercial	None	1	SEWER	1
)10722804	AMA Realty Properties LLC	Commercial	None	1	SEWER	1
)11184863	Attilio, Thomas	Commercial	None	1	SEWER	1
)12032330	310 Chestnut Street LLC	Commercial	None	1	SEWER	1
)13068080	Branch Banking & Trust Company	Commercial	None	1	SEWER	1
)13286185	White, Elaine & Bruce	Commercial	None	1	SEWER	1
)15089717	C&R Property Management LLC	Commercial	None	1	SEWER	1
)15089748	C&R Property Management LLC	Commercial	None	1	SEWER	1
)15292810	Preston, Aaron	Commercial	None	1	SEWER	1
)16240812	Shalom, Jan	Commercial	None	1	SEWER	1
)16276750	Copenhafer, Fay	Commercial	None	1	SEWER	1
)16612479	Donohue, Patrick R	Commercial	None	1	SEWER	1
)17470098	Lewis Group Ltd Partnership	Commercial	None	1	SEWER	1
)17961983	Qawasmy, John	Commercial	None	1	SEWER	1
)18085592	Christman, Lewis	Commercial	None	1	SEWER	1
)18305104	Tarquini Herrera, Rachel	Commercial	None	1	SEWER	1
)18888302	Florence Attilio Rental Acct.	Commercial	None	1	SEWER	1
)18888319	Attilio, Thomas	Commercial	None	1	SEWER	1
)19364687	Conigliaro, Vito	Commercial	None	1	SEWER	1
)21630875	Chesterview Apartments	Commercial	None	1	SEWER	1
)22621041	Main Street Royersford LLC	Commercial	None	1	SEWER	1
)22621096	Spring Mountain Brewing Co	Commercial	None	1	SEWER	1
)23796115	Kassam, Tashir	Commercial	None	1	SEWER	1
)26295581	JD Arnold LLC	Commercial	None	1	SEWER	1
)26393133	Ostebo, Kurt	Commercial	None	1	SEWER	1
		158				

Report Criteria:
Billing.Service No = 1
Customer.Customer Type = Commercial, Industrial, Residential

Report Criteria:
Billing.Service No = 1
Customer.Customer Type = Industrial, Residential

Cust No	Name	Customer Type	Group Code	Service No	Description	Unit/Share
)28611137	Lewis Group Ltd. Partnership	Industrial	None	1	SEWER	1
)28619292	Giftwares Co Inc	Industrial	None	1	SEWER	1
)28619407	Specialty Chemical Systems Inc	Industrial	None	1	SEWER	1
)28619759	Accumetrics Limited	Industrial	None	1	SEWER	1
)28619773	Accumetrics Limited	Industrial	None	1	SEWER	1
)28620339	Nelson's Ice Cream Inc.	Industrial	None	1	SEWER	1
)28620858	American Machine & Tool Co.	Industrial	None	1	SEWER	1
)29486532	A.C. Miller Concrete Company	Industrial	None	1	SEWER	1
)29651213	Borough of Royersford	Industrial	None	1	SEWER	1
)29709754	Royersford Spring Company	Industrial	None	1	SEWER	1
)29784885	Advanced Fluid Systems Inc	Industrial	None	1	SEWER	1
		11				

Cust No	Name	Customer Type	Group Code	Service No	Description	Unit/Share
)25581487	Sakal, Brian J	Residential	None	1	SEWER	1
)25581852	Barbara Berman Ricci	Residential	None	1	SEWER	1
)25590276	Tallman, William	Residential	None	1	SEWER	1
)25596441	Tarantino, Joseph	Residential	None	1	SEWER	1
)25635087	Benson, Merrill G	Residential	None	1	SEWER	1
)25760044	Blamey, Chad & Katrin	Residential	None	1	SEWER	1
)25762972	Whitmore, Andrew	Residential	None	1	SEWER	1
)25807684	Mecca, Jessica	Residential	None	1	SEWER	1
)25824139	Gerber, Jenna	Residential	None	1	SEWER	1
)25859012	Creciun, Peter	Residential	None	1	SEWER	1
)25869156	Seiders, Lester & Monica	Residential	None	1	SEWER	1
)25879108	Chesterview Apartments	Residential	None	1	SEWER	1
)25930898	US Bank NA	Residential	None	1	SEWER	1
)25948684	Findley, Nicole M	Residential	None	1	SEWER	1
)25987108	Craft, Elena	Residential	None	1	SEWER	1
)26021179	John McDonald & Karlyn Eyre	Residential	None	1	SEWER	1
)26043841	Blanche, Camile	Residential	None	1	SEWER	1
)26160869	Hirst, Sharon A	Residential	None	1	SEWER	1
)26161459	John Marlatt & Rebecca Gardner	Residential	None	1	SEWER	1
)26204967	Niemczuk, Joseph W	Residential	None	1	SEWER	1
)26223333	Weiss, Joseph	Residential	None	1	SEWER	1
)26239376	C&R Property Management LLC	Residential	None	1	SEWER	1
)26300278	Millard, Barry & Sheryl	Residential	None	1	SEWER	1
)26310954	Nevin, Sean	Residential	None	1	SEWER	1
)26326843	Davis, Jeff	Residential	None	1	SEWER	1
)26340238	Jacobs, Jamie	Residential	None	1	SEWER	1
)26352002	Slifer, Richard	Residential	None	1	SEWER	1
)26353432	Lynch, Heather	Residential	None	1	SEWER	1
)26380250	Tallman, William	Residential	None	1	SEWER	1
)26381130	Stem, Matt & Heather	Residential	None	1	SEWER	1
)26403078	Petaccio, Andrea	Residential	None	1	SEWER	1
)26630702	O'Donnell, Kaitlyn	Residential	None	1	SEWER	1
)26660253	Ilyas, Asif	Residential	None	1	SEWER	1
)26713911	Hernandez, S & Murphy, M	Residential	None	1	SEWER	1
)26746591	Gieske and Niemann LLC	Residential	None	1	SEWER	1
)26875659	Speck, Erin	Residential	None	1	SEWER	1
)26880804	Raser, Randy	Residential	None	1	SEWER	1
)26909682	Perez, Waldemar & Aracelis	Residential	None	1	SEWER	1
)26969219	Macelwee-Todd, Lisa	Residential	None	1	SEWER	1
		1427				

Report Criteria:
Billing.Service No = 1
Customer.Customer Type = Residential

permitted under Law and the terms of any applicable contract that is a Nonassignable Asset, as agent or subcontractor for Seller, pay, perform and discharge the liabilities and obligations of Seller thereunder from and after the Closing Date, but only to the extent that such liabilities and obligations would be Assumed Liabilities if the applicable consent or approval had been obtained on or before the Closing Date and such Nonassignable Asset had been assigned to Buyer at Closing. To the extent permitted under Law, Seller shall hold in trust for and pay to Buyer promptly upon receipt thereof, such Nonassignable Asset and all income, proceeds and other monies received by Seller with respect to such Nonassignable Asset in connection with the arrangements under this Article II.

(c) If, following the Effective Date and before the Closing, Buyer identifies any contract to which Seller is a party which is not set forth on Schedule 4.15, and Buyer reasonably determines such contract is necessary or useful to the operation of the System, Buyer shall notify Seller of such determination and Seller shall, promptly following receipt of such notice, deliver to Buyer an updated Schedule 4.15 reflecting the addition of such contract, and such contract will be an "Assigned Contract" for all purposes hereunder.

(d) If during the twelve (12) month period following the Closing, Buyer identifies any contract to which Seller was a party as of the Closing and which (i) was not set forth on Schedule 4.15 (as may be updated pursuant to (c)) and (ii) Buyer reasonably believes is necessary or useful to the operation of the System, Seller shall, promptly following Buyer's written request therefor, execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such other instruments of conveyance and transfer and other documents, and perform or cause to be performed such further acts, as may be reasonably required to evidence or effectuate, or more fully evidence or effectuate the assignment of such contract to Buyer for no additional consideration, and upon such assignment, such contract is deemed an Assigned Contract for all purposes hereunder.

ARTICLE III.

PURCHASE PRICE

Section 3.01. Purchase Price. The purchase price for the Acquired Assets is Thirteen Million Dollars ($13,000,000) (the "Purchase Price") which Buyer shall pay as follows at Closing:

(a) Buyer shall provide for payment in full of the total amount of Outstanding Indebtedness directly to Seller's obligees on account of the Purchase Price;

(b) Buyer shall pay, subject to any adjustment pursuant to Section 3.01(c), to Seller by wire transfer of immediately available funds the balance of the Purchase Price (remaining after the debt repayment pursuant to Section 3.01(a)) to one or more accounts that Seller designates and provides to Buyer at least three (3) Business Days before the Closing Date; and

(c) Final Billing: The Buyer is entitled to all customer billings with respect to sanitary wastewater customers services for the period on or after the Closing Effective Time, and Seller is entitled to all such billings for the period before the Closing Effective Time. The Parties

Report Criteria:
Service.Service number = 10,16
Group Code.Group code = "A","B","C"
Customer.Final bill date = {IS NULL}
Billing.Temporary disconnect date = {IS NULL}
Billing.Final disconnect date = {IS NULL}

Customer Number	Customer Name	Service Address	Customer Type	Units
10				
UP Commercial				
18011257.01	POTTSTOWN 1257 INC	1257 N CHARLOTTE ST	UP Commercial	2
18011277.01	CONIGLIARO, VITO	1277 N CHARLOTTE ST	UP Commercial	1
18011293.01	BURGER KING #4651	1293 N CHARLOTTE ST	UP Commercial	8
24010861.02	DCM PROPERTY INVESTMENTS LLC	861 WILLOW ST	UP Commercial	1
24010929.01	CREATIVE HEALTH SERVICES	929 WILLOW ST	UP Commercial	4
25100799.01	FULTON FINANCIAL CORP	799 STATE ST - FULTON BANK	UP Commercial	1
41020175.02	POTTSTOWN PLAZA ASSOC C/O COTSWOLD GRO	RENT-A-CENTER #50	UP Commercial	2
41020177.02	POTTSTOWN PLAZA ASSOC C/O COTSWOLD GRO	DOLLAR ADVANTAGE	UP Commercial	2
41020178.02	POTTSTOWN PLAZA ASSOC C/O COTSWOLD GRO	RADIO SHACK #60	UP Commercial	2
41021066.01	GEORGE EVANS	1066 FARMINGTON AVE	UP Commercial	1
41021173.01	SHUKOWITSH, STEVEN & JESSICA	1173 FARMINGTON AVE	UP Commercial	1
41021189.01	ARTIM, ROBERT	1189 FARMINGTON AVE	UP Commercial	1
41021320.01	STROGUS, BARRY	1320 FARMINGTON AVE	UP Commercial	1
41021346.01	AMERICAN METAL FINISHERS	1346 FARMINGTON AVE	UP Commercial	1
41021359.02	BOWERS, TODD	1359 FARMINGTON AVE	UP Commercial	1
41021391.01	MCGINNIS, DENNIS	1361 FARMINGTON AVE	UP Commercial	1
41021393.01	SDM INVESTMENTS LLC	1393 FARMINGTON AVE	UP Commercial	1
41021403.01	ARTIMS AUTOMOTIVE INC	1403 FARMINGTON AVE	UP Commercial	2
41021446.02	1446 FARMINGTON AVE LLC	1446 FARMINGTON AVE	UP Commercial	4
41021507.01	RICHARDSON, GLORIA MAUGER & THOMAS	1507 FARMINGTON AVE	UP Commercial	1
41021525.01	YOUNG, SHANE & KATHY	1525 FARMINGTON AVE	UP Commercial	1
41021587.01	BURGYONE, BARRY	1587 FARMINGTON AVE	UP Commercial	1
Total UP Commercial:				
22				40
UP Mixed Use				
20010875.01	SJW PROPERTIES LLC	875 N HANOVER ST -salon & apts	UP Mixed Use	2
20010933.02	MCGONIGLE, MICHAEL	933 N HANOVER ST	UP Mixed Use	2
20010943.01	STRAUSS, PAUL	943 N HANOVER ST	UP Mixed Use	3
20010955.01	BRODI, GERALD & ELAINE	955 N HANOVER ST	UP Mixed Use	11
21070842.01	DAVIDHEISER, ALLEN & BEVERLY	842 FARMINGTON AVE	UP Mixed Use	1
24010940.01	TOLENTINO, ROBERT & ASUNCION	940 WILLOW ST	UP Mixed Use	3
41050013.01	OLOCK, ANDREW	941 N HANOVER ST	UP Mixed Use	4
Total UP Mixed Use:				
7				26
UP Public				
16030233.01	HOLY TRINITY ORTHODOX CHURCH	1256 JUNIPER ST	UP Public	1
20011351.01	POTTSGROVE SCHOOL DISTRICT - ADMIN BLDG	1351 N HANOVER ST - MULTI	UP Public	30
41230093.01	CHURCH OF LATTER - DAY SAINTS	93 MAUGERS MILL RD	UP Public	1
Total UP Public:				
3				32
UP Residential				
10140863.02	MILLS, LUCAS	863 FARMINGTON AVE	UP Residential	1
10140871.01	POLLOCK, ANTHONY FILLMAN & BRENDA	871 FARMINGTON AVE	UP Residential	1

Customer Number	Customer Name	Service Address	Customer Type	Units
42061525.02	HUTELMYER, JULIA & GREG	1525 CLOVERHILL RD	UP Residential	1
42071000.01	HEATH, TERENCE M & CATHERINE	1000 FALLBROOK LN	UP Residential	1
42071002.02	DAVIS, STEPHEN & KATHRYN	1002 FALLBROOK LN	UP Residential	1
42071004.02	GALLINA, GAETANO	1004 FALLBROOK LN	UP Residential	1
42071006.02	LIANG, JIE LIN & XIUYAN	1006 FALLBROOK LN	UP Residential	1
42071007.01	STEELE, CORTNEY & DANIEL	1007 FALLBROOK LN	UP Residential	1
42071008.02	FENOGLIO, CASEY & RICHARD	1008 FALLBROOK LN	UP Residential	1
42071009.02	SHAW, SCOTT & THERESA	1009 FALLBROOK LN	UP Residential	1
42071010.02	JOHNSON, FRANKLIN & KIMBERLY	1010 FALLBROOK LN	UP Residential	1
42071011.01	HUBBARD, ANNA	1011 FALLBROOK LN	UP Residential	1
42071012.02	DIXON, JULIAN & ERICA	1012 FALLBROOK LN	UP Residential	1
42071013.01	HARISH, BIDADI & LAKSHMI	1013 FALLBROOK LN	UP Residential	1
42071014.02	RICHARDSON, KATRINA	1014 FALLBROOK LN	UP Residential	1
42071015.02	DZIUNYCZ, MATTHEW & EMILY	1015 FALLBROOK LN	UP Residential	1
42071016.02	ISHLER, KARI KLAUS & MICHAEL	1016 FALLBROOK LN	UP Residential	1
42071017.03	CONNER IV, SAMUEL	1017 FALLBROOK LN	UP Residential	1
42071018.01	SHORT, CHRISTOPHER & RONNA	1018 FALLBROOK LN	UP Residential	1
42071019.01	MCPHILLIMEY, MARK & ANN KOREEN	1019 FALLBROOK LN	UP Residential	1
42071020.01	MCWILLIAMS, DAVID & LAURI	1020 FALLBROOK LN	UP Residential	1
42071021.01	RIZZETTO, NINA	1021 FALLBROOK LN	UP Residential	1
42071022.02	PASQUAL, MICHAEL & MARIA	1022 FALLBROOK LN	UP Residential	1
42071024.01	COLLINGS, MARK	1024 FALLBROOK LN	UP Residential	1
42071026.01	GAINES, NICOLE	1026 FALLBROOK LN	UP Residential	1
42071028.02	SPRING HILL REALTY	1028 FALLBROOK LN	UP Residential	1
42071030.03	HOUSEAL JR, JOSEPH & CARA	1030 FALLBROOK LN	UP Residential	1
42071032.03	DAILY, ALBERT & REGINA	1032 FALLBROOK LN	UP Residential	1
42071034.01	FELTENBERGER, CHAD & HEATHER	1034 FALLBROOK LN	UP Residential	1
42071036.02	SOLIVAN, GINA & ADRIAN	1036 FALLBROOK LN	UP Residential	1
42071038.03	THAO, DAVID	1038 FALLBROOK LN	UP Residential	1
42071040.01	JORGENSON, TRISHA & ERICK	1040 FALLBROOK LN	UP Residential	1
42071042.01	KROENING, TERRY	1042 FALLBROOK LN	UP Residential	1
42071044.01	SCHURR, JEFFREY KENT	1044 FALLBROOK LN	UP Residential	1
42071045.01	PURKAYASTHA, DEBASHISH & SUDDATTA	1045 FALLBROOK LN	UP Residential	1
42071046.03	WILLIS, FRANK & FAITH	1046 FALLBROOK LN	UP Residential	1
42071047.02	CONG, MY	1047 FALLBROOK LN	UP Residential	1
42071048.01	HAINES, LARRY & DONNA	1048 FALLBROOK LN	UP Residential	1
42071050.02	MIDDLETON, JAMES	1050 FALLBROOK LN	UP Residential	1
42071052.01	SEMETER, DANIEL	1052 FALLBROOK LN	UP Residential	1
42071513.04	ROMANO, DANIEL & SARA	1513 CLOVER HILL RD	UP Residential	1
42081600.02	GOMEZ, ODETTE	1600 APPLEGATE LN	UP Residential	1
42081601.01	RODRIGUEZ, RUTH & JUAN	1601 APPLEGATE LN	UP Residential	1
42081602.02	EGARIAN, CHRISTOPHER	1602 APPLEGATE LN	UP Residential	1
42081604.01	LAWLOR, CARL & LORETTA	1604 APPLEGATE LN	UP Residential	1
42081606.01	COHEN, SIDNEY & RUTH	1606 APPLEGATE LN	UP Residential	1
42081608.01	ROCHA, WILL & CARMEN	1608 APPLEGATE LN	UP Residential	1
42081609.01	EVANS, GARETH	1609 APPLEGATE LN	UP Residential	1
42081610.01	DUNKEL, CAROL	1610 APPLEGATE LN	UP Residential	1
42081611.02	SORG, GREGORY & TRICIA	1611 APPLEGATE LN	UP Residential	1
42081612.01	MANCINI, MICHAEL & AMIE	1612 APPLEGATE LN	UP Residential	1
42091501.02	HULL, KEVIN & AMY	1501 MAYWOOD LN	UP Residential	1
42091503.02	EPSTEIN, CARL & LINDA	1503 MAYWOOD LN	UP Residential	1
410512005.01	CUTLER, ROBERT & ELIZABETH	2005 PROUT FARM RD	UP Residential	
4102152012.01	SCHAEFFER, JACK & AUDREY	1520 FARMINGTON AVE	UP Residential	1
4152006901.01	BUCK, WILLIAM	69 MICKLITZ DR	UP Residential	1
Total UP Residential: 1,390				1429

Customer Number	Customer Name	Service Address	Customer Type	Units
Total 10:				
1,422				1527
16				
UP Commercial				
10140882.01	DICKENSON, CHARLES	882 FARMINGTON AVE	UP Commercial	2
10140902.01	CMD SERVICES INC	902 FARMINGTON AVE	UP Commercial	3
18011263.02	H & E PALERMO REAL ESTATE	1263 N CHARLOTTE ST	UP Commercial	2
20010863.01	SJW PROPERTIES LLC	871 N HANOVER ST -comm.bldg	UP Commercial	6
41020179.01	APPLEBEES RESTAURANT - ROSE CAS DIN LP	815 STATE ST	UP Commercial	30
41021495.01	KIM, JONG Y & YUN K	1495 FARMINGTON AVE	UP Commercial	3
Total UP Commercial:				
6				46
Total 16:				
6				46
Grand Totals:				
1,428				1573

Report Criteria:
Service.Service number = 10,16
Group Code.Group code = "A","B","C"
Customer.Final bill date = {IS NULL}
Billing.Temporary disconnect date = {IS NULL}
Billing.Final disconnect date = {IS NULL}

https://www.pottsmerc.com/news/upper-pottsgrove-votes-4-1-to-sell-sewer-system-for-13-7m/article_f8f493d8-8408-11ea-8425-07388a90f968.html

FEATURED

Upper Pottsgrove votes 4-1 to sell sewer system for $13.7M

Evan Brandt ebrandt@21st-centurymedia.com @PottstownNews on Twitter
Apr 22, 2020



Upper Pottsgrove Township Commissioner Martin Schreiber, framed in yellow, outlines his objections to the sale of the township's sewer collection system during Monday's online meeting.

Photo from Screenshot

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UPPER POTTSGROVE — Township Commissioners voted 4-1 Monday night to sell the township's sewer collection system for $13.75 million to Pennsylvania American Water.

Commissioners Martin Schreiber cast the lone vote against the sale.

As The Mercury reported on April 8, the presentation provided at four online informational sessions earlier in the month forecast that sewer rates would drop by about 9.6 percent under Pennsylvania American Water ownership.

However, the decrease — from the current $71.87 per month to $65 per month — would be short-lived, according to Bernie Grundusky, senior director for business development for the water company.

A chart he shared as part of the online meetings showed rates would return to the current rate in three or four years after the sale, and then increase annually by an average of 4.5 to 5.2 percent.

By comparison, the township's sewer rates, which have increased in a more haphazard fashion, average out to between 4.6 to 6 percent a year, according to the presentation.

Now that the sale has been approved, the average homeowner will save $1,260 between the time rates were dropped to when they return to their current level, according to the presentation.

The deal must still be approved by the Pennsylvania Public Utility Commission, a process that could take longer than a year to be finalized.

As a result of the vote, PFM Financial Advisors LLC will be paid more than $250,000.

As noted by Commissioners' Chairman Trace Slinkerd, who, prior to the vote, praised the consultants for taking a risk, if the commissioners had voted against the sale, PFM would have been paid only its $7,500 fee for preliminary work.

Scott Shearer, managing director of PFM, insisted during Monday's meeting that the firm "did not make a recommendation. We're not trying to sell this system."

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During the four public information sessions the township staged online, not one negative aspect of the sale was identified. Township Manager Michelle Reddick said the presentations were put together by PFM and the staff.

During those meetings, Slinkerd restricted all interaction to questions from residents, which were mostly answered by the consultants or township staff. He said public comments would be accepted at the April 20 meeting.

When that happened Monday night, the online meeting was attended by more than 50 people.

Eight residents spoke. All but one asked the commissioners to vote against the sale or, even more frequently, delay the vote until next month or later.

Many cited the fact that the Pennsylvania American Water's bid does not expire until June 30, and there is still time to answer residents' questions.

Don Read, a former member of the Pottstown Borough Authority and a current member of the township's sewer committee, was the only person to speak fully in favor of the sale.

As he did at the April 16 meeting, Read said the best reason to sell the system is the risk inherent in running it.

He said the potential capital costs of problems with sewer lines and pump stations, as well as capital costs imposed by the Pottstown Borough Authority, which runs the plant that receives and treats Upper Pottsgrove's sewage, are too big a financial risk for a four-person staff.

"The price is on the high side of what we projected," he said of the winning bid. The other bidder was Aqua America.

"What's another month going to do? It's frustrating to watch people come in at the last hour and ask for a delay," said Read.

He was referring, presumably, to other speakers who said they were unaware of the potential sale of the system until they received a township letter in the mail, a letter which arrived after the first two public information sessions had already occurred.

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"I am imploring you all to take an opportunity to table the vote until the May 20 meeting," said Turnberry Farms resident Stephanie Rowe.

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"This is beneficial in several ways, the first being it allows all residents to be able to digest and question this decision that seems to be on a fast track for a reason that has not been satisfied by any of the presentations that you allowed to happen with little or no response from the board — almost every question was deferred to either PFM or PA American Water," Rowe said.

Darryle Tillman, who appeared in scrubs while caring "for 104 patients, one third to one half of which have COVID-19," also urged a delay.

"This plan has its good points and its bad points, but it is ridiculous to do this in a Zoom meeting in the middle of a pandemic," he said in reference to the on-line platform used for the meeting.

Al Leach, who is also the vice president of the Pottsgrove School Board, also urged a pause.

"I'm sure you've all done your due diligence, but a lot of residents are just finding out about this and would like to see if they can get more involved," Leach said.

"There are a lot of questions that need to get answered, like how the board intends to spend the proceeds, and the open space question," he said.

Although the presentation has identified the proceeds as paying down the sewer system debt; making the pension system whole and paying off general fund and road fund debt, two other proposed uses have raised questions.

One is paying off debt undertaken by the open space fund, which is paid off with a voter-approved earned income tax; and infrastructure improvements to the police station and township offices in the firehouse.

No specific plan for those improvements has been presented as part of the sewer system sale proposal, said resident Doug Kern.

"We have no access to the paperwork, no ability to examine this ourselves," said Kern, who said he did not find out about the proposal until two of the public information sessions had already passed.

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"All I have is a bunch of slides, which changed after almost every meeting, and a lot of 'take-my-word-for-it-answers. It sounds like you have a 90-day window to make a decision," said Kern, urging a delay or a no vote.

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Dustin Schreiber said his research indicates American Water, the parent company of the high bidder, "is owned by a German conglomerate called RFWAG. I'd prefer we support an American company if we sell, and I'm not convinced we should sell."

Hanover Drive resident Keith Plumadore said he sees the sale as a short-term fix for the township's finances. "It's a temporary reprieve from amateur fiscal management. The township did a good job with the (request for proposals) but I see no evidence the township will execute and bring better fiscal governance with the proceeds."

"When I moved here in 2000, the commissioners and the people all worked together," said Leach. "I implore you to at least consider the idea of tabling this motion, It would be so easy to delay this vote so we can get all our ducks in a row and demonstrate transparency we always used to have in this community."

Slinkerd closed public comment and then called on Schreiber to outline the objections he has been posting on his Facebook page and the Turnberry Farms Facebook page.

However, as Schreiber spoke, Slinkerd repeatedly interrupted him, talked over him and told him his points were not relevant to the subject at hand.

"The sewer customers paid for the sewer, if they were stockholders, they should be getting a bonus check, they're getting the short end of the stick," said Schreiber.

"What about people who pay school taxes but don't have any children in the system," Slinkerd interjected. "Should they not be taxed?"

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The areas in green on this map of Upper Pottsgrove show the areas served by the township sewer system.

Official township sewer map

"Everyone has a chance to send to send students to school," Schreiber replied. "What about open space, Martin?" Slinkerd interrupted again. "That's paid with earned income tax, but seniors don't pay that. Should we put signs up telling them they can't use the open space?" Slinkerd asked.

"We taxed ourselves for that," Schreiber started to reply and Slinkerd pressed on. "We don't separate our residents into septic or sewer residents. Are you saying that's the way we should go?"

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As Schreiber tried to raise further points, Slinkerd continued to interrupt him. "That's what you've been doing, going down this rabbit hole trying to dislodge what we're talking about," Slinkerd said.

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"You keep trying to throw things at the wall at the 11th hour to see what sticks to make it seem like you did research," he continued. "You've had a year to think about this stuff."

"Are you going to let me finish?" Schreiber finally asked. "I never stopped you," Slinkerd replied, finally allowing Schreiber to speak uninterrupted.

The other commissioners, Dave Waldt, Cathy Paretti and Renee Spaide all were permitted to speak uninterrupted, except when Schrieber spoke, thinking Paretti was finished with her point.

He apologized for interrupting her and urged her to go on.

The other commissioners joined in disputing Schreiber's points.

Spaide, who has served on the board for many years with Schreiber, read from a prepared statement that noted, in part, "all the commissioners have been involved."

She said she agrees with Read that running the sewer system is a risk. "We have a road crew, not a sewer crew and Pennsylvania American Water does this for a living," said Spaide.

Waldt said he and Paretti "ran on concern about the township's finances. People were very unhappy." He disputed Schreiber's characterization that he was left out of discussions. "We've spent hours on the budget and I never see you. You never participate," said Waldt.

"Dave and I started to get to get acquainted with this while we were running," said Paretti. "We don't have any business running a sewer business. If we keep it, our taxes would rise and the rates would be higher than if we didn't own it."

She added, "I don't wait to be invited into things, I ask for the information I need."

When Schreiber tried to point out he had asked Reddick for information and it took two days to get an answer, the other commissioners leaped to her defense. "Michelle has a lot on her plate," said Paretti.

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"Michelle has done an outstanding job," said Slinkerd.

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Paretti pointec out that while people last night were complaining about having the meeting over Zoom, it had more participants than most in-person township meetings.

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"It's great to see so many people participate. This is not as many as we get at regular meetings. I've had people tell me they like this better," said Paretti. "You're never going to make everyone happy."

But even in a pandemic, "the one thing that can't stop is your government," Paretti said.

After the vote, Slinkerd said the next steps would be discussed at a future meeting.

This article first appeared as a post in The Digital Notebook blog.

> "All I have is a bunch of slides, which changed after almost every meeting, and a lot of 'take-my-word-for-it-answers."
>
> — Doug Kern, Upper Pottsgrove resident

> "This plan has its good points and its bad points, but it is ridiculous to do this in a Zoom meeting in the middle of a pandemic."
>
> — Darryle Tillman, Upper Pottsgrove resident

> "What's another month going to do? It's frustrating to watch people come in at the last hour and ask for a delay."
>
> — Don Read, Upper Pottsgrove Sewer Committee

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> "I am imploring you all to take an opportunity to table the vote until the May 20 meeting."
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> — Stephanie Rowe, Upper Pottsgrove resident

> "You keep trying to throw things at the wall at the 11th hour to see what sticks to make it seem like you did research."
>
> — Trace Slinkerd, Upper Pottsgrove Commissioners chairman

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Men's Grillin' Like a Villain Long Sleeve...

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Evan Brandt
@PottstownNews on Twitter

Evan Brandt has been a staff reporter for The Mercury for more than 20 years. He covers municipal, school district, political, state government, federal government and environmental news.

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Va Township

Bill ID: 20-3-30 Bill Date: 03/30/2020 Due Date: 04/30/2020

Service	Charge	Rate	Current Charge	Prior Due	Total Billed	w\Penalty

Billing Summary By Class

Class	# of Units	# of Accounts	Consumption charges	Fixed charges	Special charges	Unit charges	Taxes	Prior Due	Total	Consumption
CH	0.00	6	$1,903.57	$0.00	$0.00	$0.00	$0.00	$588.17	$2,491.74	0.00
COM	0.00	119	$57,834.48	$0.00	$0.00	$0.00	$0.00	$4,543.43	$62,377.91	1,636.00
DAY	0.00	2	$2,006.87	$0.00	$0.00	$0.00	$0.00	$0.00	$2,006.87	0.00
IND	0.00	13	$11,785.09	$0.00	$0.00	$0.00	$0.00	-$967.10	$10,817.99	27.00
MH	0.00	4	$1,087.76	$0.00	$0.00	$0.00	$0.00	$1,003.61	$2,091.37	0.00
RES	1.00	3,022	$943,941.94	$0.00	$0.00	$0.00	$0.00	$224,214.75	$1,168,156.69	31,458.00
SCH	0.00	3	$4,074.10	$0.00	$0.00	$0.00	$0.00	$0.00	$4,074.10	338.00
Grand Totals	1.00		$1,022,633.81	$0.00	$0.00	$0.00	$0.00	$229,382.86	$1,252,016.67	33,459.00

65

	Metered Sewer	Sewer	Trash	Water	Total
CH	0.00 0 $0.00 0.00	0.00 6 $1463.00 0.00	0.00 6 $440.57 0.00	0.00 0 $0.00 0.00	0.00 6 $1903.57 0.00
COM	0.00 26 $9447.60 555.00	0.00 90 $41339.82 526.00	0.00 17 $1258.76 0.00	0.00 27 $5788.30 555.00	0.00 119 $57834.48 1,636.00
DAY	0.00 0 $0.00 0.00	0.00 2 $1881.00 0.00	0.00 1 $125.87 0.00	0.00 0 $0.00 0.00	0.00 2 $2006.87 0.00
IND	0.00 0 $0.00 0.00	0.00 12 $11495.00 0.00	0.00 1 $62.94 0.00	0.00 1 $227.15 27.00	0.00 13 $11785.09 27.00
MH	0.00 0 $0.00 0.00	0.00 4 $836.00 0.00	0.00 4 $251.76 0.00	0.00 0 $0.00 0.00	0.00 4 $1087.76 0.00

Bill ID: 20-3-30 Bill Date: 03/30/2020 Due Date: 04/30/2020

Service Charge Rate Current Charge Prior Due Total Billed w\Penalty

	Metered Sewer	Sewer	Trash	Water	Total
RES	0.00 1,638 $326585.47 15,718.00	0.00 1,344 $274835.00 0.00	1.00 2,741 $178743.69 0.00	0.00 1,641 $163777.78 15,740.00	1.00 3,022 $943941.94 31,458.00
SCH	0.00 2 $2026.80 169.00	0.00 1 $627.00 0.00	0.00 0 $0.00 0.00	0.00 2 $1420.30 169.00	0.00 3 $4074.10 338.00
Total	0.00 1,666 $338059.87 16,442.00	0.00 1,459 $332476.82 526.00	1.00 2,770 $180883.59 0.00	0.00 1,671 $171213.53 16,491.00	1.00 3,169 $1022633.81 33,459.00

Billing Summary By District

District	Accounts	Consumption charges	Fixed charges	Special charges	Unit charges	Total Taxes	Prior Due	Total	Consumption
	98	$31,793.07	$0.00	$0.00	$0.00	$0.00	$7,493.77	$39,286.84	1,308.00
01	227	$89,098.00	$0.00	$0.00	$0.00	$0.00	$11,780.00	$100,878.00	5,375.00
02	180	$66,337.00	$0.00	$0.00	$0.00	$0.00	$7,045.26	$73,382.26	3,734.00
03	373	$140,804.30	$0.00	$0.00	$0.00	$0.00	$12,388.59	$153,192.89	8,152.00
04	128	$45,371.52	$0.00	$0.00	$0.00	$0.00	$3,462.92	$48,834.44	2,402.00
05	79	$29,618.51	$0.00	$0.00	$0.00	$0.00	$1,527.02	$31,145.53	1,676.00
06	507	$168,878.38	$0.00	$0.00	$0.00	$0.00	-$1,009.62	$167,868.76	7,332.00
A	522	$156,120.45	$0.00	$0.00	$0.00	$0.00	$53,216.98	$209,337.43	1,346.00
B	662	$191,212.44	$0.00	$0.00	$0.00	$0.00	$96,144.83	$287,357.27	1,172.00
C	364	$92,570.36	$0.00	$0.00	$0.00	$0.00	$36,930.04	$129,500.40	436.00
EF	9	$3,446.52	$0.00	$0.00	$0.00	$0.00	$91.36	$3,537.88	218.00
WC	20	$7,383.26	$0.00	$0.00	$0.00	$0.00	$311.71	$7,694.97	308.00
Grand Totals		$1,022,633.81	$0.00	$0.00	$0.00	$0.00	$229,382.86	$1,252,016.67	33,459.00

(b) Until such time as a Nonassignable Asset is transferred to Buyer pursuant to this Article II, Buyer and Seller shall cooperate in any commercially reasonable and economically feasible arrangements (such as subleasing, sublicensing or subcontracting) to provide to the Parties the economic and, to the extent permitted under Law, operational equivalent of the transfer of such Nonassignable Asset to Buyer at the Closing and the performance by Buyer of its obligations with respect thereto, and so long as Seller transfers and turns over all economic and beneficial rights with respect to each such Nonassignable Asset, Buyer shall, to the extent permitted under Law and the terms of any applicable contract that is a Nonassignable Asset, as agent or subcontractor for Seller, pay, perform and discharge the liabilities and obligations of Seller thereunder from and after the Closing Date, but only to the extent that such liabilities and obligations would be Assumed Liabilities if the applicable consent or approval had been obtained on or before the Closing Date and such Nonassignable Asset had been assigned to Buyer at Closing. To the extent permitted under Law, Seller shall hold in trust for and pay to Buyer promptly upon receipt thereof, such Nonassignable Asset and all income, proceeds and other monies received by Seller with respect to such Nonassignable Asset in connection with the arrangements under this Article II.

(c) If, following the Effective Date and before the Closing, Buyer identifies any contract to which Seller is a party which is not set forth on Schedule 4.13, and Buyer reasonably determines such contract is necessary or useful to the operation of the System, Buyer shall notify Seller of such determination and Seller shall, promptly following receipt of such notice, deliver to Buyer an updated Schedule 4.13 reflecting the addition of such contract, and such contract will be an "Assigned Contract" for all purposes hereunder.

(d) If during the twelve (12) month period following the Closing, Buyer identifies any contract to which Seller was a party as of the Closing and which (i) was not set forth on Schedule 4.13 (as may be updated pursuant to (c)) and (ii) Buyer reasonably believes is necessary or useful to the operation of the System, Seller shall, promptly following Buyer's written request therefor, execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such other instruments of conveyance and transfer and other documents, and perform or cause to be performed such further acts, as may be reasonably required to evidence or effectuate, or more fully evidence or effectuate the assignment of such contract to Buyer for no additional consideration, and upon such assignment, such contract is deemed an Assigned Contract for all purposes hereunder.

ARTICLE III.

PURCHASE PRICE AND ADDITIONAL PURCHASE PRICE

Section 3.01. Purchase Price.
The purchase price for the Acquired Assets is Thirteen Million Nine Hundred Fifty Thousand Dollars ($13,950,000) (the "Purchase Price") which Buyer shall pay as follows at Closing:

(a) Buyer shall pay, subject to any adjustment pursuant to Section 3.01(b), to Seller by wire transfer of immediately available funds the Purchase Price (remaining after the payments required in Section 3.01(a)) to one or more accounts that Seller designates and provides to Buyer at least three (3) Business Days before the Closing Date; and

Va Township

Bill ID: 20-3-30 Bill Date: 03/30/2020 Due Date: 04/30/2020

Service	Charge	Rate	Current Charge	Prior Due	Total Billed	w\Penalty

Billing Summary By Class

Class	# of Units	# of Accounts	Consumption charges	Fixed charges	Special charges	Unit charges	Taxes	Prior Due	Total	Consumption
CH	0.00	6	$1,903.57	$0.00	$0.00	$0.00	$0.00	$588.17	$2,491.74	0.00
COM	0.00	119	$57,834.48	$0.00	$0.00	$0.00	$0.00	$4,543.43	$62,377.91	1,636.00
DAY	0.00	2	$2,006.87	$0.00	$0.00	$0.00	$0.00	$0.00	$2,006.87	0.00
IND	0.00	13	$11,785.09	$0.00	$0.00	$0.00	$0.00	-$967.10	$10,817.99	27.00
MH	0.00	4	$1,087.76	$0.00	$0.00	$0.00	$0.00	$1,003.61	$2,091.37	0.00
RES	1.00	3,022	$943,941.94	$0.00	$0.00	$0.00	$0.00	$224,214.75	$1,168,156.69	31,458.00
SCH	0.00	3	$4,074.10	$0.00	$0.00	$0.00	$0.00	$0.00	$4,074.10	338.00
Grand Totals	1.00		$1,022,633.81	$0.00	$0.00	$0.00	$0.00	$229,382.86	$1,252,016.67	33,459.00

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	Metered Sewer	Sewer	Trash	Water	Total
CH	0.00 0 $0.00 0.00	0.00 6 $1463.00 0.00	0.00 6 $440.57 0.00	0.00 0 $0.00 0.00	0.00 6 $1903.57 0.00
COM	0.00 26 $9447.60 555.00	0.00 90 $41339.82 526.00	0.00 17 $1258.76 0.00	0.00 27 $5788.30 555.00	0.00 119 $57834.48 1,636.00
DAY	0.00 0 $0.00 0.00	0.00 2 $1881.00 0.00	0.00 1 $125.87 0.00	0.00 0 $0.00 0.00	0.00 2 $2006.87 0.00
IND	0.00 0 $0.00 0.00	0.00 12 $11495.00 0.00	0.00 1 $62.94 0.00	0.00 1 $227.15 27.00	0.00 13 $11785.09 27.00
MH	0.00 0 $0.00 0.00	0.00 4 $836.00 0.00	0.00 4 $251.76 0.00	0.00 0 $0.00 0.00	0.00 4 $1087.76 0.00

Bill ID: 20-3-30 Bill Date: 03/30/2020 Due Date: 04/30/2020

Service	Charge	Rate	Current Charge	Prior Due	Total Billed	w\Penalty

	Metered Sewer	Sewer	Trash	Water	Total
RES	0.00 1,638 $326585.47 15,718.00	0.00 1,344 $274835.00 0.00	1.00 2,741 $178743.69 0.00	0.00 1,641 $163777.78 15,740.00	1.00 3,022 $943941.94 31,458.00
SCH	0.00 2 $2026.80 169.00	0.00 1 $627.00 0.00	0.00 0 $0.00 0.00	0.00 2 $1420.30 169.00	0.00 3 $4074.10 338.00
Total	0.00 1,666 $338059.87 16,442.00	0.00 1,459 $332476.82 526.00	1.00 2,770 $180883.59 0.00	0.00 1,671 $171213.53 16,491.00	1.00 3,169 $1022633.81 33,459.00

Billing Summary By District

District	Accounts	Consumption charges	Fixed charges	Special charges	Unit charges	Total Taxes	Prior Due	Total	Consumption
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02	180	$66,337.00	$0.00	$0.00	$0.00	$0.00	$7,045.26	$73,382.26	3,734.00
03	373	$140,804.30	$0.00	$0.00	$0.00	$0.00	$12,388.59	$153,192.89	8,152.00
04	128	$45,371.52	$0.00	$0.00	$0.00	$0.00	$3,462.92	$48,834.44	2,402.00
05	79	$29,618.51	$0.00	$0.00	$0.00	$0.00	$1,527.02	$31,145.53	1,676.00
06	507	$168,878.38	$0.00	$0.00	$0.00	$0.00	-$1,009.62	$167,868.76	7,332.00
A	522	$156,120.45	$0.00	$0.00	$0.00	$0.00	$53,216.98	$209,337.43	1,346.00
B	662	$191,212.44	$0.00	$0.00	$0.00	$0.00	$96,144.83	$287,357.27	1,172.00
C	364	$92,570.36	$0.00	$0.00	$0.00	$0.00	$36,930.04	$129,500.40	436.00
EF	9	$3,446.52	$0.00	$0.00	$0.00	$0.00	$91.36	$3,537.88	218.00
WC	20	$7,383.26	$0.00	$0.00	$0.00	$0.00	$311.71	$7,694.97	308.00
Grand Totals		$1,022,633.81	$0.00	$0.00	$0.00	$0.00	$229,382.86	$1,252,016.67	33,459.00

and beneficial rights with respect to each such Nonassignable Asset, Buyer shall, to the extent permitted under Law and the terms of any applicable contract that is a Nonassignable Asset, as agent or subcontractor for Seller, pay, perform and discharge the liabilities and obligations of Seller thereunder from and after the Closing Date, but only to the extent that such liabilities and obligations would be Assumed Liabilities if the applicable consent or approval had been obtained on or before the Closing Date and such Nonassignable Asset had been assigned to Buyer at Closing. To the extent permitted under Law, Seller shall hold in trust for and pay to Buyer promptly upon receipt thereof, such Nonassignable Asset and all income, proceeds and other monies received by Seller with respect to such Nonassignable Asset in connection with the arrangements under this Article II.

(c) If, following the Effective Date and before the Closing, Buyer identifies any contract to which Seller is a party which is not set forth on Schedule 4.13, and Buyer reasonably determines such contract is necessary or useful to the operation of the System, Buyer shall notify Seller of such determination and Seller shall, promptly following receipt of such notice, deliver to Buyer an updated Schedule 4.13 reflecting the addition of such contract, and such contract will be an "Assigned Contract" for all purposes hereunder.

(d) If during the twelve (12) month period following the Closing, Buyer identifies any contract to which Seller was a party as of the Closing and which (i) was not set forth on Schedule 4.13 (as may be updated pursuant to (c)) and (ii) Buyer reasonably believes is necessary or useful to the operation of the System, Seller shall, promptly following Buyer's written request therefor, execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such other instruments of conveyance and transfer and other documents, and perform or cause to be performed such further acts, as may be reasonably required to evidence or effectuate, or more fully evidence or effectuate the assignment of such contract to Buyer for no additional consideration, and upon such assignment, such contract is deemed an Assigned Contract for all purposes hereunder.

ARTICLE III.

PURCHASE PRICE AND ADDITIONAL PURCHASE PRICE

Section 3.01. Purchase Price.

The purchase price for the Acquired Assets is Seven Million Three Hundred Twenty-Five Thousand Dollars ($7,325,000) (the "Purchase Price") which Buyer shall pay as follows at Closing:

(a) Buyer shall pay, subject to any adjustment pursuant to Section 3.01(b) and to release Liens, to Seller by wire transfer of immediately available funds the Purchase Price to one or more accounts that Seller designates and provides to Buyer at least three (3) Business Days before the Closing Date; and

(b) Final Billing: The Buyer is entitled to all customer billings with respect to drinking water customers services for the period on or after the Closing Effective Time, and Seller is entitled to all such billings for the period before the Closing Effective Time. The Parties

respect thereto, and so long as Seller or the City transfers and turns over all economic and beneficial rights with respect to each such Nonassignable Asset, Buyer shall, to the extent permitted under applicable Law and the terms of any applicable contract that constitutes a Nonassignable Asset, as agent or subcontractor for Seller or the City, pay, perform and discharge the Liabilities and obligations of Seller thereunder from and after the Closing Date, but only to the extent that such liabilities and obligations would constitute Assumed Liabilities if the applicable consent or approval had been obtained on or prior to the Closing Date and such Nonassignable Asset had been assigned to Buyer at Closing. To the extent permitted under applicable Law, Seller or the City shall, at Seller's or the City's expense, hold in trust for and pay to Buyer promptly upon receipt thereof, such Nonassignable Asset and all income, proceeds and other monies received by Seller with respect to such Nonassignable Asset in connection with the arrangements under this Article II.

(c) If, following the Effective Date and prior to the Closing, Buyer identifies any contract to which Seller or the City is a party which is not identified on Schedule 4.15 as an Assigned Contract as of the Effective Date, and Buyer reasonably determines such contract is necessary to the operation of the System, Buyer shall give notice of such determination to Seller or the City and Seller or the City shall, promptly following receipt of such notice, deliver to Buyer an updated Schedule 4.15 identifying such contract, and such contract shall thereafter constitute and be deemed an Assigned Contract for all purposes hereunder.

(d) In the event that, during the twelve (12) month period following the Closing, Buyer identifies any contract to which Seller or the City was a party as of the Closing and which (i) was not set forth on or properly identified on Schedule 4.15 (as may be updated pursuant to (c)) and (ii) Buyer reasonably believes is necessary to the operation of the System, Seller or the City shall, promptly following Buyer's written request therefor, execute, acknowledge and deliver, or cause to be executed, acknowledged and delivered, such other instruments of conveyance and transfer and other documents, and perform or cause to be performed such further acts, as may be reasonably required to evidence or effectuate, or more fully evidence or effectuate the assignment of such contract to Buyer for no additional consideration, and upon such assignment, such contract shall be deemed an Assigned Contract for all purposes hereunder.

ARTICLE III.

PURCHASE PRICE

Section 3.01 Purchase Price; Agreement Proposal Security.

(a) **Purchase Price for the Assets; Adjustment for City Deposit.** Subject to the terms and conditions of this Agreement, the purchase price ("**Purchase Price**") for the Acquired Assets shall be (i) $235,000,000, *plus* (ii) the Average Daily AR Payment. The Purchase Price shall be delivered as follows:

(i) Within 60 days of the Effective Date, Buyer shall deposit Twenty Million Dollars ($20,000,000) of the Purchase Price, payable to the City in immediately available funds ("**City Deposit**"), subject to Sections 4.03, 6.06, 9.05 and 13.02 and secured by the City with a tax and revenue anticipation note (the "**Deposit Note**") substantially in the form attached hereto as Exhibit A; and

Application of Pennsylvania-American Water Company for the Acquisition of the Wastewater Collection and Treatment System Owned by the York City Sewer Authority (the "Authority") and Operated by the City of York (the "City") (collectively "York")

66 Pa. C.S. § 1329
Application Filing Checklist – Water/Wastewater
Docket No. A-2021-3024681

17. Customers.

a. State the seller's actual number of customers by class and quantify the related consumption or gallons treated in the current calendar year and future number of connections anticipated for the next 10 years.

RESPONSE:

a. As of April 2021, York provided direct wastewater service to approximately 13,747 customers and seven bulk customers:

1. Manchester Township
2. West Manchester Township
3. York Township
4. North York Borough
5. The York Water Company (owner of the West York Borough Collection System)
6. Spring Garden Township
7. Springettsbury Township

The York does not differentiate by customer class.

Consumption (annual):

Based on 2020 monthly average flow data from the 2020 Chapter 94 Report, the annual gallon treated is 3,341,575,000 gallons, inclusive of the seven bulk customers' sewage.

Please refer to **Appendix A-20-c,** Chapter 94 Report for future EDU projections.

Appendix A-17-a

system at an agreed-upon price of $53,000,000.[9] Thereafter, Aqua and the Township agreed to use the process presented in Section 1329 of the Code to determine the FMV of the wastewater system assets and the ratemaking rate base. As required by Section 1329, Aqua and LMT jointly retained the services of Ebert Engineering, Inc., Consulting Engineers (Ebert) to complete the engineering assessment and original cost estimate of the wastewater system (Assessment of Tangible Property). Aqua St. 1 at 20; Application at ¶ 11. Aqua selected Gannett Fleming, and the Township selected AUS, as their respective UVEs to prepare FMV appraisals of the wastewater system. Application at ¶ 53. Gannett Fleming's FMV report concluded that the value of the wastewater system was $55,505,000; AUS' FMV was $54,430,591. Application Exhs. Q and R. Both appraisals were prepared in compliance with the USPAP standards. Application at ¶ 61; Application Exhs. T1 and T2.

In its Application, Aqua proposed a ratemaking rate base of $53,000,000 based on the agreed-to purchase price of $53,000,000. This amount is less than the average of the two UVE appraisals for the wastewater system (($55,505,000 + $54,430,591)/2 = $54,967,796). OCA M.B. at 6; *See* 66 Pa. C.S. § 1329(c)(2).

In addition, Aqua is seeking approval of the APA with LMT. Application Exh. B. The APA requires Aqua to implement rates that are no higher than the Township's rates in effect at closing. Application Exh. B at Section 7.04. The APA also provides that Aqua intends to bill customers on a monthly basis instead of an annual basis. *Id*. Moreover, in accordance with Section 1102 of the Code, Aqua is requesting a Certificate in order to provide wastewater services to the Township customers. Application at ¶ 5. Separate customer notices were sent to the Township customers and

[9] All assets are located in the Township except for a portion of a main that collects wastewater from a small segment of residents in Yardley Borough. The main is located on University Blvd. and is owned by LMT which loops into, then out of, Yardley Borough. The residents in Yardley Borough that are connected to this main are billed by Yardley Borough. Application at 3.

adopted without comment unless they are either expressly or by necessary implication rejected or modified by this Opinion and Order.

As we proceed in our review of the various positions of the Parties in this proceeding, we are reminded that the Commission is not required to consider expressly or at length each contention or argument raised by the parties. *Consolidated Rail Corp. v. Pa. PUC*, 625 A.2d 741 (Pa. Cmwlth. 1993); *also see, generally, University of Pennsylvania v. Pa. PUC*, 485 A.2d 1217 (Pa. Cmwlth. 1984). Exceptions that we do not specifically address shall be deemed to have been duly considered and denied without further discussion.

III. Transaction Overview

Aqua is a certificated provider of wastewater service, duly organized and existing under the laws of the Commonwealth of Pennsylvania. Aqua provides wastewater service to approximately 45,000 customer accounts in various counties throughout Pennsylvania including parts of Bucks County. Application at ¶ 7.

LMT owns a sanitary wastewater collection system operated by the Municipal Sewer Authority of the Township of Lower Makefield, which provides direct wastewater service to 11,151 customers in the Township. Application at ¶ 8; Aqua St. 2 at 10. LMT does not own a wastewater treatment plant. Wastewater treatment is mainly provided by the Municipal Authority of the Borough of Morrisville and also by Yardley Borough Sewer Authority. Application at ¶ 15.

On September 17, 2020, Aqua and LMT entered into an APA for the sale of substantially all of the assets, properties, and rights related to the Township's wastewater

II. Transaction Overview

Aqua is a certificated provider of wastewater service, duly organized and existing under the laws of the Commonwealth of Pennsylvania. Aqua provides wastewater service to approximately 45,000 customer accounts in various counties throughout Pennsylvania, including parts of Chester County and within the Township itself, and currently operates thirty-nine wastewater treatment plants. Application at ¶ 7; Aqua St. 1 at 8-9.

EWT is a Pennsylvania Second Class township, which owns the sanitary wastewater collection system (the System) providing sanitary wastewater service to approximately 3,895 customers in EWT. Application at ¶ 8. Although EWT owns the Malvern Hunt Wastewater Treatment Plant (WWTP), wastewater treatment is mainly provided by the Valley Forge Sewer Authority (VFSA).[3] Application at ¶ 15.

On January 8, 2021, Aqua and EWT entered into an APA for the sale of the assets, properties, and rights related to the Township's System at an agreed-upon price of $54,930,000. Thereafter, Aqua and the Township agreed to use the process presented in Section 1329 of the Code to determine the fair market value (FMV) of the System assets and the ratemaking rate base. As required by Section 1329, Aqua and EWT jointly retained the services of Pennoni Associates, Inc. (Pennoni) to complete the engineering assessment and original cost estimate of the System (Engineering Assessment).

[3] In the Application, Aqua stated that Malvern Hunt WWTP was in the process of being decommissioned and converted to a pump station. Following the decommissioning, all wastewater flows will be treated at the VFSA WWTP. EWT, in addition, collects/conveys flow to/from its system from the Borough of Malvern, Tredyffrin Township, Charlestown Township, and Willistown Township, which then flows for treatment at the VFSA. EWT also has several areas of its system that are on the border between EWT and East Goshen Township. While EWT owns the facilities within its borders, flows from these customers are sent to the East Goshen Municipal Authority (EGMA) WWTP. Aqua St. 2 at 5-6.

Willistown is a Pennsylvania Second Class township, which owns the sanitary wastewater collection and treatment system (the System) providing sanitary wastewater service to approximately 2,294 customers in Willistown. Application at ¶ 8. Although Willistown owns one wastewater treatment plant (WWTP), Penn's Preserve, which treats wastewater to a small community system, wastewater treatment is mainly provided by the Valley Forge Sewer Authority (VFSA).[5] Application at ¶ 15.

On January 20, 2021, Aqua and Willistown entered into an APA for the sale of the assets, properties, and rights related to the Township's wastewater system at an agreed-upon price of $17,500,000. Thereafter, Aqua and the Township agreed to use the process presented in Section 1329 of the Code to determine the FMV of the wastewater system assets and the ratemaking rate base. As required by Section 1329, Aqua and Willistown jointly retained the services of Pennoni Associates, Inc. (Pennoni) to complete the engineering assessment and original cost estimate of the System (Engineering Assessment). Aqua St. 1 at 19; Application at ¶ 11. Aqua selected Gannett Fleming, and the Township selected AUS, as their respective Utility Valuation Engineers (UVEs) to prepare FMV appraisals of the System. Application at ¶ 53. Gannett Fleming's FMV report concluded that the value of the System was $25,612,805; AUS' FMV was $19,113,140. Application Exhs. Q and R, respectively.[6, 7] Both appraisals were prepared in compliance with the Uniform Standards of Professional Appraisal Practice (USPAP) standards. Application at ¶ 61; Application Exhs. T1 and T2.

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[5] Willistown accepts flows into the System from users on the borders of Willistown, including from neighboring municipalities: Borough of Malvern (Malvern), East Goshen Township (East Goshen), and East Whiteland Township (EWT). While most flows from these users flow to the VFSA WWTP for treatment, some flows sent to East Goshen are treated at the East Goshen Municipal Authority (EGMA) Ridley Creek WWTP or the West Goshen Sewer Authority (WGSA) WWTP. Aqua St. 2 at 5-6.

[6] Application Exhibit Q, Gannett Fleming Fair Market Value Appraisal Report (hereinafter "Application Exh. Q" or "Gannett Fleming FMV Appraisal").

[7] Aqua Application, Exhibit R, AUS Fair Market Value Appraisal Report (hereinafter "Application Exh. R" or "AUS FMV Appraisal").

Municipality	Final Sewer Customers
City of Beaver Falls	3,252
North Sewickley	1,094
Patterson Township	1,191
Big Beaver	166
Eastvale	104
West Mayfield	521
White Township	421
Patterson Heights	270
Total	**7,019**

CITY OF BEAVER FALLS
STATEMENT OF NET POSITION
PROPRIETARY FUNDS
DECEMBER 31, 2017

	JOINT SEWER USERS FUND	CITY SEWER USERS FUND	TOTAL
ASSETS			
Current Assets:			
Cash and cash equivalents	$ 996,456	$ 9,666	$ 1,006,122
Due from Other Fund	180,324	100,479	280,803
Accounts receivable:			
Sanitation/Sewage (Net)	-	181,575	181,575
Other	193,960	-	193,960
Total Current Assets	$ 1,370,740	$ 291,720	$ 1,662,460
Noncurrent Assets:			
Buildings and improvements	$ 10,010,405	$ -	$ 10,010,405
Office Equipment	30,894	11,885	42,779
Vehicles	108,226	148,570	256,796
Machinery & Equipment	-	404,698	404,698
Infrastructure	1,700,472	787,072	2,487,544
Accumulated depreciation	(5,917,335)	(625,729)	(6,543,064)
Total Noncurrent Assets	5,932,661	726,497	6,659,158
TOTAL ASSETS	**$ 7,303,401**	**$ 1,018,217**	**$ 8,321,618**
LIABILITIES			
Current Liabilities:			
Accounts payable	$ 24,668	$ 9,202	$ 33,870
Due to other funds	53,763	180,324	234,087
Total Current Liabilities	$ 78,431	$ 189,526	$ 267,957
TOTAL LIABILITIES	**$ 78,431**	**$ 189,526**	**$ 267,957**
NET POSITION			
Net Investment in Capital Assets	$ 5,932,661	$ 726,497	$ 6,659,158
Unrestricted	1,292,309	102,194	1,394,503
TOTAL NET POSITION	**$ 7,224,970**	**$ 828,691**	**$ 8,053,661**
TOTAL LIABILITIES AND NET POSITION	**$ 7,303,401**	**$ 1,018,217**	**$ 8,321,618**

The accompanying notes are an integral part of these financial statements

CITY OF BEAVER FALLS
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET POSITION
PROPRIETARY FUNDS
FOR THE YEAR ENDED DECEMBER 31, 2017

	JOINT SEWER USERS FUND	CITY SEWER USERS FUND	TOTAL
OPERATING REVENUES:			
Sewage charges	$ 1,516,759	$ 1,283,432	$ 2,800,191
Tap-In Fees	33,719	-	33,719
Permit Fees	500	-	500
Miscellaneous	1,294	-	1,294
TOTAL OPERATING REVENUES	**$ 1,552,272**	**$ 1,283,432**	**$ 2,835,704**
OPERATING EXPENSES:			
Contractual services	$ -	$ 681,208	$ 681,208
Wages and Benefits	600,030	79,200	679,230
Administrative	30,000	180,000	210,000
Office	2,743	-	2,743
Repair and maintenance	66,599	101,922	168,521
Billing expense	-	20,084	20,084
Depreciation	215,037	34,803	249,840
Engineering	9,665	21,281	30,946
Utilities	123,779	-	123,779
Chemicals/Chlorine	27,374	-	27,374
Sludge/grit removal	47,756	-	47,756
Janitorial Supplies	3,029	-	3,029
Gas and Oil	2,340	-	2,340
Equipment	2,263	-	2,263
Uniforms	2,135	-	2,135
Permits and testing	13,022	500	13,522
Certification & Training	830	375	1,205
Insurance	30,273	-	30,273
Miscellaneous	-	2,016	2,016
Line Rental Expense	40,000	-	40,000
Sewer-Line Reimbursement	-	100,000	100,000
TOTAL OPERATING EXPENSES	**$ 1,216,875**	**$ 1,221,389**	**$ 2,438,264**
OPERATING INCOME (LOSS)	**$ 335,397**	**$ 62,043**	**$ 397,440**
NONOPERATING REVENUES (EXPENSES):			
Interest income	$ 1,268	$ 444	$ 1,712
Interest expense	(21,815)	-	(21,815)
Operating Transfers In	964,629	-	964,629
Operating Transfers Out	(497,238)	-	(497,238)
TOTAL NONOPERATING REVENUES (EXPENSES)	**$ 446,844**	**$ 444**	**$ 447,288**
CHANGE IN NET POSITION	**$ 782,241**	**$ 62,487**	**$ 844,728**
NET POSITION - January 1, 2017	6,442,729	766,204	7,208,933
NET POSITION - December 31, 2017	**$ 7,224,970**	**$ 828,691**	**$ 8,053,661**

The accompanying notes are an integral part of these financial statements

CITY OF BEAVER FALLS
STATEMENT OF CASH FLOWS
PROPRIETARY FUNDS
FOR THE YEAR ENDED DECEMBER 31, 2017

	JOINT SEWER USERS FUND	CITY SEWER USERS FUND	TOTAL
CASH FLOWS FROM OPERATING ACTIVITIES:			
Cash Received from User Charges	$ 1,523,415	$ 1,290,322	$ 2,813,737
Miscellaneous Revenue	1,294	-	1,294
Cash Paid to Vendors for Goods and Services	(1,004,677)	(1,181,844)	(2,186,521)
Net cash provided (used) by operating activities	**$ 520,032**	**$ 108,478**	**$ 628,510**
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:			
Fixed asset purchases & additions	$ (7,749)	$ -	$ (7,749)
Principal debt service payments	(940,000)	-	(940,000)
Interest expense	(24,629)	-	(24,629)
Net cash provided (used) by capital and related financing activities	**$ (972,378)**	**$ -**	**$ (972,378)**
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:			
Transfers to Other Funds	$ 496,656	$ (169,854)	$ 326,802
Net cash provided (used) by noncapital financing activities	**$ 496,656**	**$ (169,854)**	**$ 326,802**
CASH FLOWS FROM INVESTING ACTIVITIES:			
Interest income	$ 1,268	$ 444	$ 1,712
Net cash provided by investing activities	**$ 1,268**	**$ 444**	**$ 1,712**
Net increase (decrease) in cash and cash equivalents	$ 45,578	$ (60,932)	$ (15,354)
Cash and cash equivalents - January 1, 2017	950,878	70,598	1,021,476
Cash and cash equivalents - December 31, 2017	**$ 996,456**	**$ 9,666**	**$ 1,006,122**
RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES:			
Operating Income (Loss)	$ 335,397	$ 62,043	$ 397,440
Adjustments to reconcile excess revenues over expenditures provided (used) by operating activities:			
Depreciation	215,037	34,803	249,840
Changes in assets and liabilities:			
(Increase) decrease in sewer/refuse receivables	-	6,890	6,890
(Increase) decrease in other accounts receivable	(27,563)	-	(27,563)
Increase (decrease) in accounts payable	(2,839)	4,742	1,903
Net cash provided (used) by operating activities	**$ 520,032**	**$ 108,478**	**$ 628,510**

The accompanying notes are an integral part of these financial statements

CITY OF BEAVER FALLS
STATEMENT OF NET POSITION
PROPRIETARY FUNDS
DECEMBER 31, 2018

	JOINT SEWER USERS FUND	CITY SEWER USERS FUND	TOTAL
ASSETS			
Current Assets:			
Cash and cash equivalents	$ 1,187,520	$ 22,457	$ 1,209,977
Due from Other Fund	177,811	395,725	573,536
Accounts receivable:			
Sanitation/Sewage (Net)	-	181,157	181,157
Other	182,827	-	182,827
Total Current Assets	**$ 1,548,158**	**$ 599,339**	**$ 2,147,497**
Noncurrent Assets:			
Buildings and improvements	$ 10,010,405	$ -	$ 10,010,405
Office Equipment	30,894	11,885	42,779
Vehicles	108,226	148,570	256,796
Machinery & Equipment	-	410,644	410,644
Infrastructure	1,700,472	787,072	2,487,544
Accumulated depreciation	(6,128,323)	(660,978)	(6,789,301)
Total Noncurrent Assets	**$ 5,721,674**	**$ 697,193**	**$ 6,418,867**
TOTAL ASSETS	**$ 7,269,832**	**$ 1,296,532**	**$ 8,566,364**
LIABILITIES			
Current Liabilities:			
Accounts payable	$ 18,323	$ 2,854	$ 21,177
Due to other funds	186	177,811	177,997
Total Current Liabilities	**$ 18,509**	**$ 180,665**	**$ 199,174**
TOTAL LIABILITIES	**$ 18,509**	**$ 180,665**	**$ 199,174**
NET POSITION			
Net Investment in Capital Assets	$ 5,721,674	$ 697,193	$ 6,418,867
Unrestricted	1,529,649	418,674	1,948,323
TOTAL NET POSITION	**$ 7,251,323**	**$ 1,115,867**	**$ 8,367,190**
TOTAL LIABILITIES AND NET POSITION	**$ 7,269,832**	**$ 1,296,532**	**$ 8,566,364**

The accompanying notes are an integral part of these financial statements

CITY OF BEAVER FALLS
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET POSITION
PROPRIETARY FUNDS
FOR THE YEAR ENDED DECEMBER 31, 2018

	JOINT SEWER USERS FUND	CITY SEWER USERS FUND	TOTAL
OPERATING REVENUES:			
Sewage charges	$ 1,607,524	$ 1,446,894	$ 3,054,418
Miscellaneous	1,577	-	1,577
TOTAL OPERATING REVENUES	**$ 1,609,101**	**$ 1,446,894**	**$ 3,055,995**
OPERATING EXPENSES:			
Contractual services	$ -	$ 705,420	$ 705,420
Wages and Benefits	664,761	65,700	730,461
Administrative	41,053	180,000	221,053
Office	3,533	-	3,533
Repair and maintenance	65,885	49,157	115,042
Billing expense	-	20,187	20,187
Depreciation	210,987	35,249	246,236
Engineering	4,252	5,142	9,394
Utilities	134,647	-	134,647
Chemicals/Chlorine	24,827	-	24,827
Sludge/grit removal	56,054	-	56,054
Janitorial Supplies	2,589	-	2,589
Gas and Oil	6,533	-	6,533
Equipment	5,732	-	5,732
Small Tools	40	-	40
Uniforms	2,244	-	2,244
Permits and testing	14,042	500	14,542
Certification & Training	480	-	480
Insurance	30,273	-	30,273
Miscellaneous	793	255	1,048
Line Rental Expense	40,000	-	40,000
Sewer-Line Reimbursement	-	100,000	100,000
TOTAL OPERATING EXPENSES	**$ 1,308,725**	**$ 1,161,610**	**$ 2,470,335**
OPERATING INCOME (LOSS)	**$ 300,376**	**$ 285,284**	**$ 585,660**
NONOPERATING REVENUES (EXPENSES):			
Interest income	$ 6,446	$ 1,892	$ 8,338
Refund Prior Year Revenues	(30,469)	-	(30,469)
Operating Transfers Out	(250,000)	-	(250,000)
TOTAL NONOPERATING REVENUES (EXPENSES)	**$ (274,023)**	**$ 1,892**	**$ (272,131)**
CHANGE IN NET POSITION	**$ 26,353**	**$ 287,176**	**$ 313,529**
NET POSITION - January 1, 2018	7,224,970	828,691	8,053,661
NET POSITION - December 31, 2018	**$ 7,251,323**	**$ 1,115,867**	**$ 8,367,190**

The accompanying notes are an integral part of these financial statements

CITY OF BEAVER FALLS
STATEMENT OF CASH FLOWS
PROPRIETARY FUNDS
FOR THE YEAR ENDED DECEMBER 31, 2018

	JOINT SEWER USERS FUND	CITY SEWER USERS FUND	TOTAL
CASH FLOWS FROM OPERATING ACTIVITIES:			
Cash Received from User Charges	$ 1,618,657	$ 1,447,312	$ 3,065,969
Miscellaneous Revenue	1,577	-	1,577
Cash Paid to Vendors for Goods and Services	(1,104,083)	(1,132,709)	(2,236,792)
Net cash provided (used) by operating activities	**$ 516,151**	**$ 314,603**	**$ 830,754**
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:			
Fixed asset purchases & additions	$ -	$ (5,945)	$ (5,945)
Refund Prior Year Revenues	(30,469)	-	(30,469)
Net cash provided (used) by capital and related financing activities	**$ (30,469)**	**$ (5,945)**	**$ (36,414)**
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:			
Transfers to Other Funds	$ (301,064)	$ (297,759)	$ (598,823)
Net cash provided (used) by noncapital financing activities	**$ (301,064)**	**$ (297,759)**	**$ (598,823)**
CASH FLOWS FROM INVESTING ACTIVITIES:			
Interest income	$ 6,446	$ 1,892	$ 8,338
Net cash provided by investing activities	**$ 6,446**	**$ 1,892**	**$ 8,338**
Net increase (decrease) in cash and cash equivalents	**$ 191,064**	**$ 12,791**	**$ 203,855**
Cash and cash equivalents - January 1, 2018	996,456	9,666	1,006,122
Cash and cash equivalents - December 31, 2018	**$ 1,187,520**	**$ 22,457**	**$ 1,209,977**
RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES:			
Operating Income (Loss)	$ 300,376	$ 285,284	$ 585,660
Adjustments to reconcile excess revenues over expenditures provided (used) by operating activities:			
Depreciation	210,987	35,249	246,236
Changes in assets and liabilities:			
(Increase) decrease in sewer/refuse receivables	-	418	418
(Increase) decrease in other accounts receivable	11,133	-	11,133
Increase (decrease) in accounts payable	(6,345)	(6,348)	(12,693)
Net cash provided (used) by operating activities	**$ 516,151**	**$ 314,603**	**$ 830,754**

The accompanying notes are an integral part of these financial statements

CITY OF BEAVER FALLS
STATEMENT OF NET POSITION
PROPRIETARY FUNDS
DECEMBER 31, 2019

	JOINT SEWER USERS FUND	CITY SEWER USERS FUND	TOTAL
ASSETS			
Current Assets:			
Cash and cash equivalents	$ 1,270,734	$ 214,063	$ 1,484,797
Due from Other Fund	176,039	-	176,039
Accounts receivable:			
Sanitation/Sewage (Net)	-	216,531	216,531
Other	111,159	-	111,159
Total Current Assets	**$ 1,557,932**	**$ 430,594**	**$ 1,988,526**
Noncurrent Assets:			
Buildings and improvements	$ 10,010,405	$ -	$ 10,010,405
Office Equipment	33,705	11,885	45,590
Vehicles	108,226	148,570	256,796
Machinery & Equipment	-	410,644	410,644
Infrastructure	1,700,472	787,072	2,487,544
Accumulated depreciation	(6,336,236)	(696,525)	(7,032,761)
Total Noncurrent Assets	**$ 5,516,572**	**$ 661,646**	**$ 6,178,218**
TOTAL ASSETS	**$ 7,074,504**	**$ 1,092,240**	**$ 8,166,744**
LIABILITIES AND NET POSITION			
LIABILITIES			
Current Liabilities:			
Accounts payable	$ 11,878	$ 24	$ 11,902
Due to other funds	117	176,039	176,156
Total Current Liabilities	**$ 11,995**	**$ 176,063**	**$ 188,058**
TOTAL LIABILITIES	**$ 11,995**	**$ 176,063**	**$ 188,058**
NET POSITION			
Net Investment in Capital Assets	$ 5,516,572	$ 661,646	$ 6,178,218
Unrestricted	1,545,937	254,531	1,800,468
TOTAL NET POSITION	**$ 7,062,509**	**$ 916,177**	**$ 7,978,686**
TOTAL LIABILITIES AND NET POSITION	**$ 7,074,504**	**$ 1,092,240**	**$ 8,166,744**

The accompanying notes are an integral part of these financial statements

CITY OF BEAVER FALLS
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET POSITION
PROPRIETARY FUNDS
FOR THE YEAR ENDED DECEMBER 31, 2019

	JOINT SEWER USERS FUND	CITY SEWER USERS FUND	TOTAL
OPERATING REVENUES:			
Sewage charges	$ 1,557,579	$ 1,589,785	$ 3,147,364
Tap-In Fees	11,700	-	11,700
Miscellaneous	1,337	-	1,337
TOTAL OPERATING REVENUES	**$ 1,570,616**	**$ 1,589,785**	**$ 3,160,401**
OPERATING EXPENSES:			
Contractual services	$ -	$ 704,155	$ 704,155
Wages and Benefits	693,120	200,000	893,120
Administrative	29,507	180,000	209,507
Office	1,947	-	1,947
Repair and maintenance	130,597	116,023	246,620
Billing expense	-	18,635	18,635
Depreciation	207,914	35,546	243,460
Engineering	3,900	2,487	6,387
Utilities	134,699	-	134,699
Chemicals/Chlorine	29,195	-	29,195
Sludge/grit removal	55,940	-	55,940
Janitorial Supplies	3,349	-	3,349
Gas and Oil	2,211	-	2,211
Equipment	16,674	-	16,674
Uniforms	2,586	-	2,586
Permits and testing	22,496	500	22,996
Certification & Training	1,359	-	1,359
Insurance	30,273	-	30,273
Miscellaneous	207	391	598
Line Rental Expense	40,000	-	40,000
Sewer-Line Reimbursement	-	200,000	200,000
TOTAL OPERATING EXPENSES	**$ 1,405,974**	**$ 1,457,737**	**$ 2,863,711**
OPERATING INCOME (LOSS) BEFORE NON OPERATING REVENUES (EXPENSES) AND TRNSFERS	**$ 164,642**	**$ 132,048**	**$ 296,690**
NONOPERATING REVENUES (EXPENSES):			
Interest income	$ 20,163	$ 8,624	$ 28,787
TOTAL NONOPERATING REVENUES (EXPENSES)	**$ 20,163**	**$ 8,624**	**$ 28,787**
TRANSFERS:			
Operating Transfers Out	$ (373,619)	$ (340,362)	$ (713,981)
TOTAL TRANSFERS	**$ (373,619)**	**$ (340,362)**	**$ (713,981)**
CHANGE IN NET POSITION	**$ (188,814)**	**$ (199,690)**	**$ (388,504)**
NET POSITION - January 1, 2019	7,251,323	1,115,867	8,367,190
NET POSITION - December 31, 2019	**$ 7,062,509**	**$ 916,177**	**$ 7,978,686**

The accompanying notes are an integral part of these financial statements

CITY OF BEAVER FALLS
STATEMENT OF CASH FLOWS
PROPRIETARY FUNDS
FOR THE YEAR ENDED DECEMBER 31, 2019

	JOINT SEWER USERS FUND	CITY SEWER USERS FUND	TOTAL
CASH FLOWS FROM OPERATING ACTIVITIES:			
Cash Received from User Charges	$ 1,640,946	$ 1,554,411	$ 3,195,357
Miscellaneous Revenue	1,337	-	1,337
Cash Paid to Vendors for Goods and Services	(1,202,802)	(1,031,067)	(2,233,869)
Net cash provided (used) by operating activities	**$ 439,481**	**$ 523,344**	**$ 962,825**
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:			
Fixed asset purchases & additions	$ (2,811)	$ -	$ (2,811)
Net cash provided (used) by capital and related financing activities	**$ (2,811)**	**$ -**	**$ (2,811)**
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:			
Transfers to Other Funds	$ (373,619)	$ (340,362)	$ (713,981)
Net cash provided (used) by noncapital financing activities	**$ (373,619)**	**$ (340,362)**	**$ (713,981)**
CASH FLOWS FROM INVESTING ACTIVITIES:			
Interest income	$ 20,163	$ 8,624	$ 28,787
Net cash provided by investing activities	**$ 20,163**	**$ 8,624**	**$ 28,787**
Net increase (decrease) in cash and cash equivalents	**$ 83,214**	**$ 191,606**	**$ 274,820**
CASH AND CASH EQUIVALENTS - January 1, 2019	1,187,520	22,457	1,209,977
CASH AND CASH EQUIVALENTS - December 31, 2019	**$ 1,270,734**	**$ 214,063**	**$ 1,484,797**
RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES:			
Operating Income (Loss)	$ 164,642	$ 132,048	$ 296,690
Adjustments to reconcile excess revenues over expenditures provided (used) by operating activities:			
Depreciation	207,914	35,546	243,460
Changes in assets and liabilities:			
(Increase) decrease in sewer/refuse receivables	-	(35,374)	(35,374)
(Increase) decrease in other accounts receivable	71,667	-	71,667
(Increase) decrease in due from other funds	1,703	393,953	395,656
Increase (decrease) in accounts payable	(6,445)	(2,829)	(9,274)
Net cash provided (used) by operating activities	**$ 439,481**	**$ 523,344**	**$ 962,825**

The accompanying notes are an integral part of these financial statements

CITY OF BEAVER FALLS
STATEMENT OF NET POSITION
PROPRIETARY FUNDS
DECEMBER 31, 2020

	JOINT SEWER USERS FUND	CITY SEWER USERS FUND	TOTAL
ASSETS			
Current Assets:			
Cash and cash equivalents	$ 1,725,909	$ 178,199	$ 1,904,108
Due from Other Fund	-	2,934	2,934
Accounts receivable:			
Sanitation/Sewage (Net)	-	216,453	216,453
Other	89,309	-	89,309
Total Current Assets	**$ 1,815,218**	**$ 397,586**	**$ 2,212,804**
Noncurrent Assets:			
Buildings and improvements	$ 10,010,405	$ -	$ 10,010,405
Office Equipment	78,355	11,885	90,240
Vehicles	150,933	148,570	299,503
Machinery & Equipment	-	410,644	410,644
Infrastructure	1,700,472	787,072	2,487,544
Accumulated depreciation	(6,540,156)	(732,072)	(7,272,228)
Total Noncurrent Assets	**$ 5,400,009**	**$ 626,099**	**$ 6,026,108**
TOTAL ASSETS	**$ 7,215,227**	**$ 1,023,685**	**$ 8,238,912**
LIABILITIES AND NET POSITION			
LIABILITIES			
Current Liabilities:			
Accounts payable	$ 22,752	$ 374	$ 23,126
Due to other funds	68,825	-	68,825
Total Current Liabilities	**$ 91,577**	**$ 374**	**$ 91,951**
TOTAL LIABILITIES	**$ 91,577**	**$ 374**	**$ 91,951**
NET POSITION			
Net Investment in Capital Assets	$ 5,400,009	$ 626,099	$ 6,026,108
Unrestricted	1,723,641	397,212	2,120,853
TOTAL NET POSITION	**$ 7,123,650**	**$ 1,023,311**	**$ 8,146,961**
TOTAL LIABILITIES AND NET POSITION	**$ 7,215,227**	**$ 1,023,685**	**$ 8,238,912**

The accompanying notes are an integral part of these financial statements

CITY OF BEAVER FALLS
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND NET POSITION
PROPRIETARY FUNDS
FOR THE YEAR ENDED DECEMBER 31, 2020

	JOINT SEWER USERS FUND	CITY SEWER USERS FUND	TOTAL
OPERATING REVENUES:			
Sewage charges	$ 1,516,345	$ 1,506,821	$ 3,023,166
Tap-In Fees	3,510	-	3,510
Miscellaneous	1,455	794	2,249
TOTAL OPERATING REVENUES	**$ 1,521,310**	**$ 1,507,615**	**$ 3,028,925**
OPERATING EXPENSES:			
Contractual services	$ -	$ 676,100	$ 676,100
Wages and Benefits	726,870	200,000	926,870
Administrative	30,210	240,000	270,210
Office	5,315	-	5,315
Repair and maintenance	171,933	21,734	193,667
Billing expense	-	20,015	20,015
Depreciation	203,920	35,546	239,466
Engineering	4,005	3,569	7,574
Utilities	137,700	-	137,700
Chemicals/Chlorine	24,286	-	24,286
Sludge/grit removal	61,270	-	61,270
Janitorial Supplies	2,995	-	2,995
Gas and Oil	1,721	-	1,721
Equipment	8,195	-	8,195
Small Tools	-	4,745	4,745
Uniforms	2,317	-	2,317
Permits and testing	16,150	500	16,650
Certification & Training	440	-	440
Insurance	30,273	-	30,273
Miscellaneous	-	351	351
Line Rental Expense	40,000	-	40,000
Sewer-Line Reimbursement	-	200,000	200,000
TOTAL OPERATING EXPENSES	**$ 1,467,600**	**$ 1,402,560**	**$ 2,870,160**
OPERATING INCOME (LOSS) BEFORE NON OPERATING REVENUES (EXPENSES)	**$ 53,710**	**$ 105,055**	**$ 158,765**
NONOPERATING REVENUES (EXPENSES):			
Interest income	$ 7,431	$ 2,079	$ 9,510
TOTAL NONOPERATING REVENUES (EXPENSES)	**$ 7,431**	**$ 2,079**	**$ 9,510**
CHANGE IN NET POSITION	**$ 61,141**	**$ 107,134**	**$ 168,275**
NET POSITION - January 1, 2020	7,062,509	916,177	7,978,686
NET POSITION - December 31, 2020	**$ 7,123,650**	**$ 1,023,311**	**$ 8,146,961**

The accompanying notes are an integral part of these financial statements

CITY OF BEAVER FALLS
STATEMENT OF CASH FLOWS
PROPRIETARY FUNDS
FOR THE YEAR ENDED DECEMBER 31, 2020

	JOINT SEWER USERS FUND	CITY SEWER USERS FUND	TOTAL
CASH FLOWS FROM OPERATING ACTIVITIES:			
Cash Received from User Charges	$ 1,541,705	$ 1,506,900	$ 3,048,605
Miscellaneous Revenue	1,455	794	2,249
Cash Paid to Vendors for Goods and Services	(1,008,059)	(1,545,637)	(2,553,696)
Net cash provided (used) by operating activities	**$ 535,101**	**$ (37,943)**	**$ 497,158**
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:			
Fixed asset purchases & additions	$ (87,357)	$ -	$ (87,357)
Net cash provided (used) by capital and related financing activities	**$ (87,357)**	**$ -**	**$ (87,357)**
CASH FLOWS FROM INVESTING ACTIVITIES:			
Interest income	$ 7,431	$ 2,079	$ 9,510
Net cash provided by investing activities	**$ 7,431**	**$ 2,079**	**$ 9,510**
Net increase (decrease) in cash and cash equivalents	**$ 455,175**	**$ (35,864)**	**$ 419,311**
CASH AND CASH EQUIVALENTS - January 1, 2020	1,270,734	214,063	1,484,797
CASH AND CASH EQUIVALENTS - December 31, 2020	**$ 1,725,909**	**$ 178,199**	**$ 1,904,108**
RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES:			
Operating Income (Loss)	$ 53,710	$ 105,055	$ 158,765
Adjustments to reconcile excess revenues over expenditures provided (used) by operating activities:			
Depreciation	203,920	35,546	239,466
Changes in assets and liabilities:			
(Increase) decrease in sewer/refuse receivables	-	79	79
(Increase) decrease in other accounts receivable	21,850	-	21,850
(Increase) decrease in due from other funds	176,039	(2,934)	173,105
Increase (decrease) in accounts payable	10,874	350	11,224
Increase (decrease) in due to other funds	68,708	(176,039)	(107,331)
Net cash provided (used) by operating activities	**$ 535,101**	**$ (37,943)**	**$ 497,158**

The accompanying notes are an integral part of these financial statements

Beaver Falls - Anticipated Sewer Rates at Closing
(Shown with anticipated 3% Increase on 1/1/2022)

	Inside City	Outside City
Quarterly Service Charge (Includes 3,000 gallons/quarter)	$42.37	N/A
Usage Charge per 1,000 Gal	$8.51	$4.41

City of Beaver Falls
WATER POLLUTION CONTROL PLANT
715 Fifteenth Street
BEAVER FALLS, PA 15010

Phone: 724-843-7184
Fax: 724-843-6787

2020 Income, Expense, Flow Total Year End Report

Income

	Gallons	Income
City of BF	162,524,000	$676,099.84
Patt. Twp.	61,329,000	$255,128.64
N. Sewickley	39,563,000	$164,582.08
White Twp.	23,406,000	$97,368.96
W. Mayfield	23,588,000	$98,126.08
Big Beaver	18,268,000	$75,994.88
Patt. Hgts	11,081,000	$46,096.96
Eastvale	3,329,000	$13,848.64
Dalton	21,418,074	$89,099.20
Valley Waste	144,269	$1,454.90
Tap-Ins		$3,510.00
Permits		$0.00
Total	364,650,343	$1,521,310.18

Expenses

Operating Expenses	$1,331,440.02
Line Rental	$40,000.00
Total	$1,371,440.02

Flow Totals

Total Billable Gallons	364,634,390
Total Gallons Treated	768,030,000
Total Rainfall	47.44



Eastvale Pump Station



Eastvale Pump Station



Eastvale Pump Station



Eastvale Pump Station



WWTP - Site



WWTP - Oxidation Tower



WWTP - Primary Settling Tanks



WWTP - Anareobic Digester Tank & Digester Building



WWTP - Sludge Dewatering Building & Sludge Cake Rolloff Box



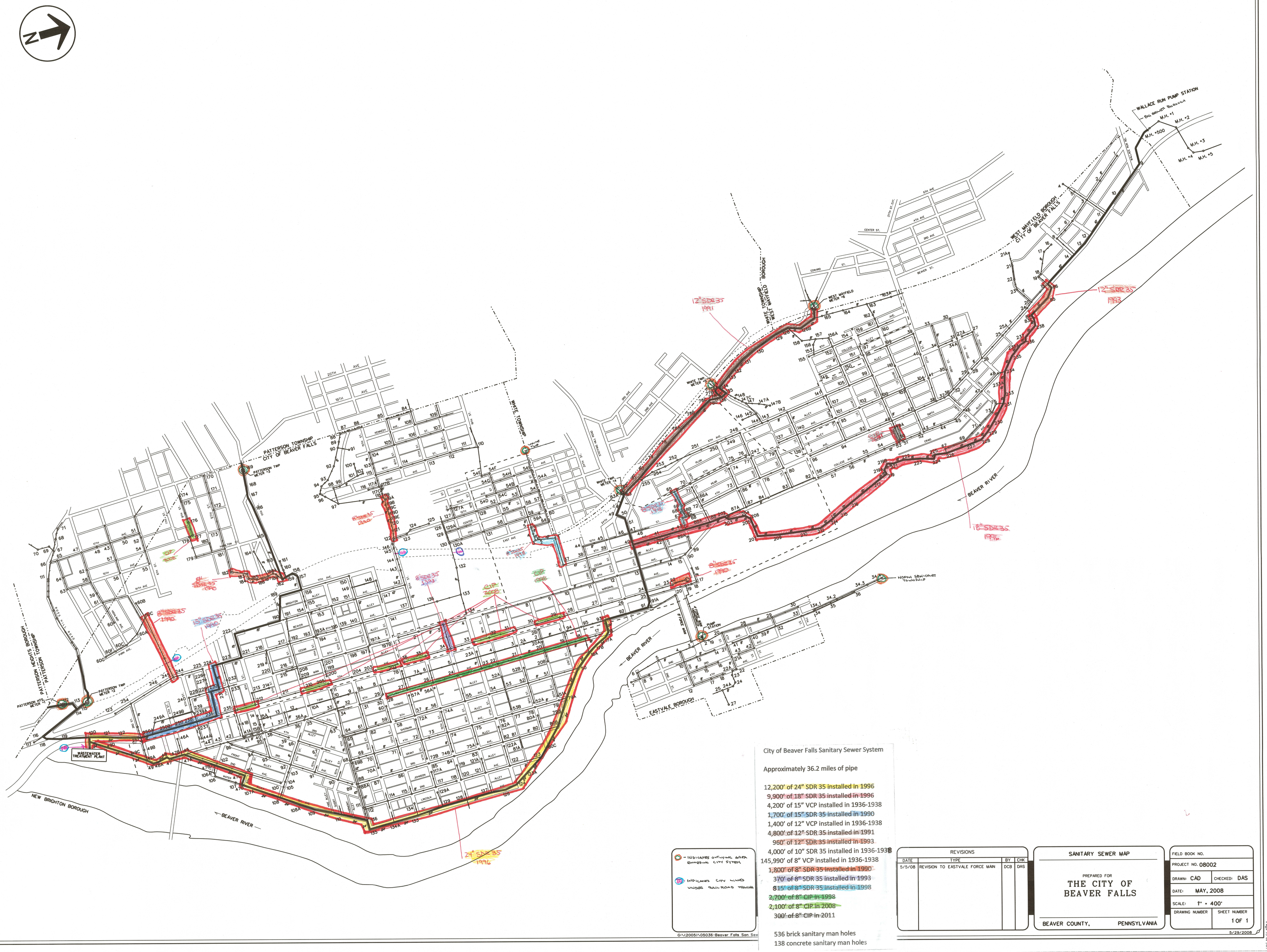
WWTP



WWTP - Digester Cover



WWTP - Generator



City of Beaver Falls Sanitary Sewer System

Approximately 36.2 miles of pipe

12,200' of 24" SDR 35 installed in 1996
9,900' of 18" SDR 35 installed in 1996
4,200' of 15" VCP installed in 1936-1938
1,700' of 15" SDR 35 installed in 1990
1,400' of 12" VCP installed in 1936-1938
4,800' of 12" SDR 35 installed in 1991
960' of 12" SDR 35 installed in 1993
4,000' of 10" SDR 35 installed in 1936-1938
145,990' of 8" VCP installed in 1936-1938
1,800' of 8" SDR 35 installed in 1990
370' of 8" SDR 35 installed in 1993
815' of 8" SDR 35 installed in 1998
2,700' of 8" CIP in 1998
2,100' of 8" CIP in 2008
300' of 8" CIP in 2011

536 brick sanitary man holes
138 concrete sanitary man holes

G:\(2005)\05036-Beaver Falls San Sew

REVISIONS			
DATE	TYPE	BY	CHK
5/5/08	REVISION TO EASTVALE FORCE MAIN	DCB	DAS

SANITARY SEWER MAP

PREPARED FOR
THE CITY OF
BEAVER FALLS

BEAVER COUNTY, PENNSYLVANIA

FIELD BOOK NO.	
PROJECT NO.	08002
DRAWN: CAD	CHECKED: DAS
DATE:	MAY, 2008
SCALE:	1" = 400'
DRAWING NUMBER	SHEET NUMBER 1 OF 1

5/29/2008

EXHIBIT 22
Page 1 of 1

PART I

Item 1. Business

This annual report on Form 10-K is a combined report being filed by two separate Registrants, American States Water Company ("AWR") and Golden State Water Company ("GSWC"). References in this report to "Registrant" are to AWR and GSWC, collectively, unless otherwise specified. GSWC makes no representations as to the information contained in this report relating to AWR and its subsidiaries, other than GSWC.

AWR makes its periodic reports, Form 10-Q and Form 10-K, and current reports, Form 8-K, available free of charge through its website, www.aswater.com, as soon as material is electronically filed with or furnished to the Securities and Exchange Commission ("SEC"). Such reports are also available on the SEC's website at www.sec.gov. AWR also makes available free of charge its code of business conduct and ethics, its corporate governance guidelines and the charters of its Nominating and Governance Committee, Compensation Committee and Audit and Finance Committee through its website or by calling (877) 463-6297. AWR and GSWC have filed the certification of officers required by Section 302 of the Sarbanes-Oxley Act as Exhibits 31.1 and 31.2 to its Form 10-K for the year ended December 31, 2020.

Overview

AWR is the parent company of GSWC, Bear Valley Electric Service, Inc. ("BVESI") and American States Utility Services, Inc. ("ASUS") (and its wholly owned subsidiaries: Fort Bliss Water Services Company ("FBWS"), Terrapin Utility Services, Inc. ("TUS"), Old Dominion Utility Services, Inc. ("ODUS"), Palmetto State Utility Services, Inc. ("PSUS"), Old North Utility Services, Inc. ("ONUS"), Emerald Coast Utility Services, Inc. ("ECUS") and Fort Riley Utility Services, Inc. ("FRUS")). On July 1, 2020, GSWC completed the transfer of the electric utility assets and liabilities from its electric division to BVESI, in exchange for common shares of BVESI. GSWC then immediately distributed all of BVESI's common shares to AWR, whereupon BVESI became wholly owned directly by AWR. This reorganization did not result in any substantive changes to AWR's operations and business segments.

AWR has three reportable segments: water, electric and contracted services. Within the segments, AWR has three principal business units, water and electric service utility operations conducted through its regulated utilities GSWC and BVESI, respectively, and contracted services conducted through ASUS and its subsidiaries. FBWS, TUS, ODUS, PSUS, ONUS, ECUS and FRUS may be referred to herein collectively as the "Military Utility Privatization Subsidiaries."

GSWC is a public water utility engaged in the purchase, production, distribution and sale of water in 10 counties in the State of California. GSWC is regulated by the California Public Utilities Commission ("CPUC"). BVESI is a public electric utility that distributes electricity in several San Bernardino County mountain communities in California, and is also regulated by the CPUC. Additional information regarding public utility regulation is discussed in Item 7. "*Management's Discussion and Analysis of Financial Condition" and Results of Operation*" under the section titled "*Regulatory Matters*."

AWR's regulated utilities served 261,796 water customers and 24,545 electric customers at December 31, 2020, or a total of 286,341 customers, compared with 260,708 water customers and 24,420 electric customers at December 31, 2019, or a total of 285,128 customers. Both GSWC's and BVESI's operations exhibit seasonal trends. Although both have diversified customer bases, residential and commercial customers account for the majority of water and electric sales and revenues. Revenues derived from commercial and residential customers accounted for approximately 90% of total water and electric revenues for the years ended December 31, 2020, 2019 and 2018.

ASUS, itself or through the Military Utility Privatization Subsidiaries, has contracted with the U.S. government to provide water and/or wastewater services at various military installations. ASUS operates, maintains and performs construction activities (including renewal and replacement capital work) on water and/or wastewater systems at various U.S. military bases pursuant to 50-year firm, fixed-price contracts. Each of the contracts with the U.S. government is subject to termination, in whole or in part, prior to the end of its 50-year term for convenience of the U.S. government or as a result of default or nonperformance by the ASUS subsidiary performing the contract. The price for each of these contracts is subject to annual economic price adjustments. Contracts are also subject to modifications for changes in circumstances, changes in laws and regulations, and additions to the contract value for new construction of facilities at the military bases. AWR guarantees performance of ASUS's military privatization contracts.

AMERICAN STATES WATER COMPANY AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 — Summary of Significant Accounting Policies

Nature of Operations: American States Water Company ("AWR") is the parent company of Golden State Water Company ("GSWC"), Bear Valley Electric Service Inc. ("BVESI"), and American States Utility Services, Inc. ("ASUS") (and its wholly owned subsidiaries, Fort Bliss Water Services Company ("FBWS"), Terrapin Utility Services, Inc. ("TUS"), Old Dominion Utility Services, Inc. ("ODUS"), Palmetto State Utility Services, Inc. ("PSUS"), Old North Utility Services, Inc. ("ONUS"), Emerald Coast Utility Services, Inc. ("ECUS"), and Fort Riley Utility Services, Inc. ("FRUS")). AWR and its subsidiaries may be collectively referred to as "Registrant" or "the Company." The subsidiaries of ASUS are collectively referred to as the "Military Utility Privatization Subsidiaries." On July 1, 2020, GSWC completed the transfer of the electric utility assets and liabilities from its electric division to BVESI, a separate legal entity and wholly owned subsidiary of AWR (Note 20). This reorganization did not result in any substantive changes to AWR's operations and business segments. AWR, through its wholly owned subsidiaries, serves over one million people in nine states.

GSWC and BVESI are both California public utilities, with GSWC engaged in the purchase, production, distribution and sale of water throughout California serving approximately 261,800 customers, while BVESI distributes electricity in several San Bernardino County mountain communities in California serving approximately 24,500 customers. The California Public Utilities Commission ("CPUC") regulates GSWC's and BVESI's businesses in matters including properties, rates, services, facilities, and transactions between GSWC, BVESI, and their affiliates.

ASUS, through its Military Utility Privatization Subsidiaries, operates, maintains and performs construction activities (including renewal and replacement capital work) on water and/or wastewater systems at various U.S. military bases pursuant to 50-year firm fixed-price contracts. These contracts are subject to annual economic price adjustments and modifications for changes in circumstances, changes in laws and regulations and additions to the contract value for new construction of facilities at the military bases.

There is no direct regulatory oversight by the CPUC over AWR or the operations, rates or services provided by ASUS or the Military Utility Privatization Subsidiaries.

Basis of Presentation: The consolidated financial statements and notes thereto are presented in a combined report filed by two separate Registrants: AWR and GSWC. References in this report to "Registrant" are to AWR and GSWC, collectively, unless otherwise specified.

AWR owns all of the outstanding Common Shares of GSWC, BVESI and ASUS. ASUS owns all of the outstanding common shares of the Military Utility Privatization Subsidiaries. The consolidated financial statements of AWR include the accounts of AWR and its subsidiaries. These financial statements are prepared in conformity with accounting principles generally accepted in the United States of America. Intercompany transactions and balances have been eliminated in the AWR consolidated financial statements.

Related-Party Transactions: GSWC, BVESI and ASUS provide and/or receive various support services to and from their parent, AWR, and among themselves. GSWC also allocates certain corporate office administrative and general costs to its affiliates using allocation factors approved by the CPUC. During the years ended December 31, 2020, 2019 and 2018, GSWC allocated to ASUS approximately $4.9 million, $4.7 million and $4.2 million, respectively, of corporate office administrative and general costs. During the year ended December 31, 2020, GSWC allocated corporate office administrative and general costs to BVESI of approximately $1.3 million.

Furthermore, AWR borrows under a credit facility, which expires in May 2023, and provides funds to GSWC and ASUS in support of their operations. The interest rate charged to GSWC and ASUS is sufficient to cover AWR's interest expense under the credit facility. The CPUC requires GSWC to pay down all intercompany borrowings from AWR within a 24-month period, which was required by November 2020. In October 2020, the Board of Directors authorized AWR to invest equity in GSWC to enable the subsidiary to pay down all its intercompany borrowings. During the fourth quarter of 2020, AWR invested $60 million of equity in GSWC and received five shares of GSWC common stock. The majority of the proceeds from this stock issuance were used by GSWC to pay down its intercompany borrowings from AWR, satisfying the CPUC's requirement. As a result, GSWC had no intercompany borrowings from AWR as of December 31, 2020.

In October 2020, AWR issued an interest bearing promissory note to GSWC, which expires in May 2023. Under the terms of the note, AWR may borrow from GSWC amounts up to $30 million for working capital purposes. AWR agrees to pay any unpaid principal amounts outstanding under this note, plus accrued interest. In November 2020, AWR borrowed $6 million from GSWC under the terms of the note, which was subsequently repaid in December. As of December 31, 2020, there were no amounts outstanding under this note.

Table of Contents

PART I

Item 1. Business

This annual report on Form 10-K is a combined report being filed by two separate Registrants, American States Water Company (“AWR”) and Golden State Water Company (“GSWC”). References in this report to “Registrant” are to AWR and GSWC, collectively, unless otherwise specified. GSWC makes no representations as to the information contained in this report relating to AWR and its subsidiaries, other than GSWC.

AWR makes its periodic reports, Form 10-Q and Form 10-K, and current reports, Form 8-K, available free of charge through its website, www.aswater.com, as soon as material is electronically filed with or furnished to the Securities and Exchange Commission (“SEC”). Such reports are also available on the SEC’s website at www.sec.gov. AWR also makes available free of charge its code of business conduct and ethics, its corporate governance guidelines and the charters of its Nominating and Governance Committee, Compensation Committee and Audit and Finance Committee through its website or by calling (877) 463-6297. AWR and GSWC have filed the certification of officers required by Section 302 of the Sarbanes-Oxley Act as Exhibits 31.1 and 31.2 to its Form 10-K for the year ended December 31, 2020.

Overview

AWR is the parent company of GSWC, Bear Valley Electric Service, Inc. ("BVESI") and American States Utility Services, Inc. (“ASUS”) (and its wholly owned subsidiaries: Fort Bliss Water Services Company (“FBWS”), Terrapin Utility Services, Inc. (“TUS”), Old Dominion Utility Services, Inc. (“ODUS”), Palmetto State Utility Services, Inc. (“PSUS”), Old North Utility Services, Inc. (“ONUS”), Emerald Coast Utility Services, Inc. (“ECUS”) and Fort Riley Utility Services, Inc. (“FRUS”)). On July 1, 2020, GSWC completed the transfer of the electric utility assets and liabilities from its electric division to BVESI, in exchange for common shares of BVESI. GSWC then immediately distributed all of BVESI's common shares to AWR, whereupon BVESI became wholly owned directly by AWR. This reorganization did not result in any substantive changes to AWR's operations and business segments.

AWR has three reportable segments: water, electric and contracted services. Within the segments, AWR has three principal business units, water and electric service utility operations conducted through its regulated utilities GSWC and BVESI, respectively, and contracted services conducted through ASUS and its subsidiaries. FBWS, TUS, ODUS, PSUS, ONUS, ECUS and FRUS may be referred to herein collectively as the “Military Utility Privatization Subsidiaries.”

GSWC is a public water utility engaged in the purchase, production, distribution and sale of water in 10 counties in the State of California. GSWC is regulated by the California Public Utilities Commission (“CPUC”). BVESI is a public electric utility that distributes electricity in several San Bernardino County mountain communities in California, and is also regulated by the CPUC. Additional information regarding public utility regulation is discussed in Item 7. "*Management's Discussion and Analysis of Financial Condition" and Results of Operation*" under the section titled "*Regulatory Matters*."

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ASUS, itself or through the Military Utility Privatization Subsidiaries, has contracted with the U.S. government to provide water and/or wastewater services at various military installations. ASUS operates, maintains and performs construction activities (including renewal and replacement capital work) on water and/or wastewater systems at various U.S. military bases pursuant to 50-year firm, fixed-price contracts. Each of the contracts with the U.S. government is subject to termination, in whole or in part, prior to the end of its 50-year term for convenience of the U.S. government or as a result of default or nonperformance by the ASUS subsidiary performing the contract. The price for each of these contracts is subject to annual economic price adjustments. Contracts are also subject to modifications for changes in circumstances, changes in laws and regulations, and additions to the contract value for new construction of facilities at the military bases. AWR guarantees performance of ASUS’s military privatization contracts.

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 7,000 professionals who provide drinking water, wastewater and other related services to over 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 over 1,700 communities in 16 states in the United States, with 3.5 million active customers in its water and wastewater networks. Services provided by the Company's utilities are subject to regulation by multiple state utility commissions or other entities engaged in utility regulation, collectively referred to as public utility commissions ("PUCs"). Federal, state and local governments also regulate environmental, health and safety, and water quality and water accountability matters. The Company reports the results of the services provided by its utilities in the Regulated Businesses segment. Operating revenues for the Regulated Businesses were $3,255 million for 2020, $3,094 million for 2019 and $2,984 million for 2018, accounting for 86%, 86% and 87%, 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, 2020:

	Operating Revenues (in millions)				Number of Customers (in thousands)			
	Water (a)	Wastewater	Total	% of Total	Water	Wastewater	Total	% of Total
New Jersey	$ 753	$ 43	$ 796	24.5 %	657	55	712	20.4 %
Pennsylvania	663	70	733	22.5 %	673	77	750	21.6 %
Missouri	335	11	346	10.6 %	472	15	487	13.9 %
Illinois	293	32	325	10.0 %	292	68	360	10.3 %
California	247	3	250	7.7 %	183	3	186	5.3 %
Indiana	234	2	236	7.3 %	318	2	320	9.2 %
West Virginia	164	1	165	5.1 %	168	1	169	4.8 %
Total—Top Seven States (b)	2,689	162	2,851	87.7 %	2,763	221	2,984	85.5 %
Other (c)	381	23	404	12.3 %	481	31	512	14.5 %
Total Regulated Businesses	$ 3,070	$ 185	$ 3,255	100.0 %	3,244	252	3,496	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 utility operations in the following states: Georgia, Hawaii, Iowa, Kentucky, Maryland, Michigan, New York, Tennessee and Virginia and other revenue attributable collectively to the Regulated Businesses.

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 2019 compared to fiscal 2018, 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, 2019, filed with the SEC on February 18, 2020.

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 7,000 professionals who provide drinking water, wastewater and other related services to over 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 over 1,700 communities in 16 states in the United States, with 3.5 million active customers with services provided by its water and wastewater networks. Services provided by the Company's utilities are subject to regulation by PUCs. The Company also operates market-based businesses that provide water, wastewater and other services to residential and smaller commercial customers, the U.S. government on military installations, as well as municipalities and utility customers, collectively presented as the "Market-Based Businesses." These Market-Based Businesses are not subject to economic regulation by state PUCs. See Item 1—Business for additional information.

Novel Coronavirus (COVID-19) Pandemic Update

American Water has been monitoring the global impact of COVID-19 pandemic and has taken steps to mitigate adverse impacts to the Company. The Company has three main areas of focus as part of its response to COVID-19: the care and safety of its employees; the safety of its customers and the communities it serves; and the execution of its business continuity plan. American Water continues to work with its vendors to prevent disruptions in its supply chain, and, at this time, has not experienced, and does not anticipate, any material negative impacts. The Company has also been monitoring the impacts of the pandemic on its access to the capital markets, and to the extent such access is adversely affected, American Water may need to consider alternative sources of funding for its operations and for working capital, any of which could increase its cost of capital.

This pandemic continues to evolve, and American Water continues to monitor developments affecting its employees, customers, contractors and vendors and will take additional actions as warranted. To date, the Company has experienced COVID-19 financial impacts, including an increase in uncollectible accounts expense, additional debt costs, and certain incremental operation and maintenance ("O&M") expenses. The Company has also experienced decreased revenues as a result of the suspension of late fees and foregone reconnect fees. These impacts are collectively referred to as "financial impacts." See Note 3—Impact of Novel Coronavirus (COVID-19) Pandemic in the Notes to Consolidated Financial Statements for additional information. The extent to which COVID-19 may further impact American Water, including without limitation, its liquidity, financial condition, and results of operations, will depend on future developments, which presently cannot be predicted.

agreement, the expenditure in 2020 was $0.1 million. Tank painting expense for 2020, 2019 and 2018 was $155,000, $447,000, and $658,000, respectively.

Budgeted mandatory utility plant expenditures, due to planned governmental highway projects, which require the relocation of Artesian Water's water service mains, expected to be incurred in 2021 through 2023 are as follows:

In thousands	
2021	$ 3,020
2022	3,020
2023	3,020
	$ 9,060

The exact timing and extent of these relocation projects is controlled primarily by the Delaware Department of Transportation.

NOTE 12

GEOGRAPHIC CONCENTRATION OF CUSTOMERS

Artesian Water, Artesian Water Maryland and Artesian Water Pennsylvania provide water utility service to customers within their established service territory in all three counties of Delaware and in portions of Maryland and Pennsylvania, pursuant to rates filed with and approved by the DEPSC, the MDPSC and the PAPUC. As of December 31, 2020, Artesian Water was serving approximately 90,300 customers, Artesian Water Maryland was serving approximately 2,500 customers and Artesian Water Pennsylvania was serving approximately 40 customers.

Artesian Wastewater provides wastewater utility service to customers within its established service territory in Sussex County, Delaware pursuant to rates filed with and approved by the DEPSC. As of December 31, 2020, Artesian Wastewater was serving approximately 2,800 customers, including one large industrial customer that comprises approximately 24% of the outstanding accounts receivable balance at year end. All wastewater customers are located in Sussex County, Delaware.

NOTE 13

REGULATORY PROCEEDINGS

Overview

Our water and wastewater utilities generate operating revenue from customers based on rates that are established by state Public Service Commissions through a rate setting process that may include public hearings, evidentiary hearings and the submission of evidence and testimony in support of the requested level of rates by the Company.

We are subject to regulation by the following state regulatory commissions:

- The DEPSC, regulates both Artesian Water and Artesian Wastewater.
- The MDPSC, regulates both Artesian Water Maryland and Artesian Wastewater Maryland.
- The PAPUC, regulates Artesian Water Pennsylvania.

Our water and wastewater utility operations are also subject to regulation under the federal Safe Drinking Water Act of 1974, or Safe Drinking Water Act, the Clean Water Act of 1972, or the Clean Water Act, and related state laws, and under federal and state regulations issued under these laws. These laws and regulations establish criteria and standards for drinking water and for wastewater discharges. Capital expenditures and operating costs required as a result of water quality standards and environmental requirements have been traditionally recognized by state regulatory commissions as appropriate for inclusion in establishing rates.

Water and Wastewater Rates

Our regulated utilities periodically seek rate increases to cover the cost of increased operating expenses, increased financing expenses due to additional investments in utility plant and other costs of doing business. In Delaware, utilities are permitted by law to place rates into effect, under bond, on a temporary basis pending completion of a rate increase proceeding. The first temporary increase may be up to the lesser of $2.5 million on an annual basis or 15% of gross water sales. Should the rate case not be completed within seven months, by law, the utility may put the entire requested rate relief, up to 15% of gross water sales, in effect under bond until a final resolution is ordered and placed into effect. If any such rates are found to be in excess of rates the DEPSC finds to be appropriate, the utility must refund customers the portion found to be in excess with interest. The timing of our rate increase requests is therefore dependent upon the estimated cost of the administrative process in relation to the investments and expenses that we hope to recover through the rate increase. We can provide no assurances that rate increase requests will be approved by applicable regulatory agencies and, if approved, we cannot guarantee that these rate increases will be granted in a timely or sufficient manner to cover the investments and expenses for which we initially sought the rate increase.

https://www.sec.gov/ix?doc=/Archives/edgar/data/863110/000086311021000005/form10k.htm[5/22/2021 2:59:20 PM]

Artesian Resources Corporation 2020 Annual Report Available Electronically to Shareholders

April 08, 2021 17:28 ET | Source: Artesian Resources Corporation

NEWARK, Del., April 08, 2021 (GLOBE NEWSWIRE) -- Artesian Resources Corporation (NASDAQ: ARTNA), a leading provider of water, wastewater services and related services on the Delmarva Peninsula today announced that its 2020 Annual Report is available electronically to shareholders through its website at https://www.artesianwater.com/investor-relations/annual-report/. If any shareholder would like to receive a print copy of the 2020 Annual Report, they can request one free of charge by writing or calling Artesian Resources Corporation, 664 Churchmans Road, Newark, Delaware 19702, Attention Laura Slayman (Phone Number: 302-453-6900).

About Artesian Resources

Artesian Resources Corporation operates as a holding company of wholly-owned subsidiaries offering water and wastewater services, and related services, on the Delmarva Peninsula. Artesian Water Company, the principal subsidiary, is the oldest and largest regulated water utility on the Delmarva Peninsula and has been providing water service since 1905. Artesian supplies 8.3 billion gallons of water per year through 1,311 miles of main to over 300,000 people.

Contact:
Nicholle Taylor

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ACCEPT

Effective June 30, 2011, the CPUC adopted new rules related to the provision of non-regulated services using utility assets and employees. As a result, nearly all California non-regulated activities are now considered NTPS. The prescribed accounting for these NTPS is incremental cost allocation plus revenue sharing with regulated customers. Non-regulated services determined to be "active activities" require a 10% revenue sharing, and "passive activities" require a 30% revenue sharing. The amount of non-regulated revenues subject to revenue sharing is the total billed revenues less any authorized pass-through costs. Some examples of CPUC authorized pass-through costs are purchased water, purchased power, and pump taxes. All of our non-regulated services, except for leasing communication antenna sites on our properties, are "active activities" subject to a 10% revenue sharing. Leasing communication antenna sites on our properties are "passive activities" subject to a 30% revenue sharing. Cal Water's annual revenue sharing with regulated customers was $2.5 million, $2.7 million, and $2.6 million in 2020, 2019, and 2018, respectively.

Operating Segment

We operate in one reportable segment, the supply and distribution of water and providing water-related utility services. For information about revenue from external customers, net income and total assets, see "Item 8. Financial Statements and Supplementary Data."

Growth

We intend to continue exploring opportunities to expand our regulated and non-regulated water and wastewater activities, particularly in the western United States. The opportunities could include system acquisitions, lease arrangements similar to the City of Hawthorne and City of Commerce contracts, full service system operation and maintenance agreements, meter reading, billing contracts and other utility-related services.

Geographical Service Areas and Number of Customer Connections at Year-end

Our principal markets are users of water within our service areas. The approximate number of customer connections served in each regulated district, the City of Hawthorne and the City of Commerce, at December 31 is as follows:

(rounded to the nearest hundred)	2020	2019
SAN FRANCISCO BAY AREA/NORTH COAST		
Bay Area Region (serving South San Francisco, Colma, Broadmoor, San Mateo, San Carlos, Lucerne, Duncans Mills, Guerneville, Dillon Beach, Noel Heights and portions of Santa Rosa)	56,000	55,900
Bear Gulch (serving portions of Menlo Park, Atherton, Woodside and Portola Valley)	19,000	18,900
Los Altos (including portions of Cupertino, Los Altos Hills, Mountain View and Sunnyvale)	19,000	19,000
Livermore	18,900	18,900
	112,900	112,700
SACRAMENTO VALLEY		
Chico (including Hamilton City)	30,800	30,500
Oroville	3,700	3,600
Marysville	3,800	3,800
Dixon	3,100	3,000
Willows	2,400	2,400
	43,800	43,300
SALINAS VALLEY		
Salinas Valley Region (including Salinas and King City)	31,600	31,500
	31,600	31,500
SAN JOAQUIN VALLEY		
Bakersfield	73,500	72,700
Stockton	44,800	44,400
Visalia	46,700	46,000

Inline XBRL Viewer

Selma	6,500	6,500
Kern River Valley	4,000	4,000

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(rounded to the nearest hundred)	2020	2019
	175,500	173,600
LOS ANGELES AREA		
East Los Angeles	26,900	26,800
Hermosa Redondo (serving Hermosa Beach, Redondo Beach and a portion of Torrance)	27,100	27,100
Dominguez (Carson and portions of Compton, Harbor City, Long Beach, Los Angeles and Torrance)	34,300	34,200
Los Angeles County Region (including Palos Verdes Estates, Rancho Palos Verdes, Rolling Hills Estates, Rolling Hills, Fremont Valley, Lake Hughes, Lancaster and Leona Valley)	25,700	25,700
Westlake (a portion of Thousand Oaks)	7,100	7,100
Hawthorne and Commerce (leased municipal systems)	7,700	7,600
	128,800	128,500
CALIFORNIA TOTAL	492,600	489,600
HAWAII	5,300	5,000
NEW MEXICO	8,500	8,300
WASHINGTON	36,600	17,700
COMPANY TOTAL	543,000	520,600

Rates and Regulation

The Commissions have plenary powers setting both rates and operating standards. As such, the Commissions' decisions significantly impact the Company's revenues, earnings, and cash flows. The amounts discussed herein are generally annual amounts, unless otherwise stated, and the financial impact to recorded revenue is expected to occur over a 12-month period from the effective date of the decision. In California, water utilities are required to make several different types of filings. Certain filings, such as General Rate Case (GRC) filings, escalation rate increase filings, and offset filings, may result in rate changes that generally remain in place until the next GRC. As explained below, surcharges and surcredits to recover balancing and memorandum accounts as well as GRC interim rate relief are temporary rate changes which have specific time frames for recovery.

The CPUC follows a rate case plan which requires Cal Water to file a GRC for each of its regulated operating districts every three years. In a GRC proceeding the CPUC not only considers the utility's rate setting requests, but may also consider other issues that affect the utility's rates and operations. The CPUC is generally required to issue its GRC decision prior to the first day of the test year or authorize interim rates. In accordance with the rate case plan, Cal Water will file its next GRC application in July of 2021.

Between GRC filings, Cal Water may file escalation rate increases, which allow Cal Water to recover cost increases, primarily from inflation and incremental investments, during the second and third years of the rate case cycle. However, escalation rate increases are district specific and subject to an earnings test. The CPUC may reduce a district’s escalation rate increase if, in the most recent 13-month period, the earnings test reflects earnings in excess of what was authorized for that district.

In addition, California water utilities are entitled to make offset requests via advice letter. Offsets may be requested to adjust revenues for construction projects authorized in GRCs when those capital projects go into service (these filings are referred to as "rate base offsets"), or for rate changes charged to Cal Water for purchased water, purchased power, and pump taxes (which are referred to as "expense offsets"). Rate changes approved in offset requests remain in effect until the next GRC is approved.

- restrictive covenants in or changes to the credit ratings on our current or future debt that could increase our financing costs or affect our ability to borrow, make payments on debt or pay dividends; and
- the risks set forth in "Risk Factors" included elsewhere in this annual report.

In light of these risks, uncertainties and assumptions, investors are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date of this annual report or as of the date of any document incorporated by reference in this annual report, as applicable. When considering forward-looking statements, investors should keep in mind the cautionary statements in this annual report and the documents incorporated by reference. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise.

Overview

California Water Service Group is a holding company with six operating subsidiaries: California Water Service Company (Cal Water), New Mexico Water Service Company (New Mexico Water), Washington Water Service Company (Washington Water), Hawaii Water Service Company, Inc. (Hawaii Water), and CWS Utility Services and HWS Utility Services LLC (CWS Utility Services and HWS Utility Services LLC being referred to collectively in this annual report as Utility Services). Cal Water, New Mexico Water, Washington Water, and Hawaii Water are regulated public utilities. The regulated utility entities also provide some non-regulated services. Utility Services holds non-utility property and provides non-regulated services to private companies and municipalities outside of California. Cal Water was the original operating company and began operations in 1926.

Our business is conducted through our operating subsidiaries and we provide utility services to approximately two million people. The bulk of the business consists of the production, purchase, storage, treatment, testing, distribution and sale of water for domestic, industrial, public and irrigation uses, and for fire protection. In some areas, we provide wastewater collection and treatment services, including treatment which allows water recycling. We also provide non-regulated water-related services under agreements with municipalities and other private companies. The non-regulated services include full water system operation, billing and meter reading services. Non-regulated operations also include the lease of communication antenna sites, lab services and promotion of other non-regulated services.

During the year ended December 31, 2020, there were no significant changes in the kind of products produced or services rendered by our operating subsidiaries, or in the markets or methods of distribution.

Our mailing address and contact information is:

California Water Service Group
1720 North First Street
San Jose, California 95112-4598
Telephone number: 408-367-8200
www.calwatergroup.com

Annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to these reports are available free of charge through our website at www.calwatergroup.com. The reports are available on our website as soon as reasonably practicable after such reports are filed with the SEC.

The content on any website referred to in this annual report is not incorporated by reference in this annual report unless expressly noted.

Regulated Business

California water operations are conducted by Cal Water, which provides service to approximately 492,600 customer connections in approximately 100 California communities through 21 separate districts, which are subject to regulation by the California Public Utilities Commission (CPUC). California water operations accounted for approximately 90.7% of our total customer connections and 93.8% of our total consolidated operating revenue.

We operate the City of Hawthorne and the City of Commerce water systems under lease agreements. In accordance with the lease agreements, we receive all revenues from operating the systems and are responsible for paying the operating costs. The City of Hawthorne and the City of Commerce lease revenues are governed through their respective city councils and are considered non-regulated because they are

patterns by our customers, resulting from such causes as increased water conservation and the installation of water saving devices and appliances that can result in decreased water usage. It is estimated that in the event we experience a 0.50% decrease in residential water consumption it would result in a decrease in annual residential water revenue of approximately $2,800,000 and would likely be partially offset by a reduction in incremental water production expenses such as chemicals and power.

Our natural gas utility customer base is diversified among residential gas, commercial gas, industrial gas, gas transportation, and other utility (consisting of miscellaneous service revenue from gas distribution operations; gas processing and handling revenue; sales of natural gas at market-based rates and contracted fixed prices; sales of gas purchased from third parties; and other gas marketing activities). The Regulated Natural Gas segment operating revenues are reported for the period since closing on the Peoples Gas Acquisition on March 16, 2020. Substantially all of our natural gas utility customers are metered, which allows to measure and bill for our customers' natural gas usage. Natural gas usage per customer is affected by local weather conditions during the year, especially during the fall, winter, and early spring. These patterns reflect the higher demand for natural gas for heating purposes during the colder months.

Our growth in revenues over the past five years is primarily a result of the 2020 Peoples Gas Acquisition, increases in water and wastewater rates and customer growth. See *Economic Regulation* for a discussion of water, wastewater and natural gas rates. The increase in our utility customer base has been due to customers added through acquisitions, partnerships with developers, and organic growth (excluding dispositions) as shown below:

Year	Utility Customer Growth Rate
2020	42.9%
2019	2.1%
2018	2.3%
2017	1.1%
2016	1.6%

In 2020, 2019, and 2018, our customer count increased by 772,099, 21,108, and 22,741 customers, respectively, primarily due to the addition of approximately 750,000 natural gas utility customers from the Peoples Gas Acquisition, water and wastewater utility systems that we acquired, and organic growth. Overall, for the five year period of 2016 through 2020, our utility customer base, adjusted to exclude customers associated with utility system dispositions, increased at an annual compound rate of 13.4%. During the five year period ended December 31, 2020, our utility customer base including customers associated with utility system acquisitions and dispositions increased from 957,866 at January 1, 2016 to 1,798,803 at December 31, 2020.

Acquisitions and Other Growth Ventures

We believe that acquisitions will continue to be an important source of customer growth for us. We intend to continue to pursue acquisitions of government-owned and regulated water and wastewater systems that provide services in areas near our existing service territories or in new service areas. We engage in continuing activities with respect to potential acquisitions, including calling on prospective sellers, performing analyses of and due diligence on acquisition candidates, making preliminary acquisition proposals, and negotiating the terms of potential acquisitions. Further, we are also seeking other potential business opportunities, including but not limited to, partnering with public and regulated utilities to invest in infrastructure projects, growing our market-based activities by acquiring businesses that provide water and wastewater or other utility-related services, and investing in infrastructure projects.

Based on the 2019 U.S. Census American Housing Survey, approximately 89% of the U.S. population obtains its water from public or private water utility systems, and 11% of the U.S. population obtains its water from individual wells. With approximately 50,000 public or private water systems in the U.S. (81% of which serve less than 3,300 customers), the water industry is the most fragmented of the major utility industries (telephone, natural gas, electric, water and wastewater). The majority of these community water systems are government-owned. The nation's water systems range in size from large government-owned systems, such as the New York City water system, which serves approximately 8.3 million people, to small systems, where a few customers share a common well. In the states where we operate regulated water utilities, we believe there are approximately 14,000 public or private water utility systems of widely-varying size, with the majority of the population being served by government-owned water systems.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this Annual Report on Form 10-K, or this Annual Report are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 that are made based upon, among other things, our current assumptions, expectations, plans, and beliefs concerning future events and their potential effect on us. These forward-looking statements involve risks, uncertainties and other factors, many of which are outside our control that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. In some cases you can identify forward-looking statements where statements are preceded by, followed by or include the words "believes," "expects," "estimates", "anticipates," "plans," "future," "potential," "probably," "predictions," "intends," "will," "continue," "in the event" or the negative of such terms or similar expressions. Please refer to the Summary in Item 1A – Risk Factors in this Annual Report for a description of the types of Forward-looking statements in this Annual Report.

Given these risks and uncertainties, you should not place undue reliance on any forward-looking statements. You should read this Annual Report completely and with the understanding that our actual future results, performance and achievements may be materially different from what we expect. These forward-looking statements represent assumptions, expectations, plans, and beliefs only as of the date of this Annual Report. Except for our ongoing obligations to disclose certain information under the federal securities laws, we are not obligated, and assume no obligation, to update these forward-looking statements, even though our situation may change in the future. For further information or other factors which could affect our financial results and such forward-looking statements, see *Item 1A – Risk Factors*. We qualify all of our forward-looking statements by these cautionary statements.

PART I

Item 1. *Business*

The Company

Essential Utilities, Inc. (referred to as "Essential Utilities", the "Company", "we", "us", or "our"), a Pennsylvania corporation, is the holding company for regulated utilities providing water, wastewater, or natural gas services to an estimated five million people in Pennsylvania, Ohio, Texas, Illinois, North Carolina, New Jersey, Indiana, Virginia, West Virginia, and Kentucky under the Aqua and Peoples brands. One of our largest operating subsidiaries, is Aqua Pennsylvania, Inc., ("Aqua Pennsylvania") accounted for approximately 55% of operating revenues and approximately 67% of income for our Regulated Water segment in 2020. As of December 31, 2020, Aqua Pennsylvania provided water or wastewater services to approximately one-half of the total number of water and wastewater customers we serve. Aqua Pennsylvania's service territory is located in the suburban areas in counties north and west of the City of Philadelphia and in 27 other counties in Pennsylvania. Our other regulated water utility subsidiaries provide similar services in seven additional states. Additionally, pursuant to the Company' growth strategy, commencing on March 16, 2020 with the completion of the Peoples Gas Acquisition, the Company began to provide natural gas distribution services to customers in western Pennsylvania, Kentucky, and West Virginia. Approximately 93% of the total number of natural gas utility customers we serve are in western Pennsylvania. Lastly, the Company's market-based activities are conducted through Aqua Infrastructure, LLC and Aqua Resources Inc., and certain other non-regulated subsidiaries of Peoples. Prior to our October 30, 2020 sale of our investment in a joint venture, Aqua Infrastructure provided non-utility raw water supply services for firms in the natural gas drilling industry. Following the October 30, 2020 closing, Aqua Infrastructure does not provide any services to the natural gas drilling industry. Aqua Resources offers, through a third-party, water and sewer line protection solutions and repair services to households.

Essential Utilities, which prior to its name change on February 3, 2020 was known as Aqua America, Inc., was formed in 1968 as a holding company for its primary subsidiary, Aqua Pennsylvania, formerly known as Philadelphia Suburban Water Company. In the early 1990s, we embarked on a growth through acquisition strategy. Our most significant transactions to date have been the merger with Consumers Water Company in 1999, the acquisition of the regulated water and wastewater operations of AquaSource, Inc. in 2003, the acquisition of Heater Utilities, Inc. in 2004, the acquisition of American Water Works Company, Inc.'s regulated water and wastewater operations in Ohio in 2012, and the Peoples Gas

PART I

Item 1. Business.

Overview

Middlesex Water Company (Middlesex) was incorporated as a water utility company in 1897 and owns and operates regulated water utility and wastewater systems primarily in New Jersey and Delaware. Middlesex also operates water and wastewater systems under contract on behalf of municipal and private clients primarily in New Jersey and Delaware.

The terms "the Company," "we," "our," and "us" refer to Middlesex Water Company and its subsidiaries, including Tidewater Utilities, Inc. (Tidewater) and Tidewater's wholly-owned subsidiaries, Southern Shores Water Company, LLC (Southern Shores) and White Marsh Environmental Systems, Inc. (White Marsh). The Company's other subsidiaries are Pinelands Water Company (Pinelands Water) and Pinelands Wastewater Company (Pinelands Wastewater) (collectively, Pinelands), Utility Service Affiliates, Inc. (USA), Utility Service Affiliates (Perth Amboy) Inc., (USA-PA), Tidewater Environmental Services, Inc. (TESI) and Twin Lakes Utilities, Inc. (Twin Lakes).

The Company's principal executive offices are located at 485C Route 1 South, Suite 400, Iselin, New Jersey 08830. Our telephone number is (732) 634-1500. Our website address is http://www.middlesexwater.com. Information contained on our website is not part of this Annual Report on Form 10-K. We make available, free of charge through our website, reports and amendments filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, after such material is electronically filed with or furnished to the United States Securities and Exchange Commission (the SEC).

Middlesex System

The Middlesex System in New Jersey provides water services to approximately 61,000 retail customers, primarily in eastern Middlesex County, New Jersey and provides water under wholesale contracts to the City of Rahway, Townships of Edison and Marlboro, the Borough of Highland Park and the Old Bridge Municipal Utilities Authority. The Middlesex System treats, stores and distributes water for residential, commercial, industrial and fire protection purposes. The Middlesex System also provides water treatment and pumping services to the Township of East Brunswick under contract. The amount of water supply allocated to the Township of East Brunswick is granted directly to the Township by the New Jersey Water Supply Authority. The Middlesex System produced approximately 59% of our 2020 consolidated operating revenues.

The Middlesex System's retail customers are located in an area of approximately 55 square miles in Woodbridge Township, the City of South Amboy, the Boroughs of Metuchen and Carteret, portions of the Township of Edison and the Borough of South Plainfield, all in Middlesex County, and a portion of the Township of Clark in Union County. Retail customers include a mix of residential customers, large industrial concerns and commercial and light industrial facilities. These customers are located in generally well-developed areas of central New Jersey.

The contract customers of the Middlesex System comprise an area of approximately 110 square miles with a population of over 200,000. Contract sales to the Townships of Edison and Marlboro, the City of Rahway and the Old Bridge Municipal Utilities Authority are supplemental to the water systems owned and operated by these customers. Middlesex is the sole source of water for the Borough of Highland Park and the Township of East Brunswick.

Middlesex provides water service to approximately 300 customers in Cumberland County, New Jersey. This system is referred to as Bayview, and is not physically interconnected with the Middlesex System. Bayview produced less than 1% of our 2020 consolidated operating revenues.

Tidewater System

Tidewater, together with its wholly-owned subsidiary, Southern Shores, provides water services to approximately 52,000 retail customers for residential, commercial and fire protection purposes in over 430 separate communities in New Castle, Kent and Sussex Counties, Delaware. The Tidewater System produced approximately 28% of our 2020 consolidated operating revenues.

USA-PA

USA-PA operates the City of Perth Amboy, New Jersey's (Perth Amboy) water and wastewater systems under a 10-year agreement, which expires in December 2028. There are approximately 12,000 customers comprised of residential, commercial and industrial connections, most of which are served by both the water and wastewater systems. In addition to performing day-to day operations, USA-PA is also responsible for emergency responses and management of capital projects funded by Perth Amboy. USA-PA produced approximately 5% of our 2020 consolidated operating revenues.

Pinelands Systems

Pinelands Water provides water services to approximately 2,500 residential customers in Burlington County, New Jersey. Pinelands Water is not physically interconnected with the Middlesex System. Pinelands Water produced approximately 1% of our 2020 consolidated operating revenues.

Pinelands Wastewater provides wastewater collection and treatment services to approximately 2,500 residential customers. Under contract, it also services one municipal wastewater system in Burlington County, New Jersey with approximately 200 residential customers. Pinelands Wastewater produced approximately 1% of our 2020 consolidated operating revenues.

USA

Tidewater System

Tidewater, together with its wholly-owned subsidiary, Southern Shores, provides water services to approximately 52,000 retail customers for residential, commercial and fire protection purposes in over 430 separate communities in New Castle, Kent and Sussex Counties, Delaware. The Tidewater System produced approximately 28% of our 2020 consolidated operating revenues.

USA-PA

USA-PA operates the City of Perth Amboy, New Jersey's (Perth Amboy) water and wastewater systems under a 10-year agreement, which expires in December 2028. There are approximately 12,000 customers comprised of residential, commercial and industrial connections, most of which are served by both the water and wastewater systems. In addition to performing day-to day operations, USA-PA is also responsible for emergency responses and management of capital projects funded by Perth Amboy. USA-PA produced approximately 5% of our 2020 consolidated operating revenues.

Pinelands Systems

Pinelands Water provides water services to approximately 2,500 residential customers in Burlington County, New Jersey. Pinelands Water is not physically interconnected with the Middlesex System. Pinelands Water produced approximately 1% of our 2020 consolidated operating revenues.

Pinelands Wastewater provides wastewater collection and treatment services to approximately 2,500 residential customers. Under contract, it also services one municipal wastewater system in Burlington County, New Jersey with approximately 200 residential customers. Pinelands Wastewater produced approximately 1% of our 2020 consolidated operating revenues.

USA

USA operates the Borough of Avalon, New Jersey's (Avalon) water utility, sewer utility and storm water system under a ten-year operations and maintenance contract expiring in 2022. USA serves approximately 6,400 retail customers in Avalon, most of which are served by both the water system and wastewater collection system. In addition to performing day-to-day operations, USA is responsible for billing, collections, customer service, emergency responses and management of capital projects funded by Avalon.

USA operates the Borough of Highland Park, New Jersey's (Highland Park) water utility and sewer utility under a ten-year operations and maintenance contract expiring in 2030. USA serves approximately 3,300 mostly retail customers in Highland Park. The contract commenced July 1, 2020.

USA also provides unregulated water and wastewater services under contract with several other smaller New Jersey municipalities.

Under a marketing agreement with HomeServe, USA offers residential customers in New Jersey and Delaware various water and wastewater related home maintenance programs. HomeServe is a leading national provider of such home maintenance service programs. USA receives a service fee for the billing, cash collection and other administrative matters associated with HomeServe's service contracts. The agreement expires in July 2021 and renewal discussions are underway.

USA produced approximately 2% of our 2020 consolidated operating revenues.

TESI System

TESI provides wastewater collection and treatment services to approximately 3,900 retail customers in Sussex County, Delaware. TESI produced approximately 2% of our 2020 consolidated operating revenues.

White Marsh

White Marsh operates or maintains water and/or wastewater systems that serve approximately 1,900 retail customers under more than 36 separate contracts. White Marsh also owns two commercial properties that are leased to Tidewater for its administrative office campus and its field operations center. White Marsh produced approximately 1% of our 2020 consolidated operating revenues.

Financial Information

Consolidated operating revenues, operating income and net income are as follows:

	(Thousands of Dollars) Years Ended December 31, 2020	2019	2018
Operating Revenues	$ 141,592	$ 134,598	$ 138,077
Operating Income	$ 37,420	$ 35,520	$ 37,142
Net Income	$ 38,425	$ 33,888	$ 32,452

Operating revenues were earned from the following sources:

EX-99.1 2 ex99-1.htm EX-99.1

EXHIBIT 99.1

FOR IMMEDIATE RELEASE

Middlesex Water Company Declares Quarterly Cash Dividend

ISELIN, N.J., Jan. 28, 2021 -- Middlesex Water Company (NASDAQ:MSEX) announced today that its Board of Directors has declared a cash dividend of $0.2725 per share on its common stock payable on March 1, 2021 to holders of record as of February 12, 2021. Middlesex Water has paid cash dividends in varying amounts continually since 1912 and has increased its annual dividend rate for 48 consecutive years.

Organized in 1897, Middlesex Water provides regulated and unregulated water and wastewater utility services primarily in New Jersey and Delaware through various subsidiary companies. To learn more about Middlesex Water, including information about its Investment Plan, visit the Investor Relations section at www.middlesexwater.com.

ABOUT MIDDLESEX WATER COMPANY

Middlesex Water Company serves as a trusted provider offering life-sustaining high quality water service for residential, commercial, industrial and fire protection purposes. The Company offers a full range of water, wastewater utility and related services. An investor-owned public utility, Middlesex Water is a professional services provider specializing in municipal and industrial contract operations and water and wastewater system technical operations and maintenance. The company and its subsidiaries form the Middlesex Water family of companies, which collectively serve a population of nearly half a million people in New Jersey and Delaware. Named a 2020 Top Workplace in New Jersey, Middlesex is focused on meeting the needs of our employees, customers, and shareholders. We invest in our people, our infrastructure and the communities we serve to support reliable and resilient utility services, economic growth and quality of life. To learn more about Middlesex Water, visit https://www.middlesexwater.com Please follow us on Facebook, Twitter and LinkedIn.

This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, among others, our long-term strategy and expectations, the status of our acquisition program, the impact of our acquisitions, the impact of current and projected rate requests and the impact of our capital program on our environmental compliance. There are important factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements including: general economic business conditions, unfavorable weather conditions, the success of certain cost containment initiatives, changes in regulations or regulatory treatment, availability and the cost of capital, the success of growth initiatives and other factors discussed in our filings with the Securities and Exchange Commission.

Contact:
Bernadette Sohler, Vice President – Corporate Affairs
Middlesex Water Company
(732) 638-7549
www.middlesexwater.com

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Item 6. ***Selected Financial Data***

FIVE YEAR FINANCIAL AND STATISTICAL REVIEW
SJW Group and Subsidiaries

	2020	2019	2018	2017	2016
CONSOLIDATED RESULTS OF OPERATIONS (in thousands)					
Operating revenue	$ 564,526	420,482	397,699	389,225	339,706
Operating expense:					
Purchased water	100,723	99,118	97,378	86,456	72,971
Power	13,330	7,443	6,180	7,295	6,102
Groundwater extraction charges	71,359	43,917	46,770	47,817	32,088
Other production expenses	40,380	25,291	18,398	16,571	14,470
Administrative and general	79,741	66,301	48,933	48,940	41,529
Maintenance	22,158	20,505	18,414	18,361	18,361
Property taxes and other non-income taxes	29,886	19,068	14,975	13,642	12,123
Depreciation and amortization	89,279	65,592	54,601	48,292	44,625
Merger related expenses	—	15,768	18,610	—	—
Total operating expense	446,856	363,003	324,259	287,374	242,269
Operating income	117,670	57,479	73,440	101,851	97,437
Interest expense, other income and expense	(47,775)	(25,398)	(24,608)	(5,358)	(11,056)
Income before income taxes	69,895	32,081	48,832	96,493	86,381
Provision for income taxes	8,380	8,454	10,065	35,393	33,542
Net income before noncontrolling interest	61,515	23,627	38,767	61,100	52,839
Less net income attributable to the noncontrolling interest	—	224	—	1,896	—
SJW Group net income	$ 61,515	23,403	38,767	59,204	52,839
Dividends paid	$ 36,509	34,134	23,074	21,332	16,559
CONSOLIDATED PER SHARE DATA					
Earnings per share - diluted	2.14	0.82	1.82	2.86	2.57
Dividends paid	1.28	1.20	1.12	1.04	0.81
Book value per common share	32.12	31.28	31.31	22.57	20.61
CONSOLIDATED BALANCE SHEET (in thousands)					
Utility plant and intangible assets	$ 3,380,048	3,168,505	1,935,911	1,792,323	1,666,381
Less accumulated depreciation and amortization	1,045,136	962,019	607,090	553,059	520,018
Net utility plant	2,334,912	2,206,486	1,328,821	1,239,264	1,146,363
Total assets	3,311,465	3,132,470	1,956,389	1,458,001	1,443,376
Capitalization:					
Stockholders' equity	917,160	889,984	889,312	463,209	421,646
Long-term debt, less current portion	1,287,580	1,283,597	431,424	431,092	433,335
Total capitalization	$ 2,204,740	2,173,581	1,320,736	894,301	854,981
OTHER STATISTICS—WATER UTILITY SERVICES					
Average revenue per connection (in thousands)	$ 1,450	1,087	1,609	1,594	1,402

Investment in gross utility plant per connection (in thousands)	$ 8,683	8,195	7,832	7,340	6,874
Connections at year-end	389,293	386,607	247,267	244,133	242,421
Miles of main at year-end	5,462	5,465	3,091	3,082	3,069
Water production (million gallons)	53,604	42,216	40,053	38,584	35,847
Maximum daily production (million gallons)	218	206	149	148	136
Population served (estimate)	1,614,866	1,604,442	1,114,200	1,100,200	1,092,600

Note: Information in this table, including Other Statistics, include SJWNE, LLC from the date of October 9, 2019.

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Item 6. ***Selected Financial Data***

FIVE YEAR FINANCIAL AND STATISTICAL REVIEW
SJW Group and Subsidiaries

	2020	2019	2018	2017	2016
CONSOLIDATED RESULTS OF OPERATIONS (in thousands)					
Operating revenue	$ 564,526	420,482	397,699	389,225	339,706
Operating expense:					
Purchased water	100,723	99,118	97,378	86,456	72,971
Power	13,330	7,443	6,180	7,295	6,102
Groundwater extraction charges	71,359	43,917	46,770	47,817	32,088
Other production expenses	40,380	25,291	18,398	16,571	14,470
Administrative and general	79,741	66,301	48,933	48,940	41,529
Maintenance	22,158	20,505	18,414	18,361	18,361
Property taxes and other non-income taxes	29,886	19,068	14,975	13,642	12,123
Depreciation and amortization	89,279	65,592	54,601	48,292	44,625
Merger related expenses	—	15,768	18,610	—	—
Total operating expense	446,856	363,003	324,259	287,374	242,269
Operating income	117,670	57,479	73,440	101,851	97,437
Interest expense, other income and expense	(47,775)	(25,398)	(24,608)	(5,358)	(11,056)
Income before income taxes	69,895	32,081	48,832	96,493	86,381
Provision for income taxes	8,380	8,454	10,065	35,393	33,542
Net income before noncontrolling interest	61,515	23,627	38,767	61,100	52,839
Less net income attributable to the noncontrolling interest	—	224	—	1,896	—
SJW Group net income	$ 61,515	23,403	38,767	59,204	52,839
Dividends paid	$ 36,509	34,134	23,074	21,332	16,559
CONSOLIDATED PER SHARE DATA					
Earnings per share - diluted	2.14	0.82	1.82	2.86	2.57
Dividends paid	1.28	1.20	1.12	1.04	0.81
Book value per common share	32.12	31.28	31.31	22.57	20.61
CONSOLIDATED BALANCE SHEET (in thousands)					
Utility plant and intangible assets	$ 3,380,048	3,168,505	1,935,911	1,792,323	1,666,381
Less accumulated depreciation and amortization	1,045,136	962,019	607,090	553,059	520,018
Net utility plant	2,334,912	2,206,486	1,328,821	1,239,264	1,146,363
Total assets	3,311,465	3,132,470	1,956,389	1,458,001	1,443,376
Capitalization:					
Stockholders' equity	917,160	889,984	889,312	463,209	421,646
Long-term debt, less current portion	1,287,580	1,283,597	431,424	431,092	433,335
Total capitalization	$ 2,204,740	2,173,581	1,320,736	894,301	854,981
OTHER STATISTICS—WATER UTILITY SERVICES					
Average revenue per connection (in thousands)	$ 1,450	1,087	1,609	1,594	1,402

Investment in gross utility plant per connection (in thousands)	$ 8,683	8,195	7,832	7,340	6,874
Connections at year-end	389,293	386,607	247,267	244,133	242,421
Miles of main at year-end	5,462	5,465	3,091	3,082	3,069
Water production (million gallons)	53,604	42,216	40,053	38,584	35,847
Maximum daily production (million gallons)	218	206	149	148	136
Population served (estimate)	1,614,866	1,604,442	1,114,200	1,100,200	1,092,600

Note: Information in this table, including Other Statistics, include SJWNE, LLC from the date of October 9, 2019.

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Lead and copper may enter drinking water primarily through plumbing materials. The Company is required to comply with the Lead and Copper Rule established by the EPA and administered by the DEP. The Company must monitor drinking water at customer taps for compliance with this rule. If lead concentrations exceed an action level, the Company must undertake a number of additional actions to control corrosion, inform the public about steps they should take to protect their health and may be required to replace lead service lines under its control. See "Management's Discussion and Analysis – Environmental Matters" for a discussion of the Company's compliance with the Lead and Copper rule.

The DEP and the Susquehanna River Basin Commission, or SRBC, regulate the amount of water withdrawn from streams in the watershed to assure that sufficient quantities are available to meet the needs of the Company and other regulated users. Through its Division of Dam Safety, the DEP regulates the operation and maintenance of the Company's impounding dams. The Company routinely inspects its dams and prepares annual reports of their condition as required by DEP regulations. The DEP reviews these reports and inspects the Company's dams. The DEP most recently inspected the Company's dams in 2019.

Since 1980, the DEP has required any new dam to have a spillway that is capable of passing the design flood without overtopping the dam. The design flood is either the Probable Maximum Flood, or PMF, or some fraction of it, depending on the size and location of the dam. PMF is very conservative and is calculated using the most severe combination of meteorological and hydrologic conditions reasonably possible in the watershed area of a dam.

The Company engaged a professional engineer to analyze the spillway capacities at the Lake Williams and Lake Redman dams and validate the DEP's recommended flood design for the dams. Management presented the results of the study to the DEP in December 2004, and DEP then requested that the Company submit a proposed schedule for the actions to address the spillway capacities. Thereafter, the Company retained an engineering firm to prepare preliminary designs for increasing the spillway capacities to pass the PMF through armoring the dams with roller compacted concrete. Management has met with the DEP on a regular basis to review the preliminary design and discuss scheduling, permitting, and construction requirements. Recently, DEP expressed concern regarding the stability of the Lake Williams spillway in light of current design standards. The Company is currently completing the final design and the permitting process to armor and replace the spillway of the Lake Williams dam. The Company expects to finalize its plans in 2021 and begin construction in 2022 at a total cost of approximately $27 million. The Lake Redman dam will be reviewed following the completion of the work on the Lake Williams dam.

Capital expenditures and operating costs required as a result of water quality standards and environmental requirements have been traditionally recognized by state public utility commissions as appropriate for inclusion in establishing rates. The capital expenditures currently required as a result of water quality standards and environmental requirements have been budgeted in the Company's capital program and represent less than 15% of its expected total capital expenditures over the next five years. The Company is currently in compliance with wastewater environmental standards and does not anticipate any major capital expenditures for its current wastewater business.

Growth

(All dollar amounts are stated in thousands of dollars)

The Company continues to grow its number of customers and distribution facilities.

The growth in the number of customers of the Company is due primarily to the acquisition of water and wastewater systems and organic growth. During the year ended December 31, 2020, the Company increased its number of customers from 71,411 to 72,681. See "Management's Discussion and Analysis – Acquisitions and Growth" for a discussion of the Company's recent acquisitions.

The Company continues to grow its water distribution and wastewater collection systems to provide reliable service to its expanding franchised service territory and the increasing population within that territory. During the year ended December 31, 2020, the Company installed an additional 14,950 feet of water distribution mains and acquired an additional 32,593 feet of wastewater collection mains resulting in 987 miles of water mains and 36 miles of wastewater mains as of December 31, 2020.

The Company's growth in revenues is primarily a result of customer growth and increases in water and wastewater rates. During the year ended December 31, 2020, the Company recognized revenue of $53,852, an increase of $2,274, or 4.4%, as compared to $51,578 during the year ended December 31, 2019. In 2020, operating revenue was derived from the following sources and in the following percentages: residential, 66%; commercial and industrial, 26%; and other, 8%, which is primarily from the provision for fire service but includes other water and wastewater service-related income. See "Management's Discussion and Analysis – Rate Matters" for a discussion of the Company's rate case management.

THE YORK WATER COMPANY

PART I

Item 1. Business.

The York Water Company (the "Company") is the oldest investor-owned water utility in the United States and is duly organized under the laws of the Commonwealth of Pennsylvania. The Company has operated continuously since 1816. The primary business of the Company is to impound, purify to meet or exceed safe drinking water standards and distribute water. The Company also owns and operates two wastewater collection systems and five wastewater collection and treatment systems. The Company operates within its franchised water and wastewater territory, which covers portions of 51 municipalities within three counties in south-central Pennsylvania. The Company is regulated by the Pennsylvania Public Utility Commission, or PPUC, for both water and wastewater in the areas of billing, payment procedures, dispute processing, terminations, service territory, debt and equity financing and rate setting. The Company must obtain PPUC approval before changing any practices associated with the aforementioned areas.

Water service is supplied through the Company's own distribution system. The Company obtains the bulk of its water supply from both the South Branch and East Branch of the Codorus Creek, which together have an average daily flow of 73.0 million gallons. This combined watershed area is approximately 117 square miles. The Company has two reservoirs, Lake Williams and Lake Redman, which together hold up to approximately 2.2 billion gallons of water. The Company supplements its reservoirs with a 15-mile pipeline from the Susquehanna River to Lake Redman which provides access to an additional supply of 12.0 million gallons of untreated water per day. The Company also owns nine wells which are capable of providing a safe yield of approximately 597,000 gallons per day to supply water to the customers of its satellite systems in Adams County. As of December 31, 2020, the Company's average daily availability was 35.6 million gallons, and average daily consumption was approximately 19.9 million gallons. The Company's service territory had an estimated population of 202,000 as of December 31, 2020. Industry within the Company's service territory is diversified, manufacturing such items as fixtures and furniture, electrical machinery, food products, paper, ordnance units, textile products, air conditioning systems, laundry detergent, barbells, and motorcycles.

The Company's water business is somewhat dependent on weather conditions, particularly the amount and timing of rainfall. Revenues are particularly vulnerable to weather conditions in the summer months. Prolonged periods of hot and dry weather generally cause increased water usage for watering lawns, washing cars, and keeping golf courses and sports fields irrigated. Conversely, prolonged periods of dry weather could lead to drought restrictions from governmental authorities. Despite the Company's adequate water supply, customers may be required to cut back water usage under such drought restrictions which would negatively impact revenues. The Company has addressed some of this vulnerability by instituting minimum customer charges which are intended to cover fixed costs of operations under all likely weather conditions.

The Company's business does not require large amounts of working capital and is not dependent on any single customer or a very few customers for a material portion of its business. Increases in revenues are generally dependent on the Company's ability to obtain rate increases from the PPUC in a timely manner and in adequate amounts and to increase volumes of water sold through increased consumption and increases in the number of customers served. The Company continuously looks for water and wastewater acquisition and expansion opportunities both within and outside its current service territory as well as additional opportunities to enter into bulk water contracts with municipalities and other entities to supply water.

The Company has agreements with several municipalities to provide sewer billing and collection services. The Company also has a service line protection program on a targeted basis in order to further diversify its business. Under this optional program, customers pay a fixed monthly fee, and the Company will repair or replace damaged customer service lines, as needed, subject to an annual maximum dollar amount. The Company continues to review and consider opportunities to expand both initiatives.

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Competition

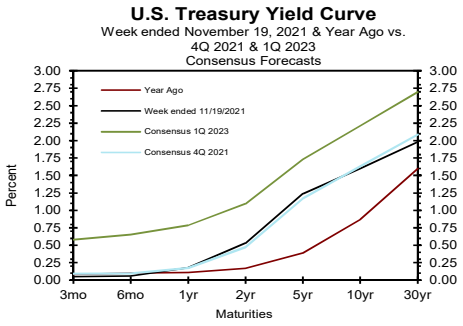
As a regulated utility, the Company operates within an exclusive franchised territory that is substantially free from direct competition with other public utilities, municipalities, and other entities. Although the Company has been granted an exclusive franchise for each of its existing community water and wastewater systems, the ability of the Company to expand or acquire new service territories may be affected by currently unknown competitors obtaining franchises to surrounding systems by application or acquisition. These competitors may include other investor-owned utilities, nearby municipally-owned utilities and sometimes competition from strategic or financial purchasers seeking to enter or expand in the water and wastewater industry. The addition of new service territory and the acquisition of other utilities are generally subject to review and approval by the PPUC.

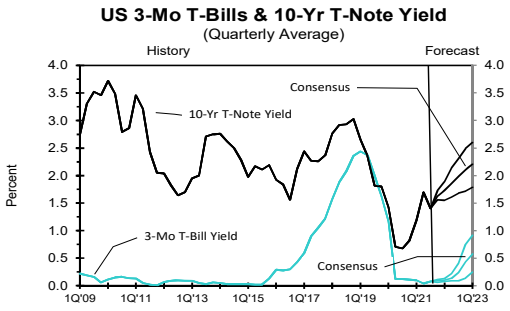
Water and Wastewater Quality and Environmental Regulations

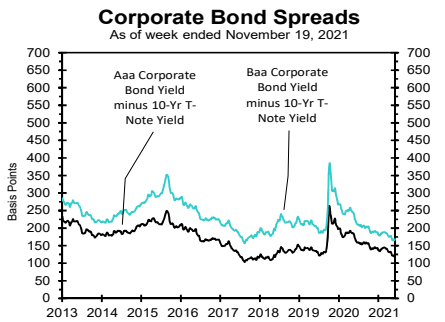
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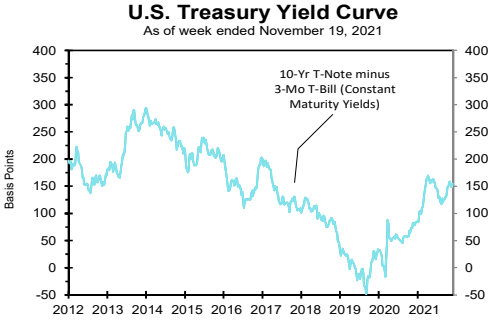
Consensus Forecast of U.S. Interest Rates and Key Assumptions

	History				History				Consensus Forecasts-Quarterly Avg.					
	Average For Week Ending				Average For Month			Latest Qtr	4Q	1Q	2Q	3Q	4Q	1Q
	Nov 19	Nov 12	Nov 5	Oct 29	Oct	Sep	Aug	3Q 2021	2021	2022	2022	2022	2022	2023
Federal Funds Rate	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.1	0.1	0.1	0.3	0.4	0.6
Prime Rate	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.3	3.3	3.3	3.4	3.5	3.7
LIBOR, 3-mo.	0.16	0.15	0.14	0.13	0.13	0.12	0.12	0.13	0.2	0.2	0.3	0.4	0.6	0.7
Commercial Paper, 1-mo.	0.06	0.05	0.07	0.06	0.05	0.05	0.05	0.05	0.1	0.1	0.2	0.3	0.5	0.6
Treasury bill, 3-mo.	0.05	0.05	0.05	0.06	0.05	0.04	0.05	0.05	0.1	0.1	0.1	0.2	0.4	0.6
Treasury bill, 6-mo.	0.06	0.07	0.07	0.06	0.06	0.05	0.06	0.05	0.1	0.1	0.2	0.3	0.5	0.7
Treasury bill, 1 yr.	0.18	0.16	0.15	0.14	0.11	0.08	0.07	0.08	0.2	0.2	0.3	0.4	0.6	0.8
Treasury note, 2 yr.	0.53	0.48	0.45	0.48	0.39	0.24	0.22	0.23	0.5	0.6	0.7	0.8	1.0	1.1
Treasury note, 5 yr.	1.24	1.17	1.14	1.18	1.11	0.86	0.77	0.80	1.2	1.3	1.4	1.5	1.6	1.7
Treasury note, 10 yr.	1.60	1.53	1.54	1.59	1.58	1.37	1.28	1.32	1.6	1.7	1.9	2.0	2.1	2.2
Treasury bond, 30 yr.	1.98	1.90	1.95	2.00	2.06	1.94	1.92	1.93	2.1	2.2	2.3	2.5	2.6	2.7
Corporate Aaa bond	2.82	2.72	2.77	2.80	2.85	2.72	2.72	2.72	2.7	2.9	3.1	3.2	3.4	3.6
Corporate Baa bond	3.29	3.18	3.22	3.25	3.31	3.16	3.16	3.16	3.4	3.6	3.8	4.0	4.2	4.4
State & Local bonds	2.56	2.56	2.60	2.61	2.59	2.67	2.64	2.64	2.4	2.6	2.7	2.9	3.0	3.1
Home mortgage rate	3.10	2.98	3.09	3.14	3.07	2.90	2.84	2.87	3.1	3.2	3.4	3.5	3.7	3.8
	History								Consensus Forecasts-Quarterly					
	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q
Key Assumptions	2019	2020	2020	2020	2020	2021	2021	2021	2021	2022	2022	2022	2022	2023
Fed's AFE Index	110.5	111.4	112.4	107.3	105.2	103.4	102.9	105.0	106.5	106.9	106.8	106.6	106.3	106.1
Real GDP	1.9	-5.1	-31.2	33.8	4.5	6.3	6.7	2.1	5.1	4.4	3.8	3.3	2.6	2.4
GDP Price Index	1.5	1.6	-1.5	3.6	2.2	4.3	6.1	5.9	4.6	3.4	2.8	2.7	2.5	2.5
Consumer Price Index	2.6	1.0	-3.1	4.7	2.4	3.7	8.4	6.6	5.6	3.3	2.9	2.6	2.5	2.4
PCE Price Index	1.7	1.3	-1.6	3.7	1.5	3.8	6.5	5.3	4.5	2.9	2.5	2.5	2.3	2.3









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12/31/2021

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Month

Company Name	Enterprise value to Net PPE	Month End 12/31/2021 0	Month End 11/30/2021 -1	Month End 10/31/2021 -2	Month End 9/30/2021 -3	Month End 8/31/2021 -4	Month End 7/31/2021 -5	Month End 6/30/2021 -6	Month End 5/31/2021 -7	Month End 4/30/2021 -8	Month End 3/31/2021 -9	Month End 2/28/2021 -10	Month End 1/31/2021 -11	Month End 12/31/2020 -12	Month End 11/30/2020 -13	Month End 10/31/2020 -14	Month End 9/30/2020 -15	Month End 8/31/2020 -16	Month End 7/31/2020 -17	Month End 6/30/2020 -18	Month End 5/31/2020 -19	Month End 4/30/2020 -20	Month End 3/31/2020 -21	Month End 2/29/2020 -22
		Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE
AMERICAN STATES WATER COMP	2.742	2.569	2.489	2.366	2.567	2.454	2.247	2.249	2.229	2.144	2.165	2.259	2.314	2.207	2.228	2.235	2.299	2.313	2.357	2.434	2.349	2.407	2.372
AMERICAN WATER WORKS COMP	2.194	2.053	2.099	2.053	2.204	2.081	1.936	1.964	1.958	1.903	1.871	2.016	1.964	1.996	1.962	1.909	1.910	1.954	1.773	1.791	1.719	1.698	1.744
ESSENTIAL UTILITIES, INC.	1.932	1.814	1.784	1.760	1.875	1.850	1.762	1.826	1.812	1.751	1.715	1.806	1.832	1.820	1.725	1.699	1.793	1.828	1.743	2.513	1.804	1.762	1.741
ARTESIAN RESOURCES CORPORA	1.037	0.991	0.946	0.911	0.945	0.933	0.899	0.981	0.972	0.960	0.925	0.982	0.923	0.936	0.890	0.878	0.902	0.888	0.905	0.897	0.889	0.932	0.893
CALIFORNIA WATER SERVICE GR	1.727	1.589	1.548	1.524	1.648	1.631	1.475	1.517	1.554	1.494	1.500	1.461	1.449	1.393	1.288	1.267	1.352	1.383	1.360	1.366	1.324	1.410	1.393
MIDDLESEX WATER COMPANY	2.807	2.499	2.643	2.478	2.678	2.515	2.075	2.213	2.115	2.050	1.899	2.137	1.978	1.938	1.838	1.788	1.882	1.878	1.939	2.011	1.822	1.818	1.874
SJW GROUP	1.503	1.461	1.443	1.427	1.492	1.487	1.407	1.446	1.460	1.443	1.429	1.451	1.491	1.471	1.399	1.401	1.431	1.420	1.416	1.450	1.393	1.370	2.195
THE YORK WATER COMPANY	2.136	2.080	2.103	1.949	2.290	2.150	2.040	2.271	2.326	2.224	1.968	2.040	2.165	2.160	2.036	2.037	2.205	2.227	2.294	2.174	2.000	2.131	2.091

Company Name	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap
AMERICAN STATES WATER COMP	3.424	3.202	3.103	2.949	3.260	3.116	2.854	2.853	2.828	2.719	2.754	2.874	2.944	2.805	2.832	2.841	2.955	2.972	3.030	3.224	3.110	3.188	3.061
AMERICAN WATER WORKS COMP	2.515	2.345	2.397	2.344	2.529	2.388	2.222	2.225	2.219	2.156	2.094	2.256	2.198	2.234	2.196	2.136	2.143	2.191	1.989	2.096	2.012	1.987	2.062
ESSENTIAL UTILITIES, INC.	1.773	1.655	1.628	1.605	1.708	1.685	1.606	1.671	1.658	1.602	1.578	1.663	1.687	1.660	1.574	1.550	1.622	1.653	1.576	2.289	1.643	1.605	1.552
ARTESIAN RESOURCES CORPORA	1.746	1.677	1.602	1.543	1.596	1.575	1.517	1.623	1.608	1.588	1.542	1.636	1.539	1.589	1.511	1.490	1.542	1.517	1.547	1.528	1.514	1.587	1.529
CALIFORNIA WATER SERVICE GR	2.095	1.973	1.922	1.892	2.057	2.036	1.841	1.923	1.970	1.894	1.879	1.830	1.815	1.800	1.665	1.636	1.742	1.782	1.752	1.852	1.795	1.911	1.887
MIDDLESEX WATER COMPANY	3.507	3.159	3.342	3.132	3.429	3.220	2.657	2.829	2.704	2.621	2.364	2.660	2.462	2.366	2.244	2.183	2.287	2.282	2.356	2.463	2.232	2.226	2.249
SJW GROUP	1.455	1.410	1.393	1.377	1.443	1.438	1.361	1.388	1.401	1.384	1.374	1.395	1.433	1.411	1.342	1.344	1.379	1.369	1.365	1.398	1.343	1.321	2.144
THE YORK WATER COMPANY	2.760	2.702	2.732	2.531	2.987	2.804	2.660	2.902	2.971	2.842	2.496	2.587	2.745	2.847	2.685	2.686	2.912	2.941	3.030	2.875	2.645	2.817	2.777

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Month

Company Name	Enterprise value to Net PPE	Month End 12/31/2021 0	Month End 11/30/2021 -1	Month End 10/31/2021 -2	Month End 9/30/2021 -3	Month End 8/31/2021 -4	Month End 7/31/2021 -5	Month End 6/30/2021 -6	Month End 5/31/2021 -7	Month End 4/30/2021 -8	Month End 3/31/2021 -9	Month End 2/28/2021 -10	Month End 1/31/2021 -11	Month End 12/31/2020 -12	Month End 11/30/2020 -13	Month End 10/31/2020 -14	Month End 9/30/2020 -15	Month End 8/31/2020 -16	Month End 7/31/2020 -17	Month End 6/30/2020 -18	Month End 5/31/2020 -19	Month End 4/30/2020 -20	Month End 3/31/2020 -21	Month End 2/29/2020 -22
		Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE	Enterprise value to Net PPE
AMERICAN STATES WATER COMP	1.000	0.937	0.908	0.863	0.936	0.895	0.819	0.820	0.813	0.782	0.789	0.824	0.844	0.805	0.813	0.815	0.839	0.843	0.860	0.888	0.857	0.878	0.865
AMERICAN WATER WORKS COMP	1.000	0.936	0.956	0.935	1.004	0.949	0.883	0.895	0.893	0.867	0.853	0.919	0.895	0.910	0.894	0.870	0.871	0.890	0.808	0.816	0.783	0.774	0.795
ESSENTIAL UTILITIES, INC.	1.000	0.939	0.924	0.911	0.971	0.958	0.912	0.945	0.938	0.907	0.888	0.935	0.949	0.942	0.893	0.880	0.928	0.946	0.902	1.301	0.934	0.912	0.901
ARTESIAN RESOURCES CORPORA	1.000	0.955	0.912	0.879	0.911	0.900	0.866	0.946	0.937	0.926	0.892	0.946	0.890	0.902	0.858	0.846	0.870	0.856	0.873	0.865	0.857	0.898	0.861
CALIFORNIA WATER SERVICE GR	1.000	0.920	0.896	0.882	0.954	0.944	0.854	0.878	0.900	0.865	0.868	0.846	0.839	0.806	0.746	0.733	0.783	0.801	0.787	0.791	0.767	0.816	0.806
MIDDLESEX WATER COMPANY	1.000	0.890	0.942	0.883	0.954	0.896	0.739	0.788	0.754	0.730	0.677	0.761	0.705	0.691	0.655	0.637	0.671	0.669	0.691	0.716	0.649	0.648	0.668
SJW GROUP	1.000	0.972	0.960	0.949	0.993	0.989	0.936	0.962	0.972	0.960	0.951	0.966	0.992	0.979	0.931	0.932	0.952	0.945	0.942	0.965	0.927	0.912	1.460
THE YORK WATER COMPANY	1.000	0.974	0.984	0.912	1.072	1.006	0.955	1.063	1.089	1.041	0.921	0.955	1.013	1.011	0.953	0.954	1.032	1.042	1.074	1.018	0.936	0.997	0.979

Company Name	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap
AMERICAN STATES WATER COMP	1.000	0.935	0.906	0.861	0.952	0.910	0.833	0.833	0.826	0.794	0.804	0.839	0.860	0.819	0.827	0.830	0.863	0.868	0.885	0.941	0.908	0.931	0.894
AMERICAN WATER WORKS COMP	1.000	0.932	0.953	0.932	1.005	0.950	0.883	0.885	0.882	0.857	0.832	0.897	0.874	0.888	0.873	0.849	0.852	0.871	0.791	0.833	0.800	0.790	0.820
ESSENTIAL UTILITIES, INC.	1.000	0.934	0.918	0.905	0.964	0.951	0.906	0.942	0.935	0.904	0.890	0.938	0.951	0.936	0.888	0.874	0.915	0.932	0.889	1.291	0.927	0.905	0.875
ARTESIAN RESOURCES CORPORA	1.000	0.961	0.917	0.884	0.914	0.902	0.869	0.930	0.921	0.910	0.883	0.937	0.881	0.910	0.865	0.853	0.883	0.869	0.886	0.875	0.867	0.909	0.876
CALIFORNIA WATER SERVICE GR	1.000	0.942	0.917	0.903	0.982	0.972	0.879	0.918	0.940	0.904	0.897	0.874	0.867	0.859	0.795	0.781	0.832	0.851	0.836	0.884	0.857	0.912	0.901
MIDDLESEX WATER COMPANY	1.000	0.901	0.953	0.893	0.978	0.918	0.758	0.807	0.771	0.747	0.674	0.759	0.702	0.675	0.640	0.623	0.652	0.651	0.672	0.702	0.636	0.635	0.641
SJW GROUP	1.000	0.969	0.958	0.947	0.992	0.989	0.936	0.954	0.963	0.952	0.945	0.959	0.985	0.970	0.922	0.924	0.948	0.941	0.938	0.961	0.923	0.908	1.474
THE YORK WATER COMPANY	1.000	0.979	0.990	0.917	1.082	1.016	0.964	1.051	1.077	1.030	0.904	0.937	0.995	1.032	0.973	0.973	1.055	1.066	1.098	1.042	0.958	1.021	1.006

12/31/2021	Month End 12/31/2021	Month End 11/30/2021	Month End 10/31/2021	Month End 9/30/2021	Month End 8/31/2021	Month End 7/31/2021	Month End 6/30/2021	Month End 5/31/2021	Month End 4/30/2021	Month End 3/31/2021	Month End 2/28/2021	Month End 1/31/2021	Month End 12/31/2020	Month End 11/30/2020	Month End 10/31/2020	Month End 9/30/2020	Month End 8/31/2020	Month End 7/31/2020	Month End 6/30/2020	Month End 5/31/2020	Month End 4/30/2020	Month End 3/31/2020	Month End 2/29/2020
Enterprise value to Net PPE	100%	94%	93%	90%	96%	95%	87%	92%	92%	89%	88%	93%	89%	91%	88%	86%	87%	87%	87%	88%	86%	89%	86%
Enterprise value to Inv Cap	100%	94%	94%	90%	98%	95%	88%	92%	93%	90%	89%	92%	88%	90%	87%	85%	87%	87%	89%	91%	89%	91%	88%

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Company Name	Month End 1/31/2020 -23 Enterprise value to Net PPE	Month End 12/31/2019 -24 Enterprise value to Net PPE	Month End 11/30/2019 -25 Enterprise value to Net PPE	Month End 10/31/2019 -26 Enterprise value to Net PPE	Month End 9/30/2019 -27 Enterprise value to Net PPE	Month End 8/31/2019 -28 Enterprise value to Net PPE	Month End 7/31/2019 -29 Enterprise value to Net PPE	Month End 6/30/2019 -30 Enterprise value to Net PPE	Month End 5/31/2019 -31 Enterprise value to Net PPE	Month End 4/30/2019 -32 Enterprise value to Net PPE	Month End 3/31/2019 -33 Enterprise value to Net PPE	Month End 2/28/2019 -34 Enterprise value to Net PPE	Month End 1/31/2019 -35 Enterprise value to Net PPE	Month End 12/31/2018 -36 Enterprise value to Net PPE	Month End 11/30/2018 -37 Enterprise value to Net PPE	Month End 10/31/2018 -38 Enterprise value to Net PPE	Month End 9/30/2018 -39 Enterprise value to Net PPE	Month End 8/31/2018 -40 Enterprise value to Net PPE	Month End 7/31/2018 -41 Enterprise value to Net PPE	Month End 6/30/2018 -42 Enterprise value to Net PPE	Month End 5/31/2018 -43 Enterprise value to Net PPE	Month End 4/30/2018 -44 Enterprise value to Net PPE	Month End 3/31/2018 -45 Enterprise value to Net PPE	Month End 2/28/2018 -46 Enterprise value to Net PPE	Month End 1/31/2018 -47 Enterprise value to Net PPE
AMERICAN STATES WATER COMF	2.672	2.622	2.632	2.894	2.753	2.898	2.453	2.391	2.392	2.321	2.324	2.379	2.263	2.244	2.288	2.117	2.115	2.128	2.112	2.024	2.021	2.000	1.919	1.958	2.005
AMERICAN WATER WORKS COMP	1.849	1.717	1.732	1.755	1.762	1.810	1.682	1.683	1.684	1.610	1.569	1.574	1.500	1.448	1.522	1.448	1.441	1.462	1.436	1.405	1.400	1.433	1.372	1.393	1.416
ESSENTIAL UTILITIES, INC.	1.978	1.804	1.735	1.766	1.748	1.756	1.958	1.937	1.904	1.863	1.538	1.572	1.505	1.479	1.535	1.453	1.593	1.626	1.606	1.549	1.550	1.555	1.519	1.558	1.609
ARTESIAN RESOURCES CORPORA	0.954	0.943	0.953	0.941	0.941	0.944	0.921	0.939	0.928	0.931	0.954	0.999	0.927	0.919	0.963	0.961	0.966	0.972	0.980	1.014	1.035	1.009	0.973	0.926	1.009
CALIFORNIA WATER SERVICE GR	1.468	1.448	1.470	1.565	1.505	1.607	1.524	1.465	1.470	1.495	1.550	1.525	1.468	1.427	1.420	1.328	1.349	1.339	1.338	1.265	1.324	1.289	1.228	1.284	1.351
MIDDLESEX WATER COMPANY	2.070	2.028	2.078	2.013	1.957	1.934	1.975	1.852	1.900	1.848	1.794	1.907	1.835	1.759	1.772	1.569	1.664	1.636	1.567	1.507	1.592	1.505	1.361	1.345	1.410
SJW GROUP	1.557	1.512	1.531	1.561	1.476	1.506	1.435	1.335	1.373	1.382	1.366	1.373	1.630	1.539	1.534	1.321	1.318	1.290	1.396	1.406	1.380	1.336	1.200	1.208	1.309
THE YORK WATER COMPANY	2.302	2.250	2.221	2.191	2.175	1.931	1.862	1.852	1.810	1.790	1.802	1.900	1.745	1.709	1.773	1.687	1.655	1.657	1.688	1.724	1.776	1.755	1.702	1.573	1.731

Company Name	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap
AMERICAN STATES WATER COMF	3.448	3.382	3.426	3.766	3.582	3.881	3.285	3.203	3.201	3.106	3.109	3.200	3.044	3.017	3.044	2.818	2.814	2.834	2.812	2.695	2.693	2.666	2.558	2.609	2.672
AMERICAN WATER WORKS COMP	2.187	2.030	2.041	2.067	2.075	2.153	2.000	2.002	2.024	1.934	1.885	1.883	1.794	1.732	1.811	1.722	1.714	1.790	1.758	1.720	1.735	1.776	1.700	1.681	1.710
ESSENTIAL UTILITIES, INC.	1.763	1.608	1.555	1.582	1.567	2.227	2.483	2.456	2.435	2.383	1.968	2.026	1.940	1.905	1.969	1.864	2.043	2.128	2.102	2.027	2.039	2.045	1.998	2.057	2.124
ARTESIAN RESOURCES CORPORA	1.633	1.615	1.651	1.629	1.630	1.648	1.608	1.639	1.626	1.631	1.671	1.757	1.630	1.615	1.691	1.688	1.696	1.696	1.711	1.770	1.824	1.778	1.714	1.613	1.757
CALIFORNIA WATER SERVICE GR	1.989	1.962	1.985	2.113	2.032	2.190	2.076	1.996	2.027	2.062	2.138	2.075	1.997	1.942	1.977	1.849	1.877	1.887	1.885	1.782	1.791	1.743	1.660	1.769	1.861
MIDDLESEX WATER COMPANY	2.484	2.433	2.773	2.686	2.611	2.607	2.662	2.497	2.596	2.525	2.451	2.612	2.514	2.409	2.450	2.169	2.300	2.305	2.208	2.123	2.224	2.103	1.903	1.882	1.974
SJW GROUP	1.521	1.477	1.482	1.511	1.429	1.459	1.390	1.293	1.320	1.329	1.313	1.883	2.236	2.111	2.123	1.828	1.824	1.806	1.956	1.969	1.918	1.857	1.668	1.714	1.857
THE YORK WATER COMPANY	3.057	2.988	2.986	2.945	2.923	2.610	2.518	2.503	2.441	2.414	2.431	2.598	2.387	2.337	2.413	2.296	2.252	2.272	2.315	2.364	2.417	2.388	2.316	2.162	2.380

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Company Name	Month End 1/31/2020 -23 Enterprise value to Net PPE	Month End 12/31/2019 -24 Enterprise value to Net PPE	Month End 11/30/2019 -25 Enterprise value to Net PPE	Month End 10/31/2019 -26 Enterprise value to Net PPE	Month End 9/30/2019 -27 Enterprise value to Net PPE	Month End 8/31/2019 -28 Enterprise value to Net PPE	Month End 7/31/2019 -29 Enterprise value to Net PPE	Month End 6/30/2019 -30 Enterprise value to Net PPE	Month End 5/31/2019 -31 Enterprise value to Net PPE	Month End 4/30/2019 -32 Enterprise value to Net PPE	Month End 3/31/2019 -33 Enterprise value to Net PPE	Month End 2/28/2019 -34 Enterprise value to Net PPE	Month End 1/31/2019 -35 Enterprise value to Net PPE	Month End 12/31/2018 -36 Enterprise value to Net PPE	Month End 11/30/2018 -37 Enterprise value to Net PPE	Month End 10/31/2018 -38 Enterprise value to Net PPE	Month End 9/30/2018 -39 Enterprise value to Net PPE	Month End 8/31/2018 -40 Enterprise value to Net PPE	Month End 7/31/2018 -41 Enterprise value to Net PPE	Month End 6/30/2018 -42 Enterprise value to Net PPE	Month End 5/31/2018 -43 Enterprise value to Net PPE	Month End 4/30/2018 -44 Enterprise value to Net PPE	Month End 3/31/2018 -45 Enterprise value to Net PPE	Month End 2/28/2018 -46 Enterprise value to Net PPE	Month End 1/31/2018 -47 Enterprise value to Net PPE
AMERICAN STATES WATER COMF	0.974	0.956	0.960	1.055	1.004	1.057	0.894	0.872	0.873	0.847	0.847	0.868	0.825	0.818	0.834	0.772	0.771	0.776	0.770	0.738	0.737	0.730	0.700	0.714	0.731
AMERICAN WATER WORKS COMP	0.843	0.783	0.790	0.800	0.803	0.825	0.766	0.767	0.768	0.734	0.715	0.717	0.684	0.660	0.694	0.660	0.657	0.666	0.654	0.640	0.638	0.653	0.625	0.635	0.646
ESSENTIAL UTILITIES, INC.	1.024	0.934	0.898	0.914	0.905	0.909	1.013	1.003	0.986	0.965	0.796	0.814	0.779	0.766	0.795	0.752	0.825	0.842	0.831	0.802	0.802	0.805	0.786	0.806	0.833
ARTESIAN RESOURCES CORPORA	0.919	0.909	0.919	0.907	0.908	0.910	0.888	0.905	0.895	0.898	0.920	0.963	0.894	0.886	0.929	0.927	0.931	0.937	0.945	0.978	0.998	0.972	0.938	0.893	0.973
CALIFORNIA WATER SERVICE GR	0.850	0.838	0.851	0.906	0.871	0.931	0.882	0.848	0.851	0.866	0.897	0.883	0.850	0.826	0.822	0.769	0.781	0.775	0.775	0.732	0.767	0.746	0.711	0.743	0.782
MIDDLESEX WATER COMPANY	0.738	0.722	0.741	0.717	0.697	0.689	0.704	0.660	0.677	0.658	0.639	0.680	0.654	0.627	0.632	0.559	0.593	0.583	0.558	0.537	0.567	0.536	0.485	0.479	0.502
SJW GROUP	1.036	1.006	1.019	1.039	0.982	1.002	0.955	0.888	0.914	0.920	0.909	0.913	1.084	1.024	1.020	0.879	0.877	0.858	0.929	0.935	0.918	0.889	0.798	0.804	0.871
THE YORK WATER COMPANY	1.078	1.053	1.040	1.025	1.018	0.904	0.872	0.867	0.847	0.838	0.844	0.889	0.817	0.800	0.830	0.790	0.775	0.776	0.790	0.807	0.831	0.822	0.797	0.736	0.810

Company Name	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap
AMERICAN STATES WATER COMF	1.007	0.988	1.000	1.100	1.046	1.133	0.959	0.935	0.935	0.907	0.908	0.934	0.889	0.881	0.889	0.823	0.822	0.828	0.821	0.787	0.786	0.779	0.747	0.762	0.780
AMERICAN WATER WORKS COMP	0.869	0.807	0.811	0.822	0.825	0.856	0.795	0.796	0.805	0.769	0.749	0.749	0.713	0.689	0.720	0.685	0.681	0.712	0.699	0.684	0.690	0.706	0.676	0.668	0.680
ESSENTIAL UTILITIES, INC.	0.994	0.907	0.877	0.893	0.884	1.256	1.400	1.385	1.373	1.344	1.110	1.143	1.094	1.075	1.111	1.051	1.153	1.200	1.185	1.143	1.150	1.154	1.127	1.160	1.198
ARTESIAN RESOURCES CORPORA	0.935	0.925	0.945	0.933	0.934	0.944	0.921	0.939	0.931	0.934	0.957	1.006	0.933	0.925	0.969	0.966	0.971	0.971	0.980	1.014	1.045	1.018	0.982	0.924	1.006
CALIFORNIA WATER SERVICE GR	0.950	0.936	0.948	1.009	0.970	1.045	0.991	0.953	0.968	0.984	1.020	0.991	0.953	0.927	0.944	0.883	0.896	0.901	0.900	0.851	0.855	0.832	0.793	0.844	0.888
MIDDLESEX WATER COMPANY	0.708	0.694	0.791	0.766	0.745	0.743	0.759	0.712	0.740	0.720	0.699	0.745	0.717	0.687	0.699	0.618	0.656	0.657	0.630	0.605	0.634	0.600	0.543	0.537	0.563
SJW GROUP	1.046	1.015	1.019	1.039	0.982	1.003	0.956	0.889	0.907	0.913	0.903	1.294	1.537	1.451	1.459	1.257	1.254	1.241	1.344	1.353	1.318	1.277	1.146	1.178	1.276
THE YORK WATER COMPANY	1.108	1.083	1.082	1.067	1.059	0.946	0.912	0.907	0.885	0.875	0.881	0.941	0.865	0.847	0.874	0.832	0.816	0.823	0.839	0.856	0.876	0.865	0.839	0.783	0.862

12/31/2021	Month End 1/31/2020	Month End 12/31/2019	Month End 11/30/2019	Month End 10/31/2019	Month End 9/30/2019	Month End 8/31/2019	Month End 7/31/2019	Month End 6/30/2019	Month End 5/31/2019	Month End 4/30/2019	Month End 3/31/2019	Month End 2/28/2019	Month End 1/31/2019	Month End 12/31/2018	Month End 11/30/2018	Month End 10/31/2018	Month End 9/30/2018	Month End 8/31/2018	Month End 7/31/2018	Month End 6/30/2018	Month End 5/31/2018	Month End 4/30/2018	Month End 3/31/2018	Month End 2/28/2018	Month End 1/31/2018
Enterprise value to Net PPE	95%	92%	91%	91%	91%	91%	89%	87%	86%	86%	85%	88%	82%	81%	83%	77%	78%	78%	78%	77%	78%	78%	75%	74%	80%
Enterprise value to Inv Cap	97%	93%	95%	97%	95%	97%	94%	92%	92%	91%	91%	97%	91%	90%	92%	86%	86%	86%	87%	85%	87%	85%	82%	81%	88%

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Company Name	Month End 12/31/2017 -48 Enterprise value to Net PPE	Month End 11/30/2017 -49 Enterprise value to Net PPE	Month End 10/31/2017 -50 Enterprise value to Net PPE	Month End 9/30/2017 -51 Enterprise value to Net PPE	Month End 8/31/2017 -52 Enterprise value to Net PPE	Month End 7/31/2017 -53 Enterprise value to Net PPE	Month End 6/30/2017 -54 Enterprise value to Net PPE	Month End 5/31/2017 -55 Enterprise value to Net PPE	Month End 4/30/2017 -56 Enterprise value to Net PPE	Month End 3/31/2017 -57 Enterprise value to Net PPE	Month End 2/28/2017 -58 Enterprise value to Net PPE	Month End 1/31/2017 -59 Enterprise value to Net PPE	Month End 12/31/2016 -60 Enterprise value to Net PPE	Month End 11/30/2016 -61 Enterprise value to Net PPE	Month End 10/31/2016 -62 Enterprise value to Net PPE	Month End 9/30/2016 -63 Enterprise value to Net PPE	Month End 8/31/2016 -64 Enterprise value to Net PPE	Month End 7/31/2016 -65 Enterprise value to Net PPE	Month End 6/30/2016 -66 Enterprise value to Net PPE	Month End 5/31/2016 -67 Enterprise value to Net PPE	Month End 4/30/2016 -68 Enterprise value to Net PPE	Month End 3/31/2016 -69 Enterprise value to Net PPE	Month End 2/29/2016 -70 Enterprise value to Net PPE	Month End 1/31/2016 -71 Enterprise value to Net PPE	Month End 12/31/2015 -72 Enterprise value to Net PPE
AMERICAN STATES WATER COMF	2.088	2.128	2.004	1.863	1.894	1.944	1.879	1.805	1.760	1.752	1.800	1.756	1.813	1.744	1.651	1.653	1.659	1.778	1.799	1.667	1.751	1.671	1.824	1.904	1.782
AMERICAN WATER WORKS COMP	1.511	1.540	1.497	1.418	1.442	1.433	1.396	1.411	1.419	1.396	1.443	1.367	1.354	1.378	1.397	1.407	1.418	1.516	1.540	1.425	1.397	1.348	1.327	1.318	1.250
ESSENTIAL UTILITIES, INC.	1.710	1.707	1.621	1.536	1.574	1.556	1.553	1.549	1.553	1.519	1.535	1.479	1.465	1.478	1.509	1.501	1.521	1.670	1.708	1.605	1.579	1.585	1.564	1.588	1.522
ARTESIAN RESOURCES CORPORA	1.036	1.138	1.102	1.040	1.044	1.072	1.053	1.009	1.070	0.943	0.957	0.919	0.941	0.942	0.879	0.885	0.877	1.017	1.016	0.898	0.882	0.901	0.916	0.957	0.894
CALIFORNIA WATER SERVICE GR	1.463	1.510	1.420	1.322	1.332	1.369	1.294	1.267	1.294	1.271	1.316	1.239	1.223	1.263	1.168	1.202	1.189	1.279	1.289	1.164	1.129	1.079	1.038	1.028	0.976
MIDDLESEX WATER COMPANY	1.476	1.697	1.601	1.474	1.459	1.486	1.497	1.384	1.467	1.430	1.481	1.486	1.648	1.610	1.454	1.426	1.396	1.632	1.700	1.503	1.503	1.313	1.254	1.287	1.205
SJW GROUP	1.373	1.480	1.334	1.276	1.288	1.243	1.184	1.195	1.209	1.211	1.221	1.230	1.332	1.329	1.276	1.147	1.146	1.139	1.078	1.031	1.029	1.068	1.073	0.989	0.933
THE YORK WATER COMPANY	1.832	2.006	1.910	1.852	1.859	1.932	1.934	1.883	2.079	1.963	2.043	2.034	2.149	2.076	1.850	1.757	1.702	1.859	1.888	1.645	1.782	1.825	1.703	1.649	1.564

Company Name	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap
AMERICAN STATES WATER COMF	2.782	2.820	2.656	2.468	2.371	2.434	2.352	2.312	2.254	2.243	2.303	2.246	2.319	2.259	2.138	2.141	2.171	2.327	2.354	2.188	2.298	2.192	2.341	2.443	2.287
AMERICAN WATER WORKS COMP	1.824	1.846	1.794	1.699	1.732	1.721	1.677	1.706	1.716	1.688	1.733	1.642	1.626	1.639	1.662	1.674	1.689	1.805	1.834	1.711	1.677	1.618	1.566	1.556	1.476
ESSENTIAL UTILITIES, INC.	2.258	2.240	2.127	2.016	2.088	2.064	2.061	2.061	2.067	2.023	2.039	1.964	1.946	1.963	2.005	1.994	2.029	2.229	2.279	2.151	2.116	2.124	2.067	2.099	2.011
ARTESIAN RESOURCES CORPORA	1.805	1.961	1.899	1.792	1.794	1.842	1.809	1.734	1.838	1.620	1.657	1.592	1.630	1.603	1.496	1.507	1.468	1.703	1.700	1.482	1.455	1.487	1.506	1.574	1.470
CALIFORNIA WATER SERVICE GR	2.016	2.068	1.946	1.810	1.878	1.930	1.824	1.780	1.818	1.787	1.882	1.772	1.750	1.770	1.636	1.684	1.680	1.806	1.822	1.652	1.603	1.532	1.439	1.424	1.352
MIDDLESEX WATER COMPANY	2.066	2.395	2.260	2.081	2.054	2.093	2.108	1.953	2.069	2.017	2.060	2.067	2.292	2.252	2.034	1.996	1.975	2.309	2.405	2.104	2.104	1.838	1.668	1.711	1.603
SJW GROUP	1.948	2.116	1.907	1.825	1.825	1.761	1.678	1.623	1.642	1.645	1.686	1.700	1.841	1.836	1.764	1.585	1.606	1.597	1.512	1.397	1.394	1.447	1.486	1.370	1.292
THE YORK WATER COMPANY	2.518	2.771	2.638	2.557	2.551	2.652	2.655	2.545	2.810	2.654	2.701	2.688	2.841	2.748	2.449	2.325	2.260	2.468	2.507	2.198	2.382	2.439	2.254	2.182	2.070

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Company Name	Month End 12/31/2017 -48 Enterprise value to Net PPE	Month End 11/30/2017 -49 Enterprise value to Net PPE	Month End 10/31/2017 -50 Enterprise value to Net PPE	Month End 9/30/2017 -51 Enterprise value to Net PPE	Month End 8/31/2017 -52 Enterprise value to Net PPE	Month End 7/31/2017 -53 Enterprise value to Net PPE	Month End 6/30/2017 -54 Enterprise value to Net PPE	Month End 5/31/2017 -55 Enterprise value to Net PPE	Month End 4/30/2017 -56 Enterprise value to Net PPE	Month End 3/31/2017 -57 Enterprise value to Net PPE	Month End 2/28/2017 -58 Enterprise value to Net PPE	Month End 1/31/2017 -59 Enterprise value to Net PPE	Month End 12/31/2016 -60 Enterprise value to Net PPE	Month End 11/30/2016 -61 Enterprise value to Net PPE	Month End 10/31/2016 -62 Enterprise value to Net PPE	Month End 9/30/2016 -63 Enterprise value to Net PPE	Month End 8/31/2016 -64 Enterprise value to Net PPE	Month End 7/31/2016 -65 Enterprise value to Net PPE	Month End 6/30/2016 -66 Enterprise value to Net PPE	Month End 5/31/2016 -67 Enterprise value to Net PPE	Month End 4/30/2016 -68 Enterprise value to Net PPE	Month End 3/31/2016 -69 Enterprise value to Net PPE	Month End 2/29/2016 -70 Enterprise value to Net PPE	Month End 1/31/2016 -71 Enterprise value to Net PPE	Month End 12/31/2015 -72 Enterprise value to Net PPE
AMERICAN STATES WATER COMF	0.761	0.776	0.731	0.679	0.691	0.709	0.685	0.658	0.642	0.639	0.657	0.640	0.661	0.636	0.602	0.603	0.605	0.649	0.656	0.608	0.639	0.609	0.665	0.694	0.650
AMERICAN WATER WORKS COMP	0.689	0.702	0.682	0.646	0.657	0.653	0.636	0.643	0.647	0.636	0.658	0.623	0.617	0.628	0.637	0.641	0.646	0.691	0.702	0.650	0.636	0.614	0.605	0.601	0.570
ESSENTIAL UTILITIES, INC.	0.885	0.884	0.839	0.795	0.815	0.805	0.804	0.802	0.804	0.787	0.795	0.766	0.759	0.765	0.781	0.777	0.787	0.865	0.884	0.831	0.817	0.821	0.810	0.822	0.788
ARTESIAN RESOURCES CORPORA	0.999	1.097	1.062	1.002	1.007	1.034	1.015	0.973	1.031	0.909	0.922	0.886	0.907	0.908	0.847	0.853	0.845	0.980	0.979	0.866	0.850	0.869	0.883	0.922	0.862
CALIFORNIA WATER SERVICE GR	0.847	0.874	0.822	0.765	0.771	0.793	0.749	0.733	0.749	0.736	0.762	0.717	0.708	0.731	0.676	0.696	0.689	0.740	0.747	0.674	0.654	0.625	0.601	0.595	0.565
MIDDLESEX WATER COMPANY	0.526	0.605	0.571	0.525	0.520	0.530	0.534	0.493	0.523	0.510	0.528	0.530	0.587	0.573	0.518	0.508	0.497	0.581	0.606	0.536	0.535	0.468	0.447	0.459	0.429
SJW GROUP	0.913	0.985	0.887	0.849	0.857	0.827	0.788	0.795	0.805	0.806	0.812	0.819	0.887	0.884	0.849	0.763	0.762	0.758	0.717	0.686	0.685	0.710	0.714	0.658	0.621
THE YORK WATER COMPANY	0.857	0.939	0.894	0.867	0.870	0.904	0.905	0.882	0.973	0.919	0.956	0.952	1.006	0.972	0.866	0.822	0.797	0.870	0.884	0.770	0.834	0.854	0.797	0.772	0.732

Company Name	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap	Enterprise value to Inv Cap
AMERICAN STATES WATER COMF	0.812	0.823	0.776	0.721	0.692	0.711	0.687	0.675	0.658	0.655	0.672	0.656	0.677	0.660	0.624	0.625	0.634	0.679	0.687	0.639	0.671	0.640	0.684	0.713	0.668
AMERICAN WATER WORKS COMP	0.725	0.734	0.713	0.675	0.689	0.684	0.667	0.678	0.682	0.671	0.689	0.653	0.647	0.652	0.661	0.665	0.671	0.718	0.729	0.680	0.667	0.643	0.623	0.619	0.587
ESSENTIAL UTILITIES, INC.	1.274	1.263	1.200	1.137	1.178	1.164	1.162	1.163	1.166	1.141	1.150	1.108	1.098	1.107	1.131	1.124	1.144	1.257	1.286	1.213	1.193	1.198	1.166	1.184	1.134
ARTESIAN RESOURCES CORPORA	1.034	1.123	1.088	1.026	1.027	1.055	1.036	0.993	1.053	0.928	0.949	0.912	0.934	0.918	0.857	0.863	0.841	0.975	0.974	0.849	0.833	0.851	0.863	0.901	0.842
CALIFORNIA WATER SERVICE GR	0.962	0.987	0.929	0.864	0.897	0.921	0.871	0.850	0.868	0.853	0.899	0.846	0.835	0.845	0.781	0.804	0.802	0.862	0.870	0.789	0.765	0.731	0.687	0.680	0.645
MIDDLESEX WATER COMPANY	0.589	0.683	0.645	0.593	0.586	0.597	0.601	0.557	0.590	0.575	0.588	0.590	0.654	0.642	0.580	0.569	0.563	0.658	0.686	0.600	0.600	0.524	0.476	0.488	0.457
SJW GROUP	1.339	1.454	1.311	1.254	1.254	1.211	1.153	1.116	1.129	1.131	1.159	1.168	1.265	1.262	1.212	1.090	1.104	1.098	1.039	0.960	0.958	0.994	1.021	0.941	0.888
THE YORK WATER COMPANY	0.912	1.004	0.956	0.926	0.924	0.961	0.962	0.922	1.018	0.961	0.979	0.974	1.029	0.996	0.887	0.842	0.819	0.894	0.908	0.797	0.863	0.884	0.817	0.791	0.750

12/31/2021	Month End 12/31/2017 -48	Month End 11/30/2017 -49	Month End 10/31/2017 -50	Month End 9/30/2017 -51	Month End 8/31/2017 -52	Month End 7/31/2017 -53	Month End 6/30/2017 -54	Month End 5/31/2017 -55	Month End 4/30/2017 -56	Month End 3/31/2017 -57	Month End 2/28/2017 -58	Month End 1/31/2017 -59	Month End 12/31/2016 -60	Month End 11/30/2016 -61	Month End 10/31/2016 -62	Month End 9/30/2016 -63	Month End 8/31/2016 -64	Month End 7/31/2016 -65	Month End 6/30/2016 -66	Month End 5/31/2016 -67	Month End 4/30/2016 -68	Month End 3/31/2016 -69	Month End 2/29/2016 -70	Month End 1/31/2016 -71	Month End 12/31/2015 -72
Enterprise value to Net PPE	85%	88%	83%	78%	79%	80%	77%	76%	78%	76%	78%	74%	73%	75%	73%	73%	73%	75%	73%	68%	67%	67%	69%	68%	64%
Enterprise value to Inv Cap	94%	100%	94%	90%	91%	94%	92%	89%	94%	89%	92%	88%	88%	88%	82%	82%	81%	88%	89%	79%	80%	79%	75%	75%	71%

NetPlant Advances CIAC DefTax ITC

		2020 Net Property, Plant & Equipment	Advances for construction	Contributions in aid of construction	Deferred income taxes, net	Deferred investment tax credits	2020 Known "Cost Free" Capital	2020 Percentage of Known "Cost Free" Capital
		(Millions of $)						
	Comparable Group							
1	American States Water Co	$1,512.043	$63.354	$138.691	$124.581	$1.224	$327.850	22%
2	American Water Works Co Inc	$19,710.000	$270.000	$1,393.000	$2,113.000	$0.000	$3,776.000	19%
3	Artesian Resources -CL A	$559.561	$4.578	$160.258	$50.313	$0.473	$215.622	39%
4	California Water Service Gp	$2,650.558	$195.625	$268.050	$276.032	$0.000	$739.707	28%
5	Essential Utilities, Inc.	$9,512.877	$99.014	$573.774	$1,258.098	$0.000	$1,930.886	20%
6	Middlesex Water Co	$796.598	$23.404	$111.990	$61.297	$0.000	$196.691	25%
7	SJW Corp	$2,334.912	$125.027	$296.105	$191.415	$0.000	$612.547	26%
8	York Water Co	$344.365	$10.326	$41.307	$43.538	$0.000	$95.171	28%
	Median							25%

CONSOLIDATED BALANCE SHEETS - USD ($)	Dec. 31, 2020	Dec. 31, 2019
$ in Thousands		
Regulated utility plant, at cost		
Water	$1,784,402	$1,700,442
Electric	112,507	108,425
Total	1,896,909	1,808,867
Non-regulated utility property, at cost	33,315	30,554
Total utility plant, at cost	1,930,224	1,839,421
Less — accumulated depreciation	-568,326	-543,263
Utility plant before construction work in progress	1,361,898	1,296,158
Construction work in progress	150,145	119,547
Net utility plant	1,512,043	1,415,705
Other Property and Investments		
Goodwill	1,116	1,116
Other property and investments	35,318	30,293
Total other property and investments	36,434	31,409
Current Assets		
Cash and cash equivalents	36,737	1,334
Accounts receivable — customers, less allowance for doubtful accounts	29,162	20,907
Unbilled revenue — receivable (Note 2)	25,836	20,482
Receivable from U.S. government, less allowance for doubtful accounts (Note 2)	25,182	22,613
Other accounts receivable, less allowance for doubtful accounts	3,960	3,096
Income taxes receivable	103	5,685
Materials and supplies	8,619	6,429
Regulatory assets — current	13,088	20,930
Prepayments and other current assets	5,555	5,413
Contract assets (Note 2)	8,873	15,567
Total current assets	157,115	122,456
Regulatory and Other Assets		
Unbilled revenue, receivable from U.S government	9,945	8,621
Receivable from U.S. government (Note 2)	49,488	42,206
Contract assets (Note 2)	1,384	64
Operating lease right-of-use assets	11,146	13,168
Regulatory Assets, Noncurrent	3,451	0
Other	10,597	7,702
Total other assets	86,011	71,761
Total Assets	1,791,603	1,641,331
Capitalization		
Common shareholders' equity	641,673	601,530
Long-term debt	440,348	280,996
Total capitalization	1,082,021	882,526
Current Liabilities		
Notes payable to banks	0	5,000
Long-term debt -current	358	344
Accounts payable	63,788	55,616
Income taxes payable	6,783	95
Accrued other taxes	11,902	11,110
Accrued employee expenses	15,122	14,255
Accrued interest	4,832	3,050
Unrealized loss on purchased power contracts	1,537	3,171
Contract liabilities (Note 2)	1,800	11,167
Operating lease liabilities	2,013	1,849
Other	10,437	10,341
Total current liabilities	118,572	115,998
Other Credits		
Notes payable to banks	134,200	200,000
Advances for Construction	63,374	63,989
Contributions in aid of construction — net	140,332	134,706
Deferred income taxes	131,172	125,304
Regulatory liabilities	0	23,380
Unamortized investment tax credits	1,224	1,295
Accrued pension and other post-retirement benefits	95,639	68,469
Operating lease liabilities	9,636	11,739
Other	15,433	13,925
Total other credits	591,010	642,807
Commitments and Contingencies		
Liabilities and Equity, Total	1,791,603	1,641,331
GSWC		
Regulated utility plant, at cost		
Water	1,784,402	1,700,442
Electric	0	108,425
Total utility plant, at cost	1,784,402	1,808,867
Less — accumulated depreciation	-502,283	-531,801
Utility plant before construction work in progress	1,282,119	1,277,066
Construction work in progress	118,370	117,676
Net utility plant	1,400,489	1,394,742
Other Property and Investments		
Other property and investments	33,240	28,212
Total other property and investments	33,240	28,212
Current Assets		
Cash and cash equivalents	35,578	401
Accounts receivable — customers, less allowance for doubtful accounts	26,920	20,907
Unbilled revenue — receivable (Note 2)	19,330	18,636
Other accounts receivable, less allowance for doubtful accounts	3,255	1,857
Intercompany receivable	1,107	0
Income taxes receivable	0	7,727
Materials and supplies	3,659	4,920
Regulatory assets — current	11,325	20,930
Prepayments and other current assets	4,114	4,497
Total current assets	105,288	79,875
Regulatory and Other Assets		
Operating lease right-of-use assets	11,103	12,745
Regulatory Assets, Noncurrent	1,048	0
Other	9,614	6,880
Total other assets	21,765	19,625
Total Assets	1,560,782	1,522,454
Capitalization		
Common shareholders' equity	583,298	551,188
Long-term debt	440,348	280,996
Total capitalization	1,023,646	832,184
Current Liabilities		
Long-term debt -current	358	344
Intercompany payable to Parent	0	158,845
Accounts payable	45,613	45,756
Income taxes payable	4,612	0
Accrued other taxes	10,382	10,640
Accrued employee expenses	12,351	12,386
Accrued interest	4,545	2,736
Unrealized loss on purchased power contracts	0	3,171
Operating lease liabilities	1,956	1,612
Other	9,403	9,745
Total current liabilities	89,220	245,235
Other Credits		
Advances for Construction	63,354	63,989
Contributions in aid of construction — net	138,691	134,706
Deferred income taxes	124,581	127,806
Regulatory liabilities	0	23,380
Unamortized investment tax credits	1,224	1,295
Accrued pension and other post-retirement benefits	95,570	68,469
Operating lease liabilities	9,636	11,588
Other	14,860	13,802
Total other credits	447,916	445,035
Liabilities and Equity, Total		
NetPlant	1,512,043	1,415,705
Advances	63,354	63,989
CIAC	138,691	134,706
DefTax	124,581	127,806
ITC	1,224	1,295

olidated Balance Sheets - USD ($)	Dec. 31, 2020	Dec. 31, 201
Millions		
ETS		
perty, plant and equipment	$25,614	$23,9
umulated depreciation	-5,904	-5,
perty, plant and equipment, net	19,710	18,
rent assets:		
n and cash equivalents	547	
tricted funds	29	
ounts receivable, net of allowance for uncollectible accounts of $60 and $41, respectively	321	
illed revenues	206	
erials and supplies	47	
ts held for sale	629	
er	127	
l current assets	1,906	1,
ulatory and other long-term assets:		
ulatory assets	1,127	1,
rating lease right-of-use assets	95	
dwill	1,504	1,
tretirement benefit assets	173	
ngible assets	55	
er	196	
l regulatory and other long-term assets	3,150	3,
l assets	24,766	22,
italization:		
mon stock ($0.01 par value; 500,000,000 shares authorized; 186,466,707 and 185,903,727 shares issued, respectively)	2	
l-in-capital	6,747	6,
ained earnings (accumulated deficit)	102	-
umulated other comprehensive loss	-49	
sury stock, at cost (5,168,215 and 5,090,855 shares, respectively)	-348	-
l common shareholders' equity	6,454	6,
g-term debt	9,329	8,
eemable preferred stock at redemption value	4	
l long-term debt	9,333	8,
l capitalization	15,787	14,
rent liabilities:		
rt-term debt	1,282	
rent portion of long-term debt	329	
ounts payable	189	
rued liabilities	591	
rued taxes	50	
rued interest	88	
ilities related to assets held for sale	137	
er	215	
l current liabilities	2,881	2,
ulatory and other long-term liabilities:		
ances for construction	270	
erred income taxes and investment tax credits	2,113	1,
ulatory liabilities	1,770	1,
rating lease liabilities	81	
rued pension expense	388	
er	83	
l regulatory and other long-term liabilities	4,705	4,
tributions in aid of construction	1,393	1,
mitments and contingencies		
l capitalization and liabilities	$24,766	$22,6

NetPlant	19,710	18,
Advances	270	
CIAC	1,393	1,
DefTax	2,113	1,
ITC	0	

CONSOLIDATED BALANCE SHEETS - USD ($)	Dec. 31, 2020	Dec. 31, 2019
$ in Thousands		
ASSETS		
Utility plant, at original cost (less accumulated depreciation - 2020 - $147,469,; 2019 - $136,588)	$559,561	$530,721
Current assets		
Cash and cash equivalents	28	596
Accounts receivable (less allowance for doubtful accounts 2020 - $862; 2019-$264)	10,162	6,913
Income tax receivable	629	19
Unbilled operating revenues	1,166	1,211
Materials and supplies	1,535	1,264
Prepaid property taxes	1,891	1,954
Prepaid expenses and other	2,208	2,250
Total current assets	17,619	14,207
Other assets		
Non-utility property (less accumulated depreciation - 2020- $865; 2019 - $790)	3,796	3,812
Other deferred assets	5,309	4,257
Operating lease right of use assets	460	480
Total other assets	9,565	8,549
Regulatory assets, net	6,473	6,891
Total assets	593,218	560,368
Stockholders' equity		
Common stock	9,357	9,292
Preferred stock	0	0
Additional paid-in capital	103,463	101,811
Retained earnings	56,606	49,165
Total stockholders' equity	169,426	160,268
Long-term debt, net of current portion	142,333	144,156
Total stockholders' equity and long-term debt	311,759	304,424
Current liabilities		
Lines of credit	26,813	7,500
Current portion of long-term debt	1,757	1,706
Accounts payable	6,341	8,176
Accrued expenses	3,414	3,113
Overdraft payable	105	15
Accrued interest	930	830
Income taxes payable	237	343
Customer and other deposits	2,060	1,970
OtherLiabilitiesCurrent	2,067	1,946
Total current liabilities	43,724	25,599
Commitments and contingencies (Note 11)		
Deferred credits and other liabilities		
Net advances for construction	4,578	5,421
OperatingLeaseLiabilityNoncurrent	432	450
Regulatory liabilities	21,681	22,246
Deferred investment tax credits	473	490
Deferred income taxes	50,313	52,259
Total deferred credits and other liabilities	77,477	80,866
Net contributions in aid of construction	160,258	149,479
Total Liabilities and Stockholders' Equity		

NetPlant	$559,561	$530,721
Advances	4,578	5,421
CIAC	160,258	149,479
DefTax	50,313	52,259
ITC	473	490

solidated Balance Sheets - USD ($)	Dec. 31, 2020	Dec. 31, 2
Thousands		
ty plant:		
l	$45,672	$45,(
reciable plant and equipment	3,645,770	3,235,
struction work in progress	171,414	245,
ngible assets	27,567	24,
l utility plant	3,890,423	3,550,
accumulated depreciation and amortization	-1,239,865	-1,144,
utility plant	2,650,558	2,406,
ent assets:		
and cash equivalents	44,555	42,
ivables:		
omers, net	44,025	32,
ulatory balancing accounts	96,241	38,
r, net	20,331	14,
illed revenue, net	34,069	34,
erials and supplies at weighted average cost	8,831	7,
s, prepaid expenses, and other assets	17,964	14,
l current assets	266,016	184,
r assets:		
ulatory assets	325,376	433,
dwill	31,842	2,
r	120,456	84,
l other assets	477,674	520,
AL ASSETS	3,394,248	3,111,
talization:		
mon stock, $0.01 par value; 68,000 shares authorized, 50,334 and 48,532 outstanding in 2020 and 2019, respectively	503	
tional paid-in capital	448,632	362,
ined earnings	472,209	417,
l common stockholders' equity	921,344	779,
g-term debt, net	781,100	786,
l capitalization	1,702,444	1,566,
ent liabilities:		
ent maturities of long-term debt, net	5,127	21,
t-term borrowings	370,000	175,
unts payable	131,725	108,
ulatory balancing accounts	34,636	4,
ued other taxes	4,477	4,
ued interest	6,178	5,
r accrued liabilities	36,563	38,
l current liabilities	588,706	358,
rred income taxes	276,032	222,
ulatory liabilities	180,718	211,
sion and postretirement benefits other than pensions	115,581	258,
ances for construction	195,625	191,
ributions in aid of construction	268,050	241,
r long-term liabilities	67,092	60,
mitments and contingencies		
AL CAPITALIZATION AND LIABILITIES	$3,394,248	$3,111,3

NetPlant	2,650,558	2,406,
Advances	195,625	191,
CIAC	268,050	241,
DefTax	276,032	222,
ITC	0	

:ed Balance Sheets - USD ($)	Dec. 31,
ısands	
, plant and equipment, at cost	$11,6
umulated depreciation	2,
erty, plant and equipment	9,
ıssets:	
cash equivalents	
receivable, net	
revenues	
/ - materials and supplies	
/ - gas stored	
ents and other current assets	
ry assets	
ld for sale	
rent assets	
ry assets	1,
charges and other assets, net	
nt in joint venture	
stricted for construction activity	
	2,
g lease right-of-use assets	
e assets	
ets	13,
Utilities stockholders' equity:	
stock at $0.50 par value, authorized 600,000,000 shares, issued 248,571,355 and 223,871,284 as of December 31, 2020 and December 31, 2019	
excess of par value	3,
earnings	1,
stock, at cost, 3,180,887 and 3,112,565 shares as of December 31, 2020 and December 31, 2019	
ckholders' equity	4,
n debt, excluding current portion	5,
t issuance costs	
n debt, excluding current portion, net of debt issuance costs	5,
nents and contingencies (See Note 9)	
iabilities:	
portion of long-term debt	
yable	
payable	
rdraft	
interest	
taxes	
ry liabilities	
crued liabilities	
rent liabilities	
credits and other liabilities:	
income taxes and investment tax credits	1,
rs' advances for construction	
ry liabilities	
irement obligations	
g lease liabilities	
and other postretirement benefit liabilities	
erred credits and other liabilities	2,
tions in aid of construction	
ilities and equity	$13,7

NetPlant	9,
Advances	
CIAC	
DefTax	1,
ITC	

CONSOLIDATED BALANCE SHEETS - USD ($)	Dec. 31, 2020	Dec. 31, 2019
$ in Thousands		
UTILITY PLANT:		
Water Production	$168,080	$160,870
Transmission and Distribution	648,763	556,517
General	85,056	83,043
Construction Work in Progress	80,055	75,520
TOTAL	981,954	875,950
Less Accumulated Depreciation	185,356	170,220
UTILITY PLANT - NET	796,598	705,730
CURRENT ASSETS:		
Cash and Cash Equivalents	4,491	2,230
Accounts Receivable, net	14,569	11,908
Unbilled Revenues	7,065	7,183
Materials and Supplies (at average cost)	5,112	5,445
Prepayments	2,886	2,367
TOTAL CURRENT ASSETS	34,123	29,133
Operating Lease Right of Use Asset	5,209	5,944
Preliminary Survey and Investigation Charges	5,192	2,054
Regulatory Assets	118,144	110,479
Restricted Cash	5,913	44,269
Non-utility Assets - Net	11,207	10,370
Other	84	1,899
TOTAL OTHER ASSETS	145,749	175,015
TOTAL ASSETS	976,470	909,878
CAPITALIZATION:		
Common Stock, No Par Value	217,451	215,125
Retained Earnings	128,757	108,667
TOTAL COMMON EQUITY	346,208	323,792
Preferred Stock	2,084	2,084
Long-term Debt	273,244	230,777
TOTAL CAPITALIZATION	621,536	556,653
CURRENT LIABILITIES:		
Current Portion of Long-term Debt	7,255	7,178
Notes Payable	2,000	20,000
Accounts Payable	30,443	23,306
Accrued Taxes	10,138	7,635
Accrued Interest	2,137	2,031
Unearned Revenues and Advanced Service Fees	1,255	1,211
Other	3,620	3,620
TOTAL CURRENT LIABILITIES	56,848	64,981
COMMITMENTS AND CONTINGENT LIABILITIES (Note 4)		
OTHER LIABILITIES:		
Customer Advances for Construction	23,404	23,905
Lease Obligations	5,042	5,732
Accumulated Deferred Income Taxes	61,297	54,408
Employee Benefit Plans	34,426	34,671
Regulatory Liabilities	60,792	69,152
Other	1,135	2,546
TOTAL OTHER LIABILITIES	186,096	190,414
CONTRIBUTIONS IN AID OF CONSTRUCTION	111,990	97,830
TOTAL CAPITALIZATION AND LIABILITIES	$976,470	$909,878

NetPlant	796,598	705,730
Advances	23,404	23,905
CIAC	111,990	97,830
DefTax	61,297	54,408
ITC	0	0

ated Balance Sheets - USD ($)	Dec. 31, 2
sands	
ant:	
	$
ble plant and equipment	3,1
tion in progress	1
e assets	
plant and equipment, gross	3,3
mulated depreciation and amortization	1,0
lities, property, plant and equipment, net	2,3
te investments	
mulated depreciation and amortization	
te investments, net	
ssets:	
d cash	
receivable:	
rs, net of allowances for uncollectible accounts of $3,891 and $1,512 in 2020 and 2019, respectively	
ax	
unbilled utility revenue	
egulatory assets, net	
xpenses	
rrent assets	
rent assets	1
sets:	
latory assets, less current portion	1
nts	
	6
er assets	8
ets	3,3
ders' equity:	
stock, $0.001 par value; authorized 70,000,000 shares in 2020 and 2019; issued and outstanding 28,556,605 shares in 2020 and 28,456,508 shares in 201	
l paid-in capital	5
earnings	4
ated other comprehensive (loss) income	
ckholders' equity	9
n debt, less current portion	1,2
ation, long-term debt and equity	2,2
iabilities:	
redit	1
portion of long-term debt	
groundwater extraction charges, purchased water and power	
payable	
interest	
payroll	
rrent liabilities	
rent liabilities	3
income taxes	1
s for construction	1
tions in aid of construction	2
ement benefit plans	1
ncurrent liabilities	
nents and contingencies	
ity and liabilities	$3,3

NetPlant	2,3
Advances	1
CIAC	2
DefTax	1
ITC	

Sheets - USD ($)	Dec. 31, 2
usands	
PLANT, at original cost	$43
quisition adjustments	
ated depreciation	-
y plant	3
HYSICAL PROPERTY, net of accumulated depreciation of $458 in 2020 and $435 in 2019	
T ASSETS:	
l cash equivalents	
d cash	
s receivable, net of reserves of $655 in 2020 and $305 in 2019	
revenues	
able income taxes	
s and supplies inventories, at cost	
expenses	
rent assets	
ONG-TERM ASSETS:	
pension cost	
eivable	
l regulatory assets	
sets	
ner long-term assets	
ets	4
N STOCKHOLDERS' EQUITY:	
n stock, no par value, authorized 46,500,000 shares, issued and outstanding 13,060,817 shares in 2020 and 13,014,898 shares in 2019	
l earnings	
nmon stockholders' equity	1
ED STOCK, authorized 500,000 shares, no shares issued	
RM DEBT, excluding current portion	1
MENTS	
T LIABILITIES:	
portion of long-term debt	
s payable	
s payable	
compensation and benefits	
interest	
l regulatory liabilities	
crued expenses	
rent liabilities	
D CREDITS:	
rs' advances for construction	
l income taxes	
l employee benefits	
l regulatory liabilities	
ferred credits	
erred credits	
tions in aid of construction	
ckholders' Equity and Liabilities	

NetPlant	3
Advances	
CIAC	
DefTax	
ITC	

Series Id: CUUR0000SA0,CUUS0000SA0
Not Seasonally Adjusted
Series Title: All items in U.S. city average, all urban consumers, not seasonally adjusted
Area: U.S. city average
Item: All items
Base Period: 1982-84=100

Download:

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	HALF1	HALF2
2000	168.8	169.8	171.2	171.3	171.5	172.4	172.8	172.8	173.7	174	174.1	174	170.8	173.6
2001	175.1	175.8	176.2	176.9	177.7	178	177.5	177.5	178.3	177.7	177.4	176.7	176.6	177.5
2002	177.1	177.8	178.8	179.8	179.8	179.9	180.1	180.7	181	181.3	181.3	180.9	178.9	180.9
2003	181.7	183.1	184.2	183.8	183.5	183.7	183.9	184.6	185.2	185	184.5	184.3	183.3	184.6
2004	185.2	186.2	187.4	188	189.1	189.7	189.4	189.5	189.9	190.9	191	190.3	187.6	190.2
2005	190.7	191.8	193.3	194.6	194.4	194.5	195.4	196.4	198.8	199.2	197.6	196.8	193.2	197.4
2006	198.3	198.7	199.8	201.5	202.5	202.9	203.5	203.9	202.9	201.8	201.5	201.8	200.6	202.6
2007	202.416	203.499	205.352	206.686	207.949	208.352	208.299	207.917	208.49	208.936	210.177	210.036	205.709	208.976
2008	211.08	211.693	213.528	214.823	216.632	218.815	219.964	219.086	218.783	216.573	212.425	210.228	214.429	216.177
2009	211.143	212.193	212.709	213.24	213.856	215.693	215.351	215.834	215.969	216.177	216.33	215.949	213.139	215.935
2010	216.687	216.741	217.631	218.009	218.178	217.965	218.011	218.312	218.439	218.711	218.803	219.179	217.535	218.576
2011	220.223	221.309	223.467	224.906	225.964	225.722	225.922	226.545	226.889	226.421	226.23	225.672	223.598	226.28
2012	226.665	227.663	229.392	230.085	229.815	229.478	229.104	230.379	231.407	231.317	230.221	229.601	228.85	230.338
2013	230.28	232.166	232.773	232.531	232.945	233.504	233.596	233.877	234.149	233.546	233.069	233.049	232.366	233.548
2014	233.916	234.781	236.293	237.072	237.9	238.343	238.25	237.852	238.031	237.433	236.151	234.812	236.384	237.088
2015	233.707	234.722	236.119	236.599	237.805	238.638	238.654	238.316	237.945	237.838	237.336	236.525	236.265	237.769
2016	236.916	237.111	238.132	239.261	240.229	241.018	240.628	240.849	241.428	241.729	241.353	241.432	238.778	241.237
2017	242.839	243.603	243.801	244.524	244.733	244.955	244.786	245.519	246.819	246.663	246.669	246.524	244.076	246.163
2018	247.867	248.991	249.554	250.546	251.588	251.989	252.006	252.146	252.439	252.885	252.038	251.233	250.089	252.125
2019	251.712	252.776	254.202	255.548	256.092	256.143	256.571	256.558	256.759	257.346	257.208	256.974	254.412	256.903
2020	257.971	258.678	258.115	256.389	256.394	257.797	259.101	259.918	260.28	260.388	260.229	260.474	257.557	260.065
2021	261.582	263.014	264.877	267.054	269.195	271.696	273.003	273.567	274.31	276.589	277.948	278.802	266.236	275.703
2022	281.148	283.716	287.504	289.109	292.296	296.311							288.347	

Geocode	County	Municipality	2010	2020	Change		Munic. Rank
					Numeric	Percent	
	Pennsylvania	Pennsylvania	**12,702,379**	**13,002,700**	**300,321**	**2.4%**	
007	Beaver County	Beaver County	170,539	168,215	-2,324	-1.4%	
00704792	Beaver County	Beaver Falls city	8987	9005	18	0.2%	963
00706240	Beaver County	Big Beaver borough	1970	1852	-118	-6.0%	1,816
00721968	Beaver County	Eastvale borough	225	184	-41	-18.2%	2,477
00755400	Beaver County	North Sewickley township	5488	5495	7	0.1%	971
00758375	Beaver County	Patterson township	3029	3129	100	3.3%	594
00758384	Beaver County	Patterson Heights borough	636	639	3	0.5%	930
00783472	Beaver County	West Mayfield borough	1239	1195	-44	-3.6%	1,473
00784444	Beaver County	White township	1394	1316	-78	-5.6%	1,762

Cycle 11 forecast (adopted by the Commission on June 24, 2019) by City of Pittsburgh Neighborhood Cluster and Municipality Outside Pittsburgh 2015-2045

City of Pittsburgh and county totals are at bottom of worksheet

Sorted County, Municipality

NOTE: column names in yellow cells are for mapping

		AREA IN SQUARE MILES			2015									2020					
									WORKPLACE EMPLOYMENT									WORKP	
unty(or Pittsburgh City)	Municipality (or Pittsburgh neighborhood cluster)	Total	Land	Water	Households	Average household size	Group-quarter population	Total population	Retail	Manufac-turing	Services	Other	Total	Households	Average household size	Group-quarter population	Total population	Retail	Manufac-turing
0	0		0	0	0	0	gqpop_15	totpop_15	retemp_15	mfgemp_15	servemp_15	othemp_15	totemp_15	hholds_20	avgsize_20	gqpop_20	totpop_20	retemp_20	mfgemp_20
Beaver	Beaver Falls City	2.2775	2.1608	0.1167	3,175	2.39	1,185	8,768	1,071	462	3,498	1,323	6,354	3,009	2.40	1,185	8,404	1,029	409
Beaver	Big Beaver Borough	18.0012	17.8470	0.1542	801	2.39	0	1,918	26	5	563	280	874	770	2.39	0	1,837	25	7
Beaver	Eastvale Borough	0.1215	0.0761	0.0454	84	2.82	0	237	40	0	12	6	58	74	2.93	0	217	39	1
Beaver	North Sewickley Township	21.0155	20.6130	0.4025	2,167	2.56	3	5,561	190	13	835	213	1,251	2,103	2.55	3	5,363	184	14
Beaver	Patterson Heights Borough	0.2476	0.2441	0.0035	255	2.47	0	630	33	0	136	6	175	247	2.47	0	609	32	2
Beaver	Patterson Township	1.7011	1.6989	0.0022	1,311	2.28	8	3,002	15	0	620	28	663	1,294	2.27	8	2,940	14	2
Beaver	West Mayfield Borough	0.7836	0.7836	0.0000	504	2.55	0	1,286	4	50	102	17	173	501	2.56	0	1,283	5	49
Beaver	White Township	0.7250	0.7250	0.0000	604	2.23	8	1,353	5	0	98	14	117	583	2.22	8	1,304	4	2

	AREA IN SQUARE MILES			2015									2020					
								WORKPLACE EMPLOYMENT									WORKP	
County/region totals	Total	Land	Water	Households	Average household size	Group-quarter population	Total population	Retail	Manufac-turing	Services	Other	Total	Households	Average household size	Group-quarter population	Total population	Retail	Manufac-turing
Pittsburgh, City of	58.2860	55.4805	2.8055	132,468	2.13	23,939	305,928	30,694	7,656	299,568	16,778	354,696	132,450	2.12	23,939	304,900	32,014	7,641
Allegheny (Excludes City of Pittsburgh)	685.6730	674.1324	11.5406	397,066	2.30	11,413	925,217	106,279	30,489	339,885	58,000	534,653	397,623	2.30	11,413	924,120	110,038	30,447
Armstrong	664.2882	653.6256	10.6626	28,524	2.36	757	67,979	4,071	2,210	13,611	5,052	24,944	27,332	2.34	757	64,822	4,160	2,034
Beaver	443.6825	433.9979	9.6846	70,079	2.38	2,951	169,785	13,374	6,957	44,256	7,058	71,645	68,468	2.37	2,951	165,356	13,247	6,462
Butler	794.6921	788.4355	6.2562	74,476	2.42	5,584	185,689	20,488	12,830	66,232	15,922	115,472	76,551	2.40	5,584	189,577	21,551	12,461
Fayette	797.8329	789.7719	8.0610	53,997	2.41	4,697	134,851	10,817	3,995	33,348	7,177	55,337	51,731	2.41	4,697	129,158	10,604	3,886
Greene	577.6056	575.7618	1.8438	14,394	2.33	4,375	37,938	2,650	396	8,802	7,692	19,540	14,192	2.31	4,375	37,184	2,568	386
Indiana	834.2155	828.9756	5.2399	34,061	2.41	5,923	87,895	7,921	2,416	25,331	10,145	45,813	33,989	2.39	5,923	87,307	7,947	2,384
Lawrence	362.6886	360.3848	2.3038	36,435	2.38	2,361	89,162	6,814	3,921	25,248	5,239	41,222	35,262	2.37	2,361	85,935	6,751	3,947
Washington	860.3761	856.8240	3.5521	83,739	2.42	5,255	208,226	19,051	9,478	69,515	23,173	121,217	84,406	2.42	5,255	209,558	19,660	9,250
Westmoreland	1,036.7786	1,025.9157	10.8629	151,173	2.33	8,562	361,251	36,817	18,488	102,926	23,936	182,167	149,268	2.32	8,562	355,285	37,420	17,889
SPC Region	7,116.1191	7,043.3057	72.8130	1,076,412	2.32	75,817	2,573,921	258,976	98,836	1,028,722	180,172	1,566,706	1,071,272	2.31	75,817	2,553,202	265,960	96,787

Cycle 11 forecast (adopted by th

City of Pittsburgh and county totals ar

Sorted County, Municipality

NOTE: column names in yellow cells are for m

		PLACE EMPLOYMENT				
ounty(or Pittsburgh City	Municipality (or Pittsburgh neighborhood cluster)	Services	Other	Total	Households	Average household size
0	0	servemp_20	othemp_20	totemp_20	hholds_25	avgsize_25
Beaver	Beaver Falls City	3,438	1,350	6,226	2,978	2.41
Beaver	Big Beaver Borough	848	291	1,171	790	2.38
Beaver	Eastvale Borough	12	13	65	73	2.89
Beaver	North Sewickley Township	825	222	1,245	2,097	2.54
Beaver	Patterson Heights Borough	135	13	182	248	2.44
Beaver	Patterson Township	620	33	669	1,305	2.25
Beaver	West Mayfield Borough	103	25	182	510	2.56
Beaver	White Township	91	26	123	580	2.21

	PLACE EMPLOYMENT				
County/region totals	Services	Other	Total	Households	Average household size
Pittsburgh, City of	317,187	17,493	374,335	136,051	2.11
Allegheny (Excludes City of Pittsburgh)	359,256	60,434	560,175	405,189	2.29
Armstrong	13,755	4,819	24,768	26,707	2.33
Beaver	45,184	7,615	72,508	68,875	2.36
Butler	69,657	16,426	120,095	78,859	2.39
Fayette	34,138	6,950	55,578	50,787	2.40
Greene	8,569	6,987	18,510	14,141	2.29
Indiana	25,671	9,423	45,425	34,596	2.38
Lawrence	25,295	5,217	41,210	34,811	2.36
Washington	73,396	23,891	126,197	86,246	2.42
Westmoreland	108,194	25,352	188,855	150,737	2.31
SPC Region	1,080,302	184,607	1,627,656	1,086,999	2.30

Cycle 11 forecast (adopted by th

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NOTE: column names in yellow cells are for m

		2025								2030								
				WORKPLACE EMPLOYMENT										WORKPLACE EMPLOYMENT				
bunty(or Pittsburgh City	Municipality (or Pittsburgh neighborhood cluster)	Group-quarter population	Total population	Retail	Manufac-turing	Services	Other	Total	Households	Average household size	Group-quarter population	Total population	Retail	Manufac-turing	Services	Other	Total
0	0	gqpop_25	totpop_25	retemp_25	mfgemp_25	servemp_25	othemp_25	totemp_25	hholds_30	avgsize_30	gqpop_30	totpop_30	retemp_30	mfgemp_30	servemp_30	othemp_30	totemp_30
Beaver	Beaver Falls City	1,185	8,367	993	309	3,351	1,337	5,990	3,028	2.42	1,185	8,520	975	252	3,355	1,321	5,903
Beaver	Big Beaver Borough	0	1,879	25	3	1,073	310	1,411	829	2.37	0	1,965	23	2	1,137	354	1,516
Beaver	Eastvale Borough	0	211	36	0	11	11	58	73	2.89	0	211	36	0	11	10	57
Beaver	North Sewickley Township	3	5,321	177	8	800	217	1,202	2,142	2.52	3	5,400	172	7	798	213	1,190
Beaver	Patterson Heights Borough	0	606	31	1	131	11	174	256	2.42	0	620	31	0	133	9	173
Beaver	Patterson Township	8	2,945	13	0	608	31	652	1,342	2.23	8	3,007	13	0	606	29	648
Beaver	West Mayfield Borough	0	1,304	5	33	106	23	167	525	2.57	0	1,349	5	27	113	21	166
Beaver	White Township	8	1,291	4	0	86	23	113	590	2.21	8	1,309	4	0	87	20	111

	2025								2030								
			WORKPLACE EMPLOYMENT										WORKPLACE EMPLOYMENT				
County/region totals	Group-quarter population	Total population	Retail	Manufac-turing	Services	Other	Total	Households	Average household size	Group-quarter population	Total population	Retail	Manufac-turing	Services	Other	Total
Pittsburgh, City of	23,939	311,659	31,555	6,974	316,613	17,096	372,238	141,330	2.11	23,939	321,969	31,463	6,456	320,875	16,694	375,488
Allegheny (Excludes City of Pittsburgh)	11,413	938,526	107,804	27,741	358,847	58,814	553,206	417,727	2.28	11,413	963,797	106,063	25,548	363,733	56,898	552,242
Armstrong	757	63,052	4,016	1,840	13,625	4,553	24,034	26,625	2.32	757	62,573	3,916	1,692	13,751	4,408	23,767
Beaver	2,951	165,660	12,932	5,893	44,795	7,359	70,979	70,860	2.35	2,951	169,639	12,750	5,429	45,190	7,175	70,544
Butler	5,584	193,864	21,255	11,224	69,246	15,854	117,579	82,415	2.37	5,584	201,009	21,043	10,245	70,135	15,274	116,697
Fayette	4,697	126,620	10,262	3,550	33,774	6,648	54,234	50,898	2.40	4,697	126,610	10,026	3,265	34,094	6,491	53,876
Greene	4,375	36,790	2,475	352	8,482	6,601	17,910	14,344	2.27	4,375	36,981	2,411	327	8,552	6,405	17,695
Indiana	5,923	88,299	7,810	2,172	25,548	9,334	44,864	35,815	2.37	5,923	90,698	7,726	2,005	25,899	9,423	45,053
Lawrence	2,361	84,432	6,556	3,622	25,228	4,985	40,391	35,418	2.35	2,361	85,425	6,446	3,367	25,644	4,831	40,288
Washington	5,255	213,562	19,321	8,429	73,404	23,428	124,582	89,310	2.41	5,255	220,429	19,089	7,789	74,543	23,174	124,595
Westmoreland	8,562	357,066	36,547	16,215	107,927	24,440	185,129	155,475	2.30	8,562	366,299	36,028	14,930	109,373	23,578	183,909
SPC Region	75,817	2,579,530	260,533	88,012	1,077,489	179,112	1,605,146	1,120,217	2.29	75,817	2,645,429	256,961	81,053	1,091,789	174,351	1,604,154

Cycle 11 forecast (adopted by th

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NOTE: column names in yellow cells are for m

		2035									2040								
						WORKPLACE EMPLOYMENT									WORKPLACE EMPLOYMENT				
ounty(or Pittsburgh City	Municipality (or Pittsburgh neighborhood cluster)	Households	Average household size	Group-quarter population	Total population	Retail	Manufac-turing	Services	Other	Total	Households	Average household size	Group-quarter population	Total population	Retail	Manufac-turing	Services	Other	Total
0	0	hholds_35	avgsize_35	gqpop_35	totpop_35	retemp_35	mfgemp_35	servemp_35	othemp_35	totemp_35	hholds_40	avgsize_40	gqpop_40	totpop_40	retemp_40	mfgemp_40	servemp_40	othemp_40	totemp_40
Beaver	Beaver Falls City	3,081	2.43	1,185	8,687	976	239	3,442	1,314	5,971	3,129	2.45	1,185	8,839	987	229	3,550	1,310	6,076
Beaver	Big Beaver Borough	844	2.36	0	1,992	23	3	1,143	349	1,518	862	2.35	0	2,025	24	2	1,159	349	1,534
Beaver	Eastvale Borough	73	2.92	0	213	36	0	12	8	56	74	2.89	0	214	35	0	12	7	54
Beaver	North Sewickley Township	2,207	2.50	3	5,531	173	7	821	211	1,212	2,262	2.49	3	5,632	175	7	848	211	1,241
Beaver	Patterson Heights Borough	265	2.40	0	635	31	0	137	8	176	271	2.38	0	645	31	0	139	6	176
Beaver	Patterson Township	1,377	2.22	8	3,065	13	0	616	27	656	1,404	2.20	8	3,100	13	0	628	27	668
Beaver	West Mayfield Borough	539	2.58	0	1,389	5	24	121	19	169	550	2.58	0	1,418	5	22	128	18	173
Beaver	White Township	600	2.20	8	1,327	4	0	90	18	112	607	2.19	8	1,338	4	0	93	16	113

	2035									2040								
					WORKPLACE EMPLOYMENT									WORKPLACE EMPLOYMENT				
County/region totals	Households	Average household size	Group-quarter population	Total population	Retail	Manufac-turing	Services	Other	Total	Households	Average household size	Group-quarter population	Total population	Retail	Manufac-turing	Services	Other	Total
Pittsburgh, City of	146,977	2.10	23,939	333,067	32,272	6,217	332,566	16,985	388,040	152,774	2.10	23,939	344,473	33,601	6,111	347,332	17,759	404,803
Allegheny (Excludes City of Pittsburgh)	430,866	2.27	11,413	989,969	107,535	24,553	377,146	57,268	566,502	443,757	2.26	11,413	1,015,104	110,874	24,079	394,297	59,272	588,522
Armstrong	26,934	2.31	757	63,017	3,920	1,618	14,169	4,392	24,099	27,335	2.30	757	63,683	3,963	1,578	14,681	4,443	24,665
Beaver	73,039	2.34	2,951	174,012	12,821	5,169	46,364	7,021	71,375	74,901	2.33	2,951	177,584	12,989	4,991	47,747	6,954	72,681
Butler	86,517	2.35	5,584	209,286	21,405	9,760	72,638	15,237	119,040	90,241	2.34	5,584	216,520	21,957	9,485	75,624	15,462	122,528
Fayette	51,424	2.39	4,697	127,595	10,042	3,136	35,096	6,496	54,770	51,815	2.38	4,697	128,255	10,138	3,060	36,267	6,578	56,043
Greene	14,671	2.25	4,375	37,450	2,420	311	8,786	6,420	17,937	15,000	2.24	4,375	37,912	2,460	300	9,083	6,551	18,394
Indiana	37,127	2.35	5,923	93,276	7,848	1,916	26,760	9,737	46,261	38,100	2.34	5,923	95,010	8,009	1,858	27,696	10,187	47,750
Lawrence	36,507	2.33	2,361	87,531	6,496	3,240	26,539	4,759	41,034	37,490	2.32	2,361	89,361	6,599	3,161	27,558	4,732	42,050
Washington	92,809	2.40	5,255	228,261	19,440	7,486	77,373	23,696	127,995	96,068	2.40	5,255	235,444	20,066	7,330	80,825	24,756	132,977
Westmoreland	161,336	2.29	8,562	377,950	36,450	14,312	113,058	23,403	187,223	166,525	2.28	8,562	387,880	37,175	13,962	117,387	23,596	192,120
SPC Region	1,158,207	2.28	75,817	2,721,414	260,649	77,718	1,130,495	175,414	1,644,276	1,194,006	2.27	75,817	2,791,226	267,831	75,915	1,178,497	180,290	1,702,533

Cycle 11 forecast (adopted by th
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NOTE: column names in yellow cells are for m

			2045										
							WORKPLACE EMPLOYMENT						
unty(or Pittsburgh City)	Municipality (or Pittsburgh neighborhood cluster)	Households	Average household size	Group-quarter population	Total population	Retail	Manufac-turing	Services	Other	Total
0	0	hhlds_45	avgsize_45	gqpop_45	totpop_45	retemp_45	mfgemp_45	servemp_45	othemp_45	totemp_45
Beaver	Beaver Falls City	3,188	2.46	1,185	9,019	1,006	220	3,685	1,310	6,221
Beaver	Big Beaver Borough	876	2.34	0	2,050	24	2	1,172	347	1,545
Beaver	Eastvale Borough	74	2.91	0	215	36	0	11	7	54
Beaver	North Sewickley Township	2,302	2.47	3	5,700	176	6	871	210	1,263
Beaver	Patterson Heights Borough	276	2.36	0	651	31	0	143	6	180
Beaver	Patterson Township	1,420	2.19	8	3,114	13	0	637	26	676
Beaver	West Mayfield Borough	556	2.59	0	1,440	6	21	134	17	178
Beaver	White Township	614	2.18	8	1,349	4	0	97	16	117

	2045								
					WORKPLACE EMPLOYMENT				
County/region totals	Households	Average household size	Group-quarter population	Total population	Retail	Manufac-turing	Services	Other	Total
Pittsburgh, City of	159,173	2.09	23,939	357,154	35,092	6,020	363,751	18,746	423,609
Allegheny (Excludes City of Pittsburgh)	458,330	2.25	11,413	1,043,734	114,757	23,650	413,193	62,025	613,625
Armstrong	27,651	2.29	757	64,156	3,993	1,537	15,215	4,538	25,283
Beaver	76,453	2.32	2,951	180,383	13,147	4,830	49,164	6,949	74,090
Butler	93,322	2.32	5,584	222,117	22,436	9,219	78,674	15,765	126,094
Fayette	52,019	2.38	4,697	128,468	10,177	2,973	37,415	6,682	57,247
Greene	15,318	2.22	4,375	38,341	2,491	290	9,405	6,750	18,936
Indiana	38,684	2.32	5,923	95,804	8,125	1,801	28,598	10,715	49,239
Lawrence	38,221	2.31	2,361	90,583	6,669	3,088	28,582	4,722	43,061
Washington	98,910	2.39	5,255	241,574	20,650	7,177	84,430	26,085	138,342
Westmoreland	170,375	2.27	8,562	394,643	37,705	13,608	121,626	23,891	196,830
SPC Region	1,228,456	2.26	75,817	2,856,957	275,242	74,193	1,230,053	186,868	1,766,356

State-Level Census Counts, 1900 to 2020

State	1900	1910	1920	1980	1990	2000	2010	2020
United States	76,212,168	92,228,496	106,021,537	226,545,805	248,709,873	281,421,906	308,745,538	331,449,281
Alabama	1,828,697	2,138,093	2,348,174	3,893,888	4,040,587	4,447,100	4,779,736	5,024,279
Alaska	63,592	64,356	55,036	401,851	550,043	626,932	710,231	733,391
Arizona	122,931	204,354	334,162	2,718,215	3,665,228	5,130,632	6,392,017	7,151,502
Arkansas	1,311,564	1,574,449	1,752,204	2,286,435	2,350,725	2,673,400	2,915,918	3,011,524
California	1,485,053	2,377,549	3,426,861	23,667,902	29,760,021	33,871,648	37,253,956	39,538,223
Colorado	539,700	799,024	939,629	2,889,964	3,294,394	4,301,261	5,029,196	5,773,714
Connecticut	908,420	1,114,756	1,380,631	3,107,576	3,287,116	3,405,565	3,574,097	3,605,944
Delaware	184,735	202,322	223,003	594,338	666,168	783,600	897,934	989,948
District of Columbia	278,718	331,069	437,571	638,333	606,900	572,059	601,723	689,545
Florida	528,542	752,619	968,470	9,746,324	12,937,926	15,982,378	18,801,310	21,538,187
Georgia	2,216,331	2,609,121	2,895,832	5,463,105	6,478,216	8,186,453	9,687,653	10,711,908
Hawaii	154,001	191,874	255,881	964,691	1,108,229	1,211,537	1,360,301	1,455,271
Idaho	161,772	325,594	431,866	943,935	1,006,749	1,293,953	1,567,582	1,839,106
Illinois	4,821,550	5,638,591	6,485,280	11,426,518	11,430,602	12,419,293	12,830,632	12,812,508
Indiana	2,516,462	2,700,876	2,930,390	5,490,224	5,544,159	6,080,485	6,483,802	6,785,528
Iowa	2,231,853	2,224,771	2,404,021	2,913,808	2,776,755	2,926,324	3,046,355	3,190,369
Kansas	1,470,495	1,690,949	1,769,257	2,363,679	2,477,574	2,688,418	2,853,118	2,937,880
Kentucky	2,147,174	2,289,905	2,416,630	3,660,777	3,685,296	4,041,769	4,339,367	4,505,836
Louisiana	1,381,625	1,656,388	1,798,509	4,205,900	4,219,973	4,468,976	4,533,372	4,657,757
Maine	694,466	742,371	768,014	1,124,660	1,227,928	1,274,923	1,328,361	1,362,359
Maryland	1,188,044	1,295,346	1,449,661	4,216,975	4,781,468	5,296,486	5,773,552	6,177,224
Massachusetts	2,805,346	3,366,416	3,852,356	5,737,037	6,016,425	6,349,097	6,547,629	7,029,917
Michigan	2,420,982	2,810,173	3,668,412	9,262,078	9,295,297	9,938,444	9,883,640	10,077,331
Minnesota	1,751,394	2,075,708	2,387,125	4,075,970	4,375,099	4,919,479	5,303,925	5,706,494
Mississippi	1,551,270	1,797,114	1,790,618	2,520,638	2,573,216	2,844,658	2,967,297	2,961,279
Missouri	3,106,665	3,293,335	3,404,055	4,916,686	5,117,073	5,595,211	5,988,927	6,154,913
Montana	243,329	376,053	548,889	786,690	799,065	902,195	989,415	1,084,225
Nebraska	1,066,300	1,192,214	1,296,372	1,569,825	1,578,385	1,711,263	1,826,341	1,961,504
Nevada	42,335	81,875	77,407	800,493	1,201,833	1,998,257	2,700,551	3,104,614
New Hampshire	411,588	430,572	443,083	920,610	1,109,252	1,235,786	1,316,470	1,377,529
New Jersey	1,883,669	2,537,167	3,155,900	7,364,823	7,730,188	8,414,350	8,791,894	9,288,994
New Mexico	195,310	327,301	360,350	1,302,894	1,515,069	1,819,046	2,059,179	2,117,522
New York	7,268,894	9,113,614	10,385,227	17,558,072	17,990,455	18,976,457	19,378,102	20,201,249
North Carolina	1,893,810	2,206,287	2,559,123	5,881,766	6,628,637	8,049,313	9,535,483	10,439,388
North Dakota	319,146	577,056	646,872	652,717	638,800	642,200	672,591	779,094
Ohio	4,157,545	4,767,121	5,759,394	10,797,630	10,847,115	11,353,140	11,536,504	11,799,448
Oklahoma	790,391	1,657,155	2,028,283	3,025,290	3,145,585	3,450,654	3,751,351	3,959,353
Oregon	413,536	672,765	783,389	2,633,105	2,842,321	3,421,399	3,831,074	4,237,256
Pennsylvania	6,302,115	7,665,111	8,720,017	11,863,895	11,881,643	12,281,054	12,702,379	13,002,700
Rhode Island	428,556	542,610	604,397	947,154	1,003,464	1,048,319	1,052,567	1,097,379
South Carolina	1,340,316	1,515,400	1,683,724	3,121,820	3,486,703	4,012,012	4,625,364	5,118,425
South Dakota	401,570	583,888	636,547	690,768	696,004	754,844	814,180	886,667
Tennessee	2,020,616	2,184,789	2,337,885	4,591,120	4,877,185	5,689,283	6,346,105	6,910,840
Texas	3,048,710	3,896,542	4,663,228	14,229,191	16,986,510	20,851,820	25,145,561	29,145,505
Utah	276,749	373,351	449,396	1,461,037	1,722,850	2,233,169	2,763,885	3,271,616
Vermont	343,641	355,956	352,428	511,456	562,758	608,827	625,741	643,077
Virginia	1,854,184	2,061,612	2,309,187	5,346,818	6,187,358	7,078,515	8,001,024	8,631,393
Washington	518,103	1,141,990	1,356,621	4,132,156	4,866,692	5,894,121	6,724,540	7,705,281
West Virginia	958,800	1,221,119	1,463,701	1,949,644	1,793,477	1,808,344	1,852,994	1,793,716
Wisconsin	2,069,042	2,333,860	2,632,067	4,705,767	4,891,769	5,363,675	5,686,986	5,893,718
Wyoming	92,531	145,965	194,402	469,557	453,588	493,782	563,626	576,851

Source: STATS Indiana, using U.S. Census Bureau data

	Beaver Falls, PA Data & Demographics (As of July 1, 2021)	*Township Of North Sewickley Data & Demographics (As of July 1, 2021)*	*Township Of Patterson Data & Demographics (As of July 1, 2021)*	*Big Beaver, PA Data & Demographics (As of July 1, 2021)*	*Eastvale, PA Data & Demographics (As of July 1, 2021)*	*West Mayfield, PA Data & Demographics (As of July 1, 2021)*	*Township Of White Data & Demographics (As of July 1, 2021)*	*Patterson Heights, PA Data & Demographics (As of July 1, 2021)*
POPULATION								
Total Population	8,578 (100%)	5,264 (100%)	2,960 (100%)	1,912 (100%)	209 (100%)	1,106 (100%)	1,288 (100%)	542 (100%)
Population in Households	7,488 (87.3%)	5,264 (100.0%)	2,953 (99.8%)	1,906 (99.7%)	200 (95.7%)	1,102 (99.6%)	1,288 (100.0%)	542 (100.0%)
Population in Families	5,434 (63.3%)	4,423 (84.0%)	2,222 (75.1%)	1,557 (81.4%)	166 (79.4%)	890 (80.5%)	941 (73.1%)	458 (84.5%)
Population in Group Quarters[1]	1,090 (12.7%)	0	7 (0.2%)	6 (0.3%)	9 (4.3%)	4 (0.4%)	0	0
Population Density	4,031	254	1,809	108	2,312	1,391	1,847	2,358
Diversity Index[2]	46	9	16	10	11	19	32	13
INCOME								
Median Household Income	$36,115	$75,058	$58,967	$57,276	$79,909	$56,878	$42,534	$98,135
Average Household Income	$48,974	$93,577	$79,058	$71,166	$98,788	$76,610	$55,580	$132,983
% of Income for Mortgage[4]	9%	9%	10%	10%	8%	8%	10%	10%
Per Capita Income	$19,646	$37,722	$37,151	$31,178	$39,767	$32,144	$25,416	$57,913
Wealth Index[5]	35	107	85	72	137	69	41	239
HOUSING								
Total HU (Housing Units)	4,022 (100%)	2,304 (100%)	1,510 (100%)	903 (100%)	103 (100%)	499 (100%)	650 (100%)	244 (100%)
Owner Occupied HU	1,637 (40.7%)	1,841 (79.9%)	974 (64.5%)	718 (79.5%)	80 (77.7%)	316 (63.3%)	321 (49.4%)	210 (86.1%)
Renter Occupied HU	1,696 (42.2%)	281 (12.2%)	432 (28.6%)	121 (13.4%)	10 (9.7%)	148 (29.7%)	268 (41.2%)	17 (7.0%)
Vacant Housing Units	689 (17.1%)	182 (7.9%)	104 (6.9%)	64 (7.1%)	14 (13.6%)	35 (7.0%)	61 (9.4%)	17 (7.0%)
Median Home Value	$76,418	$168,672	$143,907	$140,462	$158,750	$104,587	$105,278	$230,851
Average Home Value	$94,792	$200,530	$165,844	$153,656	$214,557	$114,082	$116,978	$247,406
Housing Affordability Index[3]	212	224	207	205	321	258	191	228
HOUSEHOLDS								
Total Households	3,333	2,122	1,406	839	89	464	589	227
Average Household Size	2.25	2.48	2.1	2.27	2.25	2.38	2.19	2.39
Family Households	1,871	1,553	823	590	63	308	347	162
Average Family Size	3	3	3	3	3	3	3	3

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Public Meeting held October 7, 2021

Docket Number: M-2021-3028488

BUREAU OF TECHNICAL UTILITY SERVICES

REPORT ON THE QUARTERLY EARNINGS

OF JURISDICTIONAL UTILITIES

FOR THE YEAR ENDED

June 30, 2021

Gladys Brown Dutrieuille, Chairman
John F. Coleman, Jr., Commissioner
Ralph V. Yanora, Commissioner

The market indicated common equity cost rate range consists of data used from the barometer groups and is based on a series of calculations to average the DCF methods.

Market Based Returns on Common Equity [1]	
September 10, 2021	
Water Company Barometer Group	
	Cost Rates
	%
(1) Current DCF	8.50
(2) 52-Week Average DCF	8.61
(3) Average DCF	8.55
(4) Market Indicated Common Equity Cost Rate Range @ 1 standard deviation around the mean.[2]	6.40-10.71
(5) CAPM Check of DCF Reasonableness	9.99
(6) Recent Commission Approved ROEs[3]: *None within last two years	*
(7) Distribution System Improvement Charge (DSIC) Return[4]:	**9.80%**

[1] As calculated by the Bureau of Technical Utility Services

[2] Standard Deviation of 14 DCF observations

[3] ROEs from base rate cases within last two years, fully litigated or stipulated for DSIC purposes

[4] Commission authorized Return on Equity (ROE) for DSIC purposes

Any questions concerning DSIC should be directed to Marc Hoffer of the Bureau of Technical Utility Services at (717) 787-1869.

WORKING NOTES											WORKING N
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
GROSS Property, plant and equipment	-	-	-		12,898,487	13,087,916	13,276,525	13,467,851	13,661,935	13,858,815	14,058,533
Accumulated Depreciation	-	-	-		5,047,800	5,255,187	5,449,667	5,646,950	5,847,076	6,050,086	6,256,022
NET PPE	-	-	-		7,850,687	7,832,729	7,826,858	7,820,901	7,814,859	7,808,729	7,802,511
Total Debt	-	-	-	-	-	-					
Net Equity	-	-	-	8,146,961	8,146,961	8,146,961					
Investor Provided Capital	-	-	-	8,146,961	8,146,961	8,146,961	-				
Depreciation / GROSS PPE	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	1.73%				0	0
				Muni CAPX	0	222,858	0	0	0	0	0
			IOU savings	0%			100%	100%	100%	100%	100%
				CAPX/Prior Yr. GROSS PPE			1.70%	1.70%	1.70%	1.70%	1.70%
				CAPX	87,357	222,858	221,893	225,090	228,334	231,624	234,962
				Dep rate	0.00%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%
				Half yr. Dep	0.00%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%
				Dep on CAPX	-	1,928	1,919	1,947	1,975	2,004	2,032
				Rate of retirement	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
				Retired property	13,104	33,429	33,284	33,764	34,250	34,744	35,244
				Dep on Retired property	-	578	576	584	593	601	610
				Dep on Prior yr. GROSS	243,460	239,466	226,421	229,684	232,994	236,351	239,757
				Total Dep	243,460	240,816	227,764	231,047	234,376	237,754	241,180
BEAVER											
Depreciation Expense	-	-	246,236	243,460	239,466						
				part of OCN							
				NET PPE			PURTA	0.001527765			
				Rev			Reg Assessment Fee	0.005652534			

					2020	2021	1 2022	2 2023	3 2024	4 2025	5 2026
BEAVER											
	FIX CIP			CIP	$ -	$ -	$ -	$ -	$ -	$ -	$ -
					part of OCN	= to DepX					
					87,357	222,858					
									191	71	72
					2020	2021					
						-	-	4,750.00	9,500.00	14,250.00	71,250.00
Sewer Rental Charges	0	0	3,054,418	3,147,364	3,023,166	3,023,166	3,023,166	2,349,450	2,350,140	2,351,290	
EDUs	0	0	0	0	5,107	5,107	5107	5108	5110	5113	5128
					0	0	0	1	2	3	15
		0	0	0	2553.5	5107	5107	5107.5	5109	5111.5	
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	591.9651459						
						$ 460.00	$ 460.00	$ 460.00	$ 460.00	$ 460.00	
		#DIV/0!	#DIV/0!	#DIV/0!	1183.930292	591.9651459					
BEAVER					C	3,259	9				
					E	5,107	15				
						0.64					
				1742000							
		Customer Growth				0	0	1	1	2	0.29%
		Delivered to Customer	-	18.41	18	18	18	18	18	18	18
BEAVER		Customers	3,259	3,259	3,259	3,259	3,259	3,260	3,261	3,263	3,272
		Total Revenue (Less TAP)	3,054,418	3,147,364	3,023,166	3,023,166	3,023,166	3,023,630	3,024,557	3,101,598	3,107,047
										102.48%	
		avg CUST rev	937.23	965.75	927.64	927.64	927.64	927.49	927.49	950.54	949.45
		avg CUST flow	-	0	0	0	0	0	0	0	0
		avg EDU rev	#DIV/0!	#DIV/0!	591.97	591.97	591.97	591.94	591.89	606.61	605.90
		avg EDU flow	#DIV/0!	#DIV/0!	0	0	0	0	0	0	0

WORKING NOTES											WORKING N
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
		Rev Calculated				3,023,166	3,023,166	3,023,630	3,024,094	3,025,484	3,106,095

	2021	2022	2023	2024	2025	2026
	Change			2.5%		
	$ 927.64	$ 927.64	$ 927.64	$ 950.83	$ 950.83	$ 950.83
				$ -	$ 23.19	$ -	$ -
	-	-	464	3,100,171	927	4,497
	3,023,166	3,023,166	3,023,630	3,024,557	3,101,598	3,107,047
	-	-	-	75,614	-	-

Prior yr							
NET PURTA	0.1432%		11,216	11,208	11,200	11,191	11,182
REV Reg Assessment	0.5690%		17,215	17,215	17,217	17,653	17,661
			28,431	28,423	28,417	28,844	28,843

City of Beaver Falls Wastewater System Assets	
Investor Provided (	8,146,961
Gross PP&E	12,898,487
Net PP&E	7,850,687
Revenues	3,025,415
EBITDA	773,752
EBIT	532,936
Customers	3,259
Population	15,580

G PPE	-	-	12,898,487	13,087,916	
NPPE	-	-	7,850,687	7,832,729	
Cust	3,259	3,259	3,259	3,259	

	2016	2017	2018	2019	2020	2021	2022			
BEAVER										
LESS: EOS - Wages & Benefits	0	-	-	-	-	926,870		0.15		LESS: EOS - Wages &
LESS: EOS - Professional Services	0	0	0	0	-	-		0.5		LESS: EOS - Professi
LESS: EOS - Eliminated Expenses	0	0	0	0	-	240,000				LESS: EOS - Elim
BEAVER										
Wages			0	0	0	926,870				
Professional Services					0	0				
Eliminated Exp			0	0	0	240,000				

BEAVER					included in OCN	= to DepX
Reported CAPX - from the financials	0	0	5,945	2,811	87,357	222,858

	2016	2017	2018	2019	2020		Assets	Per Books	Difference
GROSS Property, plant and equipment	-	-	-	-	12,898,487		12,898,487	-	
Accumulated Depreciation	-	-	-	-	5,047,800		5,047,800	-	
NET PPE	-	-	-	-	7,850,687		7,850,687	-	7,850,687

WORKING NOTES								WORKING N			
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Total Debt	-	-	-	-	-			222,914			
Net Equity	-	-	-	8,146,961	8,146,961						
Investor Provided Capital	-	-	-	8,146,961	8,146,961						
Depreciation Rate	0.00%	0.00%	0.00%	#DIV/0!	1.73%						
Depreciation Expense	-	-	246,236	243,460	239,466	222,914.00					

	2021	2022	2023	2024	2025	
CAPX	0	0	0	0	0	0

NOTES	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
GROSS Property, plant and equipment	14,261,129	14,466,645	14,675,122	14,886,604	15,101,133	15,318,754	15,539,511	15,763,449	15,990,615	16,221,054	16,454,814	16,691,943	16,932,489	17,176,501	17,424,029
Accumulated Depreciation	6,464,926	6,676,840	6,891,809	7,109,875	7,331,083	7,555,479	7,783,110	8,014,020	8,248,258	8,485,871	8,726,908	8,971,420	9,219,455	9,471,064	9,726,299
NET PPE	7,796,203	7,789,805	7,783,313	7,776,729	7,770,050	7,763,275	7,756,401	7,749,429	7,742,357	7,735,183	7,727,906	7,720,523	7,713,034	7,705,437	7,697,730
Total Debt															
Net Equity															
Investor Provided Capital															
Depreciation / GROSS PPE															
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%
	238,348	241,783	245,267	248,802	252,387	256,025	259,714	263,457	267,254	271,105	275,012	278,975	282,995	287,073	291,210
	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%
	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%
	2,062	2,091	2,122	2,152	2,183	2,215	2,247	2,279	2,312	2,345	2,379	2,413	2,448	2,483	2,519
	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
	35,752	36,267	36,790	37,320	37,858	38,404	38,957	39,519	40,088	40,666	41,252	41,846	42,449	43,061	43,682
	619	627	636	646	655	664	674	684	694	704	714	724	734	745	756
	243,213	246,718	250,273	253,880	257,538	261,250	265,014	268,834	272,708	276,638	280,624	284,668	288,771	292,932	297,153
	244,656	248,181	251,758	255,386	259,066	262,800	266,587	270,429	274,326	278,279	282,290	286,357	290,484	294,670	298,917

145

BEAVER

Depreciation Expense

	6 2027	7 2028	8 2029	9 2030	10 2031	11 2032	12 2033	13 2034	14 2035	15 2036	16 2037	17 2038	18 2039	19 2040	20 2041
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	56														
	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00
Sewer Rental Charges															
EDUs	5143	5158	5173	5188	5203	5218	5233	5248	5263	5278	5293	5308	5323	5338	5353
	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15

BEAVER

	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%
	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
BEAVER	3,282	3,291	3,301	3,311	3,320	3,330	3,339	3,349	3,359	3,369	3,378	3,388	3,398	3,408	3,418
	3,116,058	3,343,851	3,353,548	3,363,273	3,592,273	3,602,691	3,613,139	3,804,798	3,815,832	3,991,454	4,003,029	4,151,136	4,163,174	4,338,082	4,350,662
		107.00%													
	949.45	1,015.91	1,015.91	1,015.91	1,081.95	1,081.95	1,081.95	1,136.05	1,136.05	1,184.90	1,184.90	1,225.18	1,225.18	1,272.96	1,272.96
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	605.88	648.28	648.28	648.28	690.42	690.44	690.45	725.00	725.03	756.24	756.29	782.05	782.11	812.68	812.75
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NOTES	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
	3,111,552	3,120,576	3,348,700	3,358,411	3,368,150	3,597,482	3,607,915	3,618,378	3,810,315	3,821,365	3,997,242	4,008,833	4,157,155	4,169,211	4,344,372

	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
	7.0%			6.5%			5.0%		4.3%		3.4%		3.9%		3.7%
	$ 1,017.38	$ 1,017.38	$ 1,017.38	$ 1,083.51	$ 1,083.51	$ 1,083.51	$ 1,137.69	$ 1,137.69	$ 1,186.61	$ 1,186.61	$ 1,226.96	$ 1,226.96	$ 1,274.81	$ 1,274.81	$ 1,321.98
	$ 66.56	$ -	$ -	$ 66.13	$ -	$ -	$ 54.18	$ -	$ 48.92	$ -	$ 40.34	$ -	$ 47.85	$ -	$ 47.17
	4,505	4,518	4,849	4,863	4,877	5,209	5,224	5,239	5,517	5,533	5,788	5,804	6,019	6,037	6,290
	3,116,058	3,343,851	3,353,548	3,363,273	3,592,273	3,602,691	3,613,139	3,804,798	3,815,832	3,991,454	4,003,029	4,151,136	4,163,174	4,338,082	4,350,662
	218,124	-	-	218,613	-	-	180,657	-	164,081	-	136,103	-	162,364	-	160,975
	11,173	11,164	11,155	11,146	11,136	11,127	11,117	11,107	11,097	11,087	11,077	11,066	11,056	11,045	11,034
	17,692	18,984	19,039	19,094	20,394	20,453	20,512	21,599	21,662	22,659	22,724	23,564	23,633	24,625	24,696
	28,865	30,148	30,194	30,240	31,530	31,580	31,629	32,706	32,759	33,746	33,801	34,630	34,689	35,670	35,730

BEAVER

LESS: EOS - Wages & Benefits	Wages & Benefits	15% savings	15%	0.15
LESS: EOS - Professional Services	Net Professional Services	50% savings	50%	0.5
LESS: EOS - Eliminated Expenses	Line Rentals	10% savings	100%	1

BEAVER

Wages
Professional Services

Eliminated Exp

BEAVER

Reported CAPX - from the financials

GROSS Property, plant and equipment
Accumulated Depreciation
NET PPE

NOTES	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Total Debt															
Net Equity															
Investor Provided Capital															
Depreciation Rate															
Depreciation Expense															
CAPX															

	WORKING NOTES										WORKING N
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
GROSS Property, plant and equipment	-	-	-		12,898,487	13,087,916	13,276,525	13,467,851	13,661,935	13,858,815	14,058,533
Accumulated Depreciation	-	-	-		5,047,800	5,255,187	5,449,667	5,646,950	5,847,076	6,050,086	6,256,022
NET PPE	-	-	-		7,850,687	7,832,729	7,826,858	7,820,901	7,814,859	7,808,729	7,802,511
Total Debt	-	-	-	-	-	-					
Net Equity	-	-	-	8,146,961	8,146,961	8,146,961					
Investor Provided Capital	-	-	-	8,146,961	8,146,961	8,146,961	-				
Depreciation / GROSS PPE	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	1.73%				0	0
				Muni CAPX	0	222,858	0	0	0	0	0
			IOU savings	0%			100%	100%	100%	100%	100%
				CAPX/Prior Yr. GROSS PPE			1.70%	1.70%	1.70%	1.70%	1.70%
				CAPX	87,357	222,858	221,893	225,090	228,334	231,624	234,962
				Dep rate	0.00%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%
				Half yr. Dep	0.00%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%
				Dep on CAPX	-	1,928	1,919	1,947	1,975	2,004	2,032
				Rate of retirement	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
				Retired property	13,104	33,429	33,284	33,764	34,250	34,744	35,244
				Dep on Retired property	-	578	576	584	593	601	610
				Dep on Prior yr. GROSS	243,460	239,466	226,421	229,684	232,994	236,351	239,757
				Total Dep	243,460	240,816	227,764	231,047	234,376	237,754	241,180
BEAVER											
Depreciation Expense	-	-	246,236	243,460	239,466						
				part of OCN							
				NET PPE			PURTA	0.001527765			
				Rev			Reg Assessment Fee	0.005652534			
					2020	2021	1 2022	2 2023	3 2024	4 2025	5 2026
BEAVER											
	FIX CIP			CIP	$ -	$ -	$ -	$ -	$ -	$ -	$ -
					part of OCN	= to DepX					
					87,357	222,858					
									191	71	72
					2020	2021					
						-	-	4,750.00	9,500.00	14,250.00	71,250.00
Sewer Rental Charges	0	0	3,054,418	3,147,364	3,023,166	3,023,166	3,023,166	2,349,450	2,350,140	2,351,290	
EDUs	0	0	0	0	5,107	5,107	5107	5108	5110	5113	5128
					0	0	0	1	2	3	15
		0	0	0	2553.5	5107	5107	5107.5	5109	5111.5	
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	591.9651459						
						$ 460.00	$ 460.00	$ 460.00	$ 460.00	$ 460.00	
		#DIV/0!	#DIV/0!	#DIV/0!	1183.930292	591.9651459					
BEAVER					C	3,259	9				
					E	5,107	15				
						0.64					
				1742000							
		Customer Growth				0	0	1	1	2	0.29%
		Delivered to Customer	-	18.41	18	18	18	18	18	18	18
BEAVER		Customers	3,259	3,259	3,259	3,259	3,259	3,260	3,261	3,263	3,272
		Total Revenue (Less TAP)	3,054,418	3,147,364	3,023,166	3,023,166	3,023,166	3,023,630	3,275,596	3,277,103	3,282,861
										99.98%	
		avg CUST rev	937.23	965.75	927.64	927.64	927.64	927.49	1,004.48	1,004.32	1,003.18
		avg CUST flow	-	0	0	0	0	0	0	0	0
		avg EDU rev	#DIV/0!	#DIV/0!	591.97	591.97	591.97	591.94	641.02	640.94	640.18
		avg EDU flow	#DIV/0!	#DIV/0!	0	0	0	0	0	0	0

WORKING NOTES											WORKING N
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
		Rev Calculated				3,023,166	3,023,166	3,023,630	3,024,094	3,276,600	3,281,855

	2021	2022	2023	2024	2025	2026
	Change		8.3%			7.0%
	$ 927.64	$ 927.64	$ 927.64	$ 1,004.63	$ 1,004.63	$ 1,004.63	$ 1,074.95
				$ 76.99	$ -	$ -	$ 70.32
	-	-	464	3,275,596	1,004	4,752
	3,023,166	3,023,166	3,023,630	3,275,596	3,277,103	3,282,861
	-	-	250,961	-	-	229,800

Prior yr							
NET PURTA	0.1432%			11,216	11,208	11,200	11,191	11,182
REV Reg Assessment	0.5690%			17,215	17,215	18,645	18,651	18,660
				28,431	28,423	29,845	29,842	29,842

City of Beaver Falls Wastewater System Assets	
Investor Provided (	8,146,961
Gross PP&E	12,898,487
Net PP&E	7,850,687
Revenues	3,025,415
EBITDA	773,752
EBIT	532,936
Customers	3,259
Population	15,580

G PPE	-	-	12,898,487	13,087,916	
NPPE	-	-	7,850,687	7,832,729	
Cust	3,259	3,259	3,259	3,259	

	2016	2017	2018	2019	2020	2021	2022			
BEAVER										
LESS: EOS - Wages & Benefits	0	-	-	-	-	926,870		0.15		LESS: EOS - Wages &
LESS: EOS - Professional Services	0	0	0	0	-	-		0.5		LESS: EOS - Professi
LESS: EOS - Eliminated Expenses	0	0	0	0	-	240,000				LESS: EOS - Elim
BEAVER										
Wages			0	0	0	926,870				
Professional Services					0	0				
Eliminated Exp			0	0	0	240,000				

BEAVER					included in OCN	= to DepX
Reported CAPX - from the financials	0	0	5,945	2,811	87,357	222,858

	2016	2017	2018	2019	2020	Assets	Per Books	Difference
GROSS Property, plant and equipment	-	-	-	-	12,898,487	12,898,487	-	
Accumulated Depreciation	-	-	-	-	5,047,800	5,047,800	-	
NET PPE	-	-	-	-	7,850,687	7,850,687	-	7,850,687

WORKING NOTES								WORKING N			
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Total Debt	-	-	-	-	-			222,914			
Net Equity	-	-	-	8,146,961	8,146,961						
Investor Provided Capital	-	-	-	8,146,961	8,146,961						
Depreciation Rate	0.00%	0.00%	0.00%	#DIV/0!	1.73%						
Depreciation Expense	-	-	246,236	243,460	239,466	222,914.00					

	2021	2022	2023	2024	2025		
CAPX	0	0	0	0	0	0	

NOTES	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
GROSS Property, plant and equipment	14,261,129	14,466,645	14,675,122	14,886,604	15,101,133	15,318,754	15,539,511	15,763,449	15,990,615	16,221,054	16,454,814	16,691,943	16,932,489	17,176,501	17,424,029
Accumulated Depreciation	6,464,926	6,676,840	6,891,809	7,109,875	7,331,083	7,555,479	7,783,110	8,014,020	8,248,258	8,485,871	8,726,908	8,971,420	9,219,455	9,471,064	9,726,299
NET PPE	7,796,203	7,789,805	7,783,313	7,776,729	7,770,050	7,763,275	7,756,401	7,749,429	7,742,357	7,735,183	7,727,906	7,720,523	7,713,034	7,705,437	7,697,730
Total Debt															
Net Equity															
Investor Provided Capital															
Depreciation / GROSS PPE															
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%
	238,348	241,783	245,267	248,802	252,387	256,025	259,714	263,457	267,254	271,105	275,012	278,975	282,995	287,073	291,210
	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%	1.73%
	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%
	2,062	2,091	2,122	2,152	2,183	2,215	2,247	2,279	2,312	2,345	2,379	2,413	2,448	2,483	2,519
	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
	35,752	36,267	36,790	37,320	37,858	38,404	38,957	39,519	40,088	40,666	41,252	41,846	42,449	43,061	43,682
	619	627	636	646	655	664	674	684	694	704	714	724	734	745	756
	243,213	246,718	250,273	253,880	257,538	261,250	265,014	268,834	272,708	276,638	280,624	284,668	288,771	292,932	297,153
	244,656	248,181	251,758	255,386	259,066	262,800	266,587	270,429	274,326	278,279	282,290	286,357	290,484	294,670	298,917

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BEAVER

Depreciation Expense

	6 2027	7 2028	8 2029	9 2030	10 2031	11 2032	12 2033	13 2034	14 2035	15 2036	16 2037	17 2038	18 2039	19 2040	20 2041
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	56														
	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00
Sewer Rental Charges															
EDUs	5143	5158	5173	5188	5203	5218	5233	5248	5263	5278	5293	5308	5323	5338	5353
	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15

BEAVER

	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%
	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
BEAVER	3,282	3,291	3,301	3,311	3,320	3,330	3,339	3,349	3,359	3,369	3,378	3,388	3,398	3,408	3,418
	3,522,848	3,533,064	3,543,310	3,766,800	3,777,724	3,788,679	4,042,845	4,054,570	4,066,328	4,322,807	4,335,344	4,500,093	4,513,143	4,707,281	4,720,932
		100.00%													
	1,073.40	1,073.40	1,073.40	1,137.80	1,137.80	1,137.80	1,210.62	1,210.62	1,210.62	1,283.26	1,283.26	1,328.17	1,328.17	1,381.30	1,381.30
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	684.98	684.97	684.96	726.06	726.07	726.08	772.57	772.59	772.63	819.02	819.07	847.79	847.86	881.84	881.92
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

!OTES	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
	3,287,621	3,527,956	3,538,187	3,548,448	3,772,262	3,783,202	3,794,173	4,048,707	4,060,449	4,072,224	4,329,075	4,341,630	4,506,618	4,519,687	4,714,107

	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
			6.0%			6.4%			6.0%		3.5%		4.0%		4.2%
	$ 1,074.95	$ 1,074.95	$ 1,139.45	$ 1,139.45	$ 1,139.45	$ 1,212.38	$ 1,212.38	$ 1,212.38	$ 1,285.12	$ 1,285.12	$ 1,330.10	$ 1,330.10	$ 1,383.30	$ 1,383.30	$ 1,440.71
	$ -	$ -	$ 64.50	$ -	$ -	$ 72.92	$ -	$ -	$ 72.74	$ -	$ 44.98	$ -	$ 53.20	$ -	$ 57.41
	4,760	5,108	5,123	5,138	5,462	5,478	5,494	5,862	5,879	5,896	6,268	6,286	6,525	6,544	6,826
	3,522,848	3,533,064	3,543,310	3,766,800	3,777,724	3,788,679	4,042,845	4,054,570	4,066,328	4,322,807	4,335,344	4,500,093	4,513,143	4,707,281	4,720,932
	-	-	212,599	-	-	242,475	-	-	243,980	-	151,737	-	180,526	-	195,919
	11,173	11,164	11,155	11,146	11,136	11,127	11,117	11,107	11,097	11,087	11,077	11,066	11,056	11,045	11,034
	20,000	20,058	20,116	21,384	21,446	21,508	22,950	23,017	23,083	24,538	24,610	25,544	25,618	26,720	26,797
	31,173	31,222	31,271	32,530	32,582	32,635	34,067	34,124	34,180	35,625	35,687	36,610	36,674	37,765	37,831

BEAVER

LESS: EOS - Wages & Benefits	Wages & Benefits	15% savings	15%	0.15
LESS: EOS - Professional Services	Net Professional Services	50% savings	50%	0.5
LESS: EOS - Eliminated Expenses	Line Rentals	10% savings	100%	1

BEAVER
Wages
Professional Services

Eliminated Exp

BEAVER
Reported CAPX - from the financials

GROSS Property, plant and equipment
Accumulated Depreciation
NET PPE

NOTES	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Total Debt															
Net Equity															
Investor Provided Capital															
Depreciation Rate															
Depreciation Expense															
CAPX															

	BCWSA			ACSA			ALTOONA WATER AUTHORITY			CRWA		
	2020	**2019**	**2018**	**2020**	**2019**	**2018**	**2020**	**2019**	**2018**	**2020**	**2019**	**2018**
NET Property, plant and equipment	457,544,068	453,174,193	444,814,214	643,502,136	629,097,945	622,343,318	94,458,106	100,528,196	106,598,286	224,285,248	203,420,262	178,131,377
Operating Income	17,944,985	19,821,564	15,116,318	80,147,473	75,382,370	68,023,690	4,082,275	6,157,037	14,022,174	19,083,482	21,336,089	20,313,529
ROR/N PPE	3.92%	4.37%	3.40%	12.45%	11.98%	10.93%	4.32%	6.12%	13.15%	8.51%	10.49%	11.40%
3-Year Average	3.90%			11.79%			7.87%			10.13%		
Median of Each Year		5.08%										
Median of Each Entity		5.42%										
Conclusion			5.25%									

	CHESTER WATER AUTHORITY			ERIE CITY WATER AUTHORITY			LASA*			RAWA		
	2020	**2019**	**2018**	**2020**	**2019**	**2018**	**2020**	**2019**	**2018**	**2020**	**2019**	**2018**
NET Property, plant and equipment	280,862,318	282,920,765	277,881,505	200,008,941	194,099,358	191,070,499	147,014,498	140,405,221	142,318,075	63,336,954	66,455,706	64,973,550
Operating Income	4,928,913	4,705,194	1,487,430	13,461,619	9,549,652	10,005,109	6,069,056	6,901,580	6,054,460	3,653,656	3,556,133	2,945,874
ROR/N PPE	1.75%	1.66%	0.54%	6.73%	4.92%	5.24%	4.13%	4.92%	4.25%	5.77%	5.35%	4.53%
3-Year Average	1.32%			5.63%			4.43%			5.22%		
Median of Each Year												
Median of Each Entity												
Conclusion												

* Fiscal year 3/31

	WCMA*			PITTSBURGH WATER & SEWER		
	2020	2019	2018	2020	2019	2018
NET Property, plant and equipment	617,498,278	590,631,677	554,245,152	921,650,000	830,578,000	757,480,000
Operating Income	26,537,557	23,281,341	27,079,696	50,831,000	65,808,000	61,660,000
ROR/N PPE	4.30%	3.94%	4.89%	5.52%	7.92%	8.14%
3-Year Average	4.38%			7.19%		
Median of Each Year						
Median of Each Entity						
Conclusion						

*Fiscal Year 3/31

BUCKS COUNTY WATER AND SEWER AUTHORITY
STATEMENTS OF NET POSITION
YEARS ENDED DECEMBER 31, 2020 AND 2019

	2020	2019
ASSETS		
Current Assets		
Cash and Cash Equivalents	$ 5,872,075	$ 5,870,876
Investments	17,122,426	23,051,730
Accounts Receivable, Net of Allowance for Doubtful Accounts	8,310,705	6,175,101
Unbilled Revenue Receivable	9,768,802	9,020,572
Prepaid Expenses	729,044	692,186
Total Current Assets	41,803,052	44,810,465
Non-Current Assets		
Restricted Assets		
Cash and Cash Equivalents	3,617,503	3,922,837
Investments	63,732,897	60,095,138
Interest Receivable	920,477	748,766
Total Restricted Assets	68,270,877	64,766,741
Capital Assets		
Land, Rights-of-Way and Construction in Progress	81,292,208	77,851,553
Other Capital Assets, Net of Accumulated Depreciation	376,251,860	375,322,640
Total Capital Assets, Net	457,544,068	453,174,193
Total Non-Current Assets	525,814,945	517,940,934
Total Assets	567,617,997	562,751,399
Deferred Outflows of Resources		
Deferred Amount from Debt Refundings	7,790,319	8,818,011
Pension: Changes in Assumptions	591,106	591,106
Pension: Difference Between Expected and Actual Experience	805,127	805,127
Pension: Difference Between Projected and Actual Earnings on Investments	1,691,386	1,691,386
Pension: Contributions Made Subsequent to Measurement Date	4,326,752	4,326,752
OPEB: Difference Between Expected and Actual Experience	26,180	34,877
OPEB: Difference Between Projected and Actual Earnings on Plan Investments	-	1,972
Total Deferred Outflows of Resources	15,230,870	16,269,231
LIABILITIES AND NET POSITION		
Current Liabilities		
Accounts Payable and Accrued Expenses	12,749,312	11,887,091
Current Portion of Bonds Payable	22,375,000	21,345,000
Interest Payable	745,039	803,887
Total Current Liabilities	35,869,351	34,035,978
Non-Current Liabilities		
Customer and Developer Deposits	3,613,254	3,715,610
Bonds Payable, Net of Unamortized Bond Discount and Premium	223,030,306	233,209,683
Net Pension Liability	1,880,256	1,880,256
Net OPEB Liability	4,026,011	3,953,798
Total Non-Current Liabilities	232,549,827	242,759,347
Total Liabilities	268,419,178	276,795,325
Deferred Inflows of Resources		
Pension: Changes in Assumptions	32,118	32,118
OPEB: Changes in Assumptions	241,345	321,526
OPEB: Difference Between Projected and Actual Earnings on Investments	86,429	-
Proceeds from Sale of Future Revenues	3,795,454	3,967,975
Total Deferred Inflows of Resources	4,155,346	4,321,619
Net Position		
Net Investment in Capital Assets	229,523,791	216,079,031
Restricted for Capital Activity	15,719,591	12,077,609
Restricted for Debt Service	31,553,004	31,514,000
Unrestricted	33,477,957	38,233,046
Total Net Position	$ 310,274,343	$ 297,903,686

See accompanying notes to the financial statements.

BUCKS COUNTY WATER AND SEWER AUTHORITY
STATEMENTS OF REVENUES, EXPENSES,
AND CHANGES IN NET POSITION
YEARS ENDED DECEMBER 31, 2020 AND 2019

	2020	2019
Operating Revenues		
Retail Sewer Service	$ 54,861,161	$ 49,612,675
Wholesale Sewer Service	14,337,247	20,728,839
Retail Water Service	11,747,314	11,481,175
Wholesale Water Service	4,663,441	4,315,851
Improvement and Tapping Fees	263,705	580,375
Other Revenues	3,557,822	5,875,885
Total Operating Revenues	89,430,690	92,594,800
Expenses		
Operating Expenses		
Sewage Treatment and Water Procurement		
Sewage Treatment	19,678,584	20,534,850
Water Procurement	5,736,644	5,352,970
Total Sewage Treatment and Water Procurement	25,415,228	25,887,820
Plant Operations		
Payroll and Related Costs	2,732,227	1,927,213
Repairs and Maintenance	1,945,504	1,292,778
Electricity	521,131	405,213
Water and Sewage Testing	249,680	256,279
Total Plant Operations	5,448,542	3,881,483
Collection, Transmission and Distribution Service		
Payroll and Related Costs	8,845,809	9,070,825
Repairs and Maintenance	3,084,311	2,347,631
Electricity	885,701	807,210
Other Related Costs	216,408	274,544
Total Collection, Transmission and Distribution Service	13,032,229	12,500,210
Total Operating Expenses	43,895,999	42,269,513
General and Administrative Expenses		
Payroll and Related Costs	4,412,980	4,536,162
Professional Fees	2,329,876	2,732,816
Insurance	497,923	522,165
Other	2,382,465	3,199,536
Total General and Administrative Expense	9,623,244	10,990,679
Total Expenses	53,519,243	53,260,192
Income From Operations Before Depreciation	35,911,447	39,334,608
Depreciation	(17,966,462)	(19,513,044)
Operating Income	17,944,985	19,821,564
Nonoperating Revenue (Expense)		
Interest Expense, Net of Amounts Capitalized	(7,770,635)	(8,517,857)
Investment Income	628,113	2,078,449
Improvement and Tapping Fees	1,821,485	1,262,884
Amortization	(253,291)	(218,126)
Total Nonoperating Expense	(5,574,328)	(5,394,650)
Increase In Net Position	12,370,657	14,426,914
Net Position - Beginning of Year	297,903,686	283,476,772
Net Position - End of Year	$ 310,274,343	$ 297,903,686

See accompanying notes to the financial statements.

BUCKS COUNTY WATER AND SEWER AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)
DECEMBER 31, 2019 AND 2018

NOTE 6: SEGMENT INFORMATION

As of and for the years ended December 31, 2019 and 2018 segment information is as follows:

	2019			
Assets	Sewer System	Water System	Administrative Account	Totals
Current Assets				
Cash and Investments	$ 14,429,267	$ 11,367,223	$ 3,126,116	$ 28,922,606
Accounts Receivable, Unbilled Revenue and Net Intercompany Transfers	6,989,222	17,310,475	(9,104,024)	15,195,673
Other	608,655	83,531	-	692,186
Non-Current Assets				
Restricted Assets	48,050,977	12,345,721	4,370,043	64,766,741
Capital Assets	304,158,678	142,902,978	6,112,537	453,174,193
Total Assets	374,236,799	184,009,928	4,504,672	562,751,399
Deferred Outflows of Resources				
Deferred Amount from Debt Refundings	2,839,649	5,978,362	-	8,818,011
Pension: Changes in Assumptions	465,033	126,073	-	591,106
Pension: Difference Between Expected and Actual Experience	674,207	130,920	-	805,127
Pension: Difference Between Projected and Actual Earnings on Investments	1,437,679	253,707	-	1,691,386
Pension: Contributions Made Subsequent to Measurement Date	3,275,976	1,050,776	-	4,326,752
OPEB: Difference Between Expected and Actual Experience	29,645	5,232	-	34,877
OPEB: Difference Between Projected and Actual Earnings on Plan Investments	1,676	296	-	1,972
Total Deferred Outflows of Resources	8,723,865	7,545,366	-	16,269,231
Liabilities and Net Position				
Liabilities				
Current Liabilities	29,501,359	3,745,556	789,063	34,035,978
Non-Current Liabilities	150,796,046	88,247,692	3,715,609	242,759,347
Total Liabilities	180,297,405	91,993,248	4,504,672	276,795,325
Deferred Inflows of Resources				
Pension: Changes in Assumptions	27,086	5,032	-	32,118
Pension: Difference Between Projected and Actual Earnings on Investments	(165,256)	165,256	-	-
OPEB: Changes in Assumptions	273,297	48,229	-	321,526
Proceeds from Sale of Future Revenues	-	3,967,975	-	3,967,975
Total Deferred Inflows of Resources	135,127	4,186,492	-	4,321,619
Net Position				
Net Investment in Capital Assets	156,941,099	53,025,395	6,112,537	216,079,031
Restricted for Capital Activity	5,071,173	6,352,002	654,434	12,077,609
Restricted for Debt Service	25,520,284	5,993,716	-	31,514,000
Unrestricted	14,995,576	30,004,441	(6,766,971)	38,233,046
Total Net Position	$ 202,528,132	$ 95,375,554	$ -	$ 297,903,686

BUCKS COUNTY WATER AND SEWER AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)
DECEMBER 31, 2019 AND 2018

NOTE 6: SEGMENT INFORMATION (CONTINUED)

	2018			
Assets	Sewer System	Water System	Administrative Account	Totals
Current Assets				
Cash and Investments	$ 13,996,611	$ 9,258,718	$ 1,343,631	$ 24,598,960
Accounts Receivable, Unbilled Revenue and Net Intercompany Transfers	6,114,899	18,137,594	(6,574,182)	17,678,311
Other	610,549	85,000	-	695,549
Non-Current Assets				
Restricted Assets	47,524,162	12,202,731	3,988,462	63,715,355
Capital Assets	293,945,954	145,484,365	5,383,895	444,814,214
Total Assets	362,192,175	185,168,408	4,141,806	551,502,389
Deferred Outflows of Resources				
Deferred Amount from Debt Refundings	3,503,369	6,462,562	-	9,965,931
Pension: Changes in Assumptions	632,513	155,628	-	788,141
Pension: Difference Between Expected and Actual Experience	162,431	40,607	-	203,038
Pension: Contributions Made Subsequent to Measurement Date	6,428,229	1,607,056	-	8,035,285
Total Deferred Outflows of Resources	10,726,542	8,265,853	-	18,992,395
Liabilities and Net Position				
Liabilities				
Current Liabilities	24,140,550	3,373,492	645,278	28,159,320
Non-Current Liabilities	156,519,961	91,561,281	3,496,528	251,577,770
Total Liabilities	180,660,511	94,934,773	4,141,806	279,737,090
Deferred Inflows of Resources				
Pension: Changes in Assumptions	36,187	6,638	-	42,825
Pension: Difference Between Projected and Actual Earnings on Investments	2,478,081	619,520	-	3,097,601
Proceeds from the Sale of Future Revenues	-	4,140,496	-	4,140,496
Total Deferred Inflows of Resources	2,514,268	4,766,654	-	7,280,922
Net Position				
Net Investment in Capital Assets	129,539,966	61,197,479	5,383,898	196,121,343
Restricted for Capital Activity	18,722,168	-	491,930	19,214,098
Restricted for Debt Service	28,801,994	6,333,246	-	35,135,240
Unrestricted	12,679,810	26,202,109	(5,875,828)	33,006,091
Total Net Position	$ 189,743,938	$ 93,732,834	$ -	$ 283,476,772

BUCKS COUNTY WATER AND SEWER AUTHORITY
STATEMENTS OF NET POSITION
DECEMBER 31, 2019 AND 2018

ASSETS	2019	2018
Current Assets		
Cash and Cash Equivalents	$ 5,870,876	$ 3,803,232
Investments	23,051,730	20,795,728
Accounts Receivable, Net of Allowance for Doubtful Accounts	6,175,101	7,707,994
Unbilled Revenue Receivable	9,020,572	9,970,317
Prepaid Expenses	692,186	695,549
Total Current Assets	44,810,465	42,972,820
Non-Current Assets		
Restricted Assets		
Cash and Cash Equivalents	3,922,837	3,541,256
Investments	60,095,138	59,883,991
Interest Receivable	748,766	290,108
Total Restricted Assets	64,766,741	63,715,355
Capital Assets		
Land, Rights-of-Way and CIP	77,851,553	79,376,857
Other Capital Assets, Net of Accumulated Depreciation	375,322,640	365,437,357
Total Capital Assets, Net	453,174,193	444,814,214
Total Non-Current Assets	517,940,934	508,529,569
Total Assets	562,751,399	551,502,389
Deferred Outflows of Resources		
Deferred Amount from Debt Refundings	8,818,011	9,965,931
Pension: Changes in Assumptions	591,106	788,141
Pension: Difference Between Expected and Actual Experience	805,127	203,038
Pension: Difference Between Projected and Actual Earnings on Investments	1,691,386	-
Pension: Contributions Made Subsequent to Measurement Date	4,326,752	8,035,285
OPEB: Difference Between Expected and Actual Experience	34,877	-
OPEB: Difference Between Projected and Actual Earnings on Plan Investments	1,972	-
Total Deferred Outflows of Resources	16,269,231	18,992,395
LIABILITIES AND NET POSITION		
Current Liabilities		
Accounts Payable and Accrued Expenses	11,887,091	6,872,214
Current Portion of Bonds Payable	21,345,000	20,460,000
Interest Payable	803,887	827,106
Total Current Liabilities	34,035,978	28,159,320
Non-Current Liabilities		
Customer and Developer Deposits	3,715,610	3,496,528
Bonds Payable, Net of Unamortized Bond Discount and Premium	233,209,683	239,927,805
Net Pension Liability	1,880,256	2,296,351
Net OPEB Liability	3,953,798	5,857,086
Total Non-Current Liabilities	242,759,347	251,577,770
Total Liabilities	276,795,325	279,737,090
Deferred Inflows of Resources		
Pension: Changes in Assumptions	32,118	42,825
Pension: Difference Between Projected and Actual Earnings on Investments	-	3,097,601
OPEB: Changes in Assumptions	321,526	-
Proceeds from Sale of Future Revenues	3,967,975	4,140,496
Total Deferred Inflows of Resources	4,321,619	7,280,922
Net Position		
Net Investment in Capital Assets	216,079,031	196,121,343
Restricted for Capital Activity	12,077,609	19,214,098
Restricted for Debt Service	31,514,000	35,135,240
Unrestricted	38,233,046	33,006,091
Total Net Position	$ 297,903,686	$ 283,476,772

See accompanying notes to the financial statements.

BUCKS COUNTY WATER AND SEWER AUTHORITY
STATEMENTS OF REVENUES, EXPENSES,
AND CHANGES IN NET POSITION
YEARS ENDED DECEMBER 31, 2019 AND 2018

	2019	2018
Operating Revenues		
Retail Sewer Service	$ 49,612,675	$ 48,634,267
Wholesale Sewer Service	20,728,839	19,105,200
Retail Water Service	11,481,175	11,755,194
Wholesale Water Service	4,315,851	4,357,235
Improvement and Tapping Fees	580,375	279,425
Other Revenues	5,875,885	4,697,553
Total Operating Revenues	92,594,800	88,828,874
Expenses		
Operating Expenses		
Sewage Treatment and Water Procurement		
Sewage Treatment	20,534,850	20,862,709
Water Procurement	5,352,970	5,611,587
Total Sewage Treatment and Water Procurement	25,887,820	26,474,296
Plant Operations		
Payroll and Related Costs	1,927,213	1,592,995
Repairs and Maintenance	1,292,778	1,251,844
Electricity	405,213	461,808
Water and Sewage Testing	256,279	218,091
Total Plant Operations	3,881,483	3,524,738
Collection, Transmission and Distribution Service		
Payroll and Related Costs	9,070,825	8,191,888
Repairs and Maintenance	2,347,631	1,992,003
Electricity	807,210	995,191
Other Related Costs	274,544	298,459
Total Collection, Transmission and Distribution Service	12,500,210	11,477,541
Total Operating Expenses	42,269,513	41,476,575
General and Administrative Expenses		
Payroll and Related Costs	4,536,162	6,780,772
Professional Fees	2,732,816	1,981,255
Insurance	522,165	476,597
Other	3,199,536	4,933,790
Total General and Administrative Expense	10,990,679	14,172,414
Total Expenses	53,260,192	55,648,989
Income From Operations Before Depreciation	39,334,608	33,179,885
Depreciation	(19,513,044)	(18,063,567)
Operating Income	19,821,564	15,116,318
Nonoperating Revenue (Expense)		
Interest Expense,		
Net of Amounts Capitalized	(8,517,857)	(9,017,615)
Investment Income	2,078,449	2,015,753
Other	-	4,824
Improvement and Tapping Fees	1,262,884	2,750,737
Amortization	(218,126)	(51,377)
Total Nonoperating Expense	(5,394,650)	(4,297,678)
Increase In Net Position, Before Contributed Capital	14,426,914	10,818,640
Contributed Capital	-	779,914
Net Position - Beginning of Year, as Previously Reported	283,476,772	275,130,457
Adjustment for GASB No. 75	-	(3,252,239)
Net Position - Beginning of Year, Restated	283,476,772	271,878,218
Net Position - End of Year	$ 297,903,686	$ 283,476,772

See accompanying notes to the financial statements.

BUCKS COUNTY WATER AND SEWER AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)
DECEMBER 31, 2018 AND 2017

NOTE 6: SEGMENT INFORMATION

As of and for the years ended December 31, 2018 and 2017 segment information is as follows:

	2018			
Assets	Sewer System	Water System	Administrative Account	Totals
Current Assets				
Cash and Investments	$ 13,996,611	$ 9,258,718	$ 1,343,631	$ 24,598,960
Accounts Receivable and Unbilled Revenue	6,114,899	18,137,594	(6,574,182)	17,678,311
Other	610,549	85,000	-	695,549
Non-Current Assets				
Restricted Assets	47,524,162	12,202,731	3,988,462	63,715,355
Capital Assets	293,945,954	145,484,365	5,383,895	444,814,214
Total Assets	362,192,175	185,168,408	4,141,806	551,502,389
Deferred Outflows of Resources				
Deferred Amount from Debt Refundings	3,503,369	6,462,562	-	9,965,931
Changes in Assumptions	632,513	155,628	-	788,141
Difference Between Expected and Actual Experience	162,431	40,607	-	203,038
Contributions Made Subsequent to Measurement Date	6,428,229	1,607,056	-	8,035,285
Total Deferred Outflows of Resources	10,726,542	8,265,853	-	18,992,395
Liabilities and Net Position				
Liabilities				
Current Liabilities	24,140,550	3,373,492	645,278	28,159,320
Non-Current Liabilities	156,519,961	91,561,281	3,496,528	251,577,770
Total Liabilities	180,660,511	94,934,773	4,141,806	279,737,090
Deferred Inflows of Resources				
Changes in Assumptions	36,187	6,638	-	42,825
Difference Between Projected and Actual Earnings on Investments	2,478,081	619,520	-	3,097,601
Proceeds from the Sale of Future Revenues	-	4,140,496	-	4,140,496
Total Deferred Inflows of Resources	2,514,268	4,766,654	-	7,280,922
Net Position				
Net Investment in Capital Assets	129,539,966	61,197,479	5,383,898	196,121,343
Restricted for Capital Activity	18,722,168	-	491,930	19,214,098
Restricted for Debt Service	28,801,994	6,333,246	-	35,135,240
Unrestricted	12,679,810	26,202,109	(5,875,828)	33,006,091
Total Net Position	$ 189,743,938	$ 93,732,834	$ -	$ 283,476,772

BUCKS COUNTY WATER AND SEWER AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)
DECEMBER 31, 2018 AND 2017

NOTE 6: SEGMENT INFORMATION (CONTINUED)

	2018		
	Sewer System	Water System	Totals
Operating Revenues			
Retail Sewer Service	$ 48,634,267	$ -	$ 48,634,267
Wholesale Sewer Service	19,105,200	-	19,105,200
Retail Water Service	-	11,755,194	11,755,194
Wholesale Water Service	-	4,357,235	4,357,235
Improvement and Tapping Fees	-	279,425	279,425
Other Revenues	3,130,165	1,567,388	4,697,553
Total Operating Revenues	70,869,632	17,959,242	88,828,874
Expenses			
Operating Expenses			
Sewage Treatment and Water Procurement			
Sewage Treatment	20,862,709	-	20,862,709
Water Procurement	-	5,611,587	5,611,587
Total Sewage and Water Procurement	20,862,709	5,611,587	26,474,296
Plant Operations			
Payroll and Related Costs	1,592,995	-	1,592,995
Repairs and Maintenance	1,251,844	-	1,251,844
Electricity	461,808	-	461,808
Water and Sewage Testing	218,091	-	218,091
Total Plant Operations	3,524,738	-	3,524,738
Collection, Transmission and Distribution Service			
Payroll and related costs	6,404,591	1,787,297	8,191,888
Repairs and maintenance	1,660,514	331,489	1,992,003
Electricity	822,812	172,379	995,191
Other related costs	209,224	89,235	298,459
Total Collection, Transmission and Distribution	9,097,141	2,380,400	11,477,541
Service Expense			
Total Operating Expense	33,484,588	7,991,987	41,476,575
General and Administrative Expenses			
Payroll and related costs	5,714,319	1,066,453	6,780,772
Professional fees	1,747,815	233,440	1,981,255
Insurance	395,522	81,075	476,597
Other	4,821,938	111,852	4,933,790
Total General and Administrative Expenses	12,679,594	1,492,820	14,172,414
Income from Operations before depreciation	24,705,450	8,474,435	33,179,885
Depreciation	(14,696,296)	(3,367,271)	(18,063,567)
Operating Income	10,009,154	5,107,164	15,116,318
Nonoperating Revenue (Expense)			
Interest Expense, net of Amounts Capitalized	(5,405,915)	(3,611,700)	(9,017,615)
Investment Income	1,623,182	392,571	2,015,753
Other	4,824	-	4,824
Improvement and Tapping Fees	2,750,737	-	2,750,737
Amortization	(51,377)	-	(51,377)
Total Nonoperating Expense	(1,078,549)	(3,219,129)	(4,297,678)
Increase in Net Position, Before Contributed Capital	8,930,605	1,888,035	10,818,640
Contributed Capital	710,204	69,710	779,914
Net Position - Beginning of Year, as Previously Reported	182,867,532	92,262,925	275,130,457
Adjustment for GASB No. 75	(2,764,403)	(487,836)	(3,252,239)
Net Position - Beginning of Year, Restated	180,103,129	91,775,089	271,878,218
Net Position, End of Year	$ 189,743,938	$ 93,732,834	$ 283,476,772

BUCKS COUNTY WATER AND SEWER AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)
DECEMBER 31, 2018 AND 2017

NOTE 6: SEGMENT INFORMATION (CONTINUED)

	2018			
	Sewer System	Water System	Administrative Account	Totals
Cash Flows from Operating Activities				
Cash Received from Customers	$ 72,660,789	$ 17,539,631	$ -	$ 90,200,420
Payments to Suppliers	(31,373,585)	(6,551,971)	-	(37,925,556)
Payroll and Related Payments	(13,711,973)	(3,095,494)	-	(16,807,467)
Other Operating (Payments) / Transactions	12,644,098	(13,022,354)	222,511	(155,745)
Net Cash Provided from Operations	40,219,329	(5,130,188)	222,511	35,311,652
Cash Flows from Capital and Related Financing Activities				
Acquisition and Construction of Capital Assets	(12,799,197)	(860,416)	(191,958)	(13,851,571)
Improvement and Tapping Fees	2,750,737	-	-	2,750,737
Bond Principal Repayments	(17,784,999)	(2,475,000)	-	(20,259,999)
Interest Paid	(6,364,234)	(3,537,201)	-	(9,901,435)
Net Cash Used in Capital and Related Financing Activities	(34,197,693)	(6,872,617)	(191,958)	(41,262,268)
Cash Flows from Investing Activities				
Sale of Investments, Net	(5,599,131)	12,069,155	-	6,470,024
Interest Received	14,790	392,571	-	407,361
Net Cash Used in Investing Activities	(5,584,341)	12,461,726	-	6,877,385
Net Increase (Decrease) in Cash and Cash Equivalents	437,295	458,921	30,553	926,769
Cash and Cash Equivalents - Beginning of Year	1,529,900	33,485	4,854,334	6,417,719
Cash and Cash Equivalents - End of Year	$ 1,967,195	$ 492,406	$ 4,884,887	$ 7,344,488
Displayed as:				
Cash and Cash Equivalents	$ 1,967,195	$ 492,406	$ 1,343,631	$ 3,803,232
Restricted Cash and Cash Equivalents	-	-	3,541,256	3,541,256
	$ 1,967,195	$ 492,406	$ 4,884,887	$ 7,344,488
Reconciliation of Operating Income to Net Cash Provided from Operations:				
Operating Income	$ 10,009,154	$ 5,107,164	$ -	$ 15,116,318
Adjustments to Reconcile Operating Income to Net Cash Provided from Operating Activities				
Depreciation	14,696,296	3,367,271	-	18,063,567
Changes in Assets and Liabilities:				
Receivables and Unbilled Revenue, Net	3,276,483	(247,091)	-	3,029,392
Prepaid Expenses	(34,155)	(5,410)	-	(39,565)
Intercompany Receivables (Payables)	12,685,022	(13,036,180)	351,158	-
Accounts Payable and Accrued Expenses	531,336	(121,266)	(164,592)	245,478
Interest Payable	(37,555)	16,262	-	(21,293)
Customer and Developer Deposits	-	-	35,945	35,945
Net Pension and OPEB Liabilities and Related Pension Deferrals	(907,252)	(210,938)	-	(1,118,190)
Net Cash Provided from Operations	$ 40,219,329	$ (5,130,188)	$ 222,511	$ 35,311,652

ALLEGHENY COUNTY SANITARY AUTHORITY

STATEMENTS OF NET POSITION

DECEMBER 31, 2020 AND 2019

Assets and Deferred Outflows of Resources

	2020	2019
Assets:		
Current assets:		
Cash and cash equivalents	$ 209,431,473	$ 175,476,686
Accounts receivable:		
Billed sewer revenue	20,446,710	16,702,983
Unbilled sewer revenue	44,044,901	43,666,409
Other	4,734	30,225
Other current assets	6,634,434	6,604,244
Total current assets	280,562,252	242,480,547
Restricted/designated assets:		
Cash and cash equivalents	272,815,362	150,150,904
Investments	-	84,963,478
Accrued interest receivable	-	375,444
Total restricted/designated assets	272,815,362	235,489,826
Prepaid bond costs	5,815,062	6,591,319
Nondepreciable capital assets:		
Land	5,344,896	5,344,896
Construction in progress	94,302,298	81,287,241
Total nondepreciable capital assets	99,647,194	86,632,137
Depreciable capital assets - at cost, net of accumulated depreciation	543,854,942	542,465,808
Total	643,502,136	629,097,945
Total Assets	1,202,694,812	1,113,659,637
Deferred Outflows of Resources:		
Related to pensions	27,581,534	35,676,281
Other post-retirement benefits	1,758,333	853,236
Refunding adjustment	5,247,763	6,278,101
Total Deferred Outflows of Resources	34,587,630	42,807,618
Total Assets and Deferred Outflows of Resources	$ 1,237,282,442	$ 1,156,467,255

Liabilities, Deferred Inflows of Resources, and Net Position

	2020	2019
Liabilities:		
Current liabilities:		
Accounts payable	$ 6,092,972	$ 7,349,003
Accrued liabilities:		
Compensated absences	5,950,167	4,994,678
Salaries and wages	1,985,019	1,751,181
Accrued interest on bonds	2,592,551	2,638,762
Reserve for litigation	2,371,900	2,371,900
Pretreatment advance payments	2,600	1,850
Current maturities of sewer revenue bonds	28,785,000	27,635,000
Total current liabilities	47,780,209	46,742,374
Long-term liabilities:		
Other post-employment benefits	13,901,968	12,087,137
Net pension liability	7,266,922	28,684,748
Sewer revenue bonds - less current maturities	670,495,000	650,300,000
Unamortized bond premium	67,960,993	50,763,732
Net long-term debt	738,455,993	701,063,732
Total long-term liabilities	759,624,883	741,835,617
Total Liabilities	807,405,092	788,577,991
Deferred Inflows of Resources:		
Related to pensions	25,133,372	9,341,236
Other post-retirement benefits	3,169,749	1,904,424
Total Deferred Inflows of Resources	28,303,121	11,245,660
Net Position:		
Net investment in capital assets	154,324,268	142,167,140
Unrestricted	247,249,961	214,476,464
Total Net Position	401,574,229	356,643,604
Total Liabilities, Deferred Inflows of Resources, and Net Position	$ 1,237,282,442	$ 1,156,467,255

The notes to financial statements are an integral part of this statement.

ALLEGHENY COUNTY SANITARY AUTHORITY

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

YEARS ENDED DECEMBER 31, 2020 AND 2019

	2020	2019
Operating Revenues	$ 186,799,875	$ 180,238,305
Operating Expenses:		
Treatment	50,981,608	49,805,868
Intercepting sewer systems	8,771,952	8,753,813
Upper Allegheny system	307,944	298,412
Administrative and engineering	15,682,596	15,962,845
Billing and collecting	4,461,391	3,572,073
Management information systems	4,071,959	3,690,385
Total operating expenses before depreciation	84,277,450	82,083,396
Operating Income Before Depreciation	102,522,425	98,154,909
Depreciation	22,374,952	22,772,539
Operating Income	80,147,473	75,382,370
Non-operating Revenues (Expenses):		
Interest income	2,002,687	8,966,272
Interest expense on bonds	(27,485,399)	(28,261,390)
Amortization of prepaid bond costs	(516,597)	(596,640)
Loss on capital assets retired	(4,573,423)	-
Change in value of pension related items	(2,469,057)	(4,177,854)
Change in value of OPEB related items	(2,175,059)	(774,061)
Total non-operating revenues (expenses)	(35,216,848)	(24,843,673)
Change in Net Position	44,930,625	50,538,697
Net Position:		
Beginning of year	356,643,604	306,104,907
End of year	$ 401,574,229	$ 356,643,604

The notes to financial statements are an integral part of this statement.

ALLEGHENY COUNTY SANITARY AUTHORITY

STATEMENTS OF NET POSITION

DECEMBER 31, 2019 AND 2018

Assets and Deferred Outflows of Resources

	2019	2018
Assets:		
Current assets:		
Cash and cash equivalents	$ 175,476,686	$ 142,482,220
Accounts receivable:		
Billed sewer revenue	16,702,983	16,544,587
Unbilled sewer revenue	43,666,409	41,408,016
Other	30,225	4,469
Other current assets	6,604,244	6,556,274
Total current assets	242,480,547	206,995,566
Restricted/designated assets:		
Cash and cash equivalents	150,150,904	83,445,720
Investments	84,963,478	167,782,528
Accrued interest receivable	375,444	622,842
Total restricted/designated assets	235,489,826	251,851,090
Prepaid bond costs	6,591,319	7,187,959
Nondepreciable capital assets:		
Land	5,344,896	5,344,896
Construction in progress	81,287,241	59,836,813
Total nondepreciable capital assets	86,632,137	65,181,709
Depreciable capital assets - at cost, net of accumulated depreciation	542,465,808	557,161,609
Total	629,097,945	622,343,318
Net pension asset	-	2,705,577
Total Assets	1,113,659,637	1,091,083,510
Deferred Outflows of Resources:		
Related to pensions	35,676,281	17,633,917
Other post-retirement benefits	853,236	932,894
Refunding adjustment	6,278,101	7,077,328
Total Deferred Outflows of Resources	42,807,618	25,644,139
Total Assets and Deferred Outflows of Resources	$ 1,156,467,255	$ 1,116,727,649

Liabilities, Deferred Inflows of Resources, and Net Position

	2019	2018
Liabilities:		
Current liabilities:		
Accounts payable	$ 7,349,003	$ 7,180,579
Accrued liabilities:		
Compensated absences	4,994,678	4,539,483
Salaries and wages	1,751,181	1,529,529
Accrued interest on bonds	2,638,762	2,745,875
Reserve for litigation	2,371,900	2,371,900
Pretreatment advance payments	1,850	24,375
Current maturities of sewer revenue bonds	27,635,000	26,630,000
Total current liabilities	46,742,374	45,021,741
Long-term liabilities:		
Other post-employment benefits	12,087,137	13,297,158
Net pension liability	28,684,748	6,121,872
Sewer revenue bonds - less current maturities	650,300,000	677,935,000
Unamortized bond premium	50,763,732	55,857,500
Net long-term debt	701,063,732	733,792,500
Total long-term liabilities	741,835,617	753,211,530
Total Liabilities	788,577,991	798,233,271
Deferred Inflows of Resources:		
Related to pensions	9,341,236	12,389,471
Other post-retirement benefits	1,904,424	-
Total Deferred Inflows of Resources	11,245,660	12,389,471
Net Position:		
Net investment in capital assets	142,167,140	120,849,236
Unrestricted	214,476,464	185,255,671
Total Net Position	356,643,604	306,104,907
Total Liabilities, Deferred Inflows of Resources, and Net Position	$ 1,156,467,255	$ 1,116,727,649

The notes to financial statements are an integral part of this statement.

ALLEGHENY COUNTY SANITARY AUTHORITY

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

YEARS ENDED DECEMBER 31, 2019 AND 2018

	2019	2018
Operating Revenues	$ 180,238,305	$ 169,724,327
Operating Expenses:		
Treatment	49,805,868	47,633,280
Intercepting sewer systems	8,753,813	8,490,808
Upper Allegheny system	298,412	563,244
Administrative and engineering	15,962,845	14,736,160
Billing and collecting	3,572,073	3,482,212
Management information systems	3,690,385	3,723,344
Total operating expenses before depreciation	82,083,396	78,629,048
Operating Income Before Depreciation	98,154,909	91,095,279
Depreciation	22,772,539	23,071,589
Operating Income	75,382,370	68,023,690
Non-operating Revenues (Expenses):		
Interest income, net of amounts capitalized	8,966,272	3,127,451
Interest expense on bonds	(28,261,390)	(20,735,872)
Amortization of prepaid bond costs	(596,640)	(629,995)
Change in value of pension related items	(4,177,854)	(61,702)
Change in value of OPEB related items	(774,061)	(789,172)
Total non-operating revenues (expenses)	(24,843,673)	(19,089,290)
Change in Net Position	50,538,697	48,934,400
Net Position:		
Beginning of year	306,104,907	257,170,507
End of year	$ 356,643,604	$ 306,104,907

The notes to financial statements are an integral part of this statement.

ALLEGHENY COUNTY SANITARY AUTHORITY

STATEMENTS OF NET POSITION

DECEMBER 31, 2018 AND 2017

Assets and Deferred Outflows of Resources

	2018	2017
Assets:		
Current assets:		
Cash and cash equivalents	$ 142,482,220	$ 119,248,255
Accounts receivable:		
Billed sewer revenue	16,544,587	17,185,654
Unbilled sewer revenue	41,408,016	40,232,780
Other	4,469	4,635
Other current assets	6,556,274	6,432,263
Total current assets	206,995,566	183,103,587
Restricted/designated assets:		
Cash and cash equivalents	83,445,720	100,289,509
Investments	167,782,528	-
Accrued interest receivable	622,842	-
Total restricted/designated assets	251,851,090	100,289,509
Prepaid bond costs	7,187,959	6,472,479
Nondepreciable capital assets:		
Land	5,344,896	5,344,896
Construction in progress	59,836,813	38,371,565
Total nondepreciable capital assets	65,181,709	43,716,461
Depreciable capital assets - at cost, net of accumulated depreciation	557,161,609	564,883,734
Total	622,343,318	608,600,195
Net pension asset	2,705,577	-
Total Assets	1,091,083,510	898,465,770
Deferred Outflows of Resources:		
Related to pensions	17,633,917	21,247,515
Other post-retirement benefits	932,894	-
Refunding adjustment	7,077,328	8,074,203
Total Deferred Outflows of Resources	25,644,139	29,321,718
Total Assets and Deferred Outflows of Resources	$ 1,116,727,649	$ 927,787,488

Liabilities, Deferred Inflows of Resources, and Net Position

	2018	2017
Liabilities:		
Current liabilities:		
Accounts payable	$ 7,180,579	$ 7,167,120
Accrued liabilities:		
Compensated absences	4,539,483	4,689,828
Salaries and wages	1,529,529	1,441,024
Accrued interest on bonds	2,745,875	2,260,535
Reserve for litigation	2,371,900	2,371,900
Pretreatment advance payments	24,375	71,600
Current maturities of sewer revenue bonds	26,630,000	25,395,000
Total current liabilities	45,021,741	43,397,007
Long-term liabilities:		
Other post-employment benefits	13,297,158	6,199,726
Net pension liability	6,121,872	16,421,705
Sewer revenue bonds - less current maturities	677,935,000	547,335,000
Unamortized bond premium	55,857,500	48,952,220
Net long-term debt	733,792,500	596,287,220
Total long-term liabilities	753,211,530	618,908,651
Total Liabilities	798,233,271	662,305,658
Deferred Inflows of Resources:		
Related to pensions	12,389,471	2,935,957
Net Position:		
Net investment in capital assets	120,849,236	95,281,689
Unrestricted	185,255,671	167,264,184
Total Net Position	306,104,907	262,545,873
Total Liabilities, Deferred Inflows of Resources, and Net Position	$ 1,116,727,649	$ 927,787,488

The notes to financial statements are an integral part of this statement.

ALLEGHENY COUNTY SANITARY AUTHORITY

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

YEARS ENDED DECEMBER 31, 2018 AND 2017

	2018	2017
Operating Revenues	$ 169,724,327	$ 170,182,173
Operating Expenses:		
Treatment	47,633,280	44,821,531
Intercepting sewer systems	8,490,808	7,100,846
Upper Allegheny system	563,244	487,512
Administrative and engineering	14,736,160	13,772,696
Billing and collecting	3,482,212	4,439,250
Management information systems	3,723,344	3,778,272
Total operating expenses before depreciation	78,629,048	74,400,107
Operating Income Before Depreciation	91,095,279	95,782,066
Depreciation	23,071,589	22,426,718
Operating Income	68,023,690	73,355,348
Non-operating Revenues (Expenses):		
Interest income, net of amounts capitalized	3,127,451	1,096,517
Interest expense on bonds, net of amounts capitalized	(20,735,872)	(21,544,440)
Amortization of prepaid bond costs	(629,995)	(693,501)
Change in value of pension related items	(61,702)	(3,196,667)
Change in value of OPEB related items	(789,172)	-
Total non-operating revenues (expenses)	(19,089,290)	(24,338,091)
Change in Net Position	48,934,400	49,017,257
Net Position:		
Beginning of year, as restated for 2018	257,170,507	213,528,616
End of year	$ 306,104,907	$ 262,545,873

The notes to financial statements are an integral part of this statement.

CAPITAL REGION WATER

BALANCE SHEETS

DECEMBER 31, 2020 AND 2019

Assets and Deferred Outflows of Resources	2020	2019
Assets:		
Current assets:		
Cash and cash equivalents	$ 33,125,086	$ 37,818,930
Accounts receivable, net of allowance for uncollectible accounts of $6,812,663 and $6,179,939	12,990,450	11,392,879
Grants receivable	207,125	481,413
Due from the City of Harrisburg	3,247,428	3,030,340
Prepaid expenses	631,891	407,379
Inventory	226,727	219,675
Total current assets	50,428,707	53,350,616
Restricted assets:		
Cash and cash equivalents - restricted under trust indentures and guarantee agreement	10,339,323	10,728,097
Investments - restricted under trust indentures	19,133,382	23,792,020
Total restricted assets	29,472,705	34,520,117
Noncurrent assets:		
Capital assets, not being depreciated	41,304,196	25,938,916
Capital assets, net of accumulated depreciation of $138,312,983 and $132,254,413	182,981,052	177,481,346
Net pension asset	793,994	-
Total noncurrent assets	225,079,242	203,420,262
Total Assets	304,980,654	291,290,995
Deferred Outflows of Resources:		
Deferred loss on refunding	6,138,866	6,849,812
Deferred outflows of resources for other postemployment benefits	154,587	78,714
Deferred outflows of resources for pension	1,018,573	1,518,157
Total Deferred Outflows of Resources	7,312,026	8,446,683
Total Assets and Deferred Outflows of Resources	$ 312,292,680	$ 299,737,678

CAPITAL REGION WATER

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

YEARS ENDED DECEMBER 31, 2020 AND 2019

	2020	2019
Operating Revenues:		
User charges	$ 46,053,281	$ 47,556,016
Total operating revenues	46,053,281	47,556,016
Operating Expenses:		
Operating	15,078,242	14,776,480
Administrative	5,832,986	5,788,495
Depreciation	6,058,571	5,654,952
Total operating expenses	26,969,799	26,219,927
Operating Income	19,083,482	21,336,089
Non-Operating Revenues (Expenses):		
Investment income	426,489	1,193,936
Grant revenue	177,024	1,184,617
Gain on sale of easements	191,516	40,000
Miscellaneous income (expense)	921,942	606,499
Gain (loss) on disposal of capital assets	2,000	(74,363)
Interest expense	(5,725,558)	(5,836,796)
Total non-operating revenues (expenses)	(4,006,587)	(2,886,107)
Change in Net Position	15,076,895	18,449,982
Net Position:		
Beginning of year	94,622,873	76,172,891
End of year	$109,699,768	$ 94,622,873

The accompanying notes are an integral part of these financial statements.

CAPITAL REGION WATER

BALANCE SHEET

DECEMBER 31, 2019

(with comparative totals as of December 31, 2018)

Assets and Deferred Outflows of Resources	2019	2018
Assets:		
Current assets:		
Cash and cash equivalents	$ 37,818,930	$ 48,169,716
Accounts receivable, net of allowance for uncollectible accounts of $6,179,939 and $5,914,774	11,392,879	10,001,747
Grants receivable	481,413	905,431
Due from the City of Harrisburg	3,030,340	3,686,285
Prepaid expenses	407,379	403,089
Inventory	219,675	347,960
Total current assets	53,350,616	63,514,228
Restricted assets:		
Cash and cash equivalents - restricted under trust indentures and guarantee agreement	10,728,097	19,430,292
Investments - restricted under trust indentures	23,792,020	19,433,058
Total restricted assets	34,520,117	38,863,350
Noncurrent assets:		
Capital assets, not being depreciated	25,938,916	16,946,141
Capital assets, net of accumulated depreciation of $132,254,413 and $128,988,007	177,481,346	160,175,578
Net pension asset	-	1,009,658
Total noncurrent assets	203,420,262	178,131,377
Total Assets	291,290,995	280,508,955
Deferred Outflows of Resources:		
Deferred loss on refunding	6,849,812	7,877,263
Deferred outflows of resources for other postemployment benefits	78,714	77,533
Deferred outflows of resources for pension	1,518,157	651,522
Total Deferred Outflows of Resources	8,446,683	8,606,318
Total Assets and Deferred Outflows of Resources	$ 299,737,678	$ 289,115,273

CAPITAL REGION WATER

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

YEAR ENDED DECEMBER 31, 2019

(with comparative totals for the year ended December 31, 2018)

	2019	2018
Operating Revenues:		
User charges	$ 47,556,016	$ 44,895,271
Total operating revenues	47,556,016	44,895,271
Operating Expenses:		
Operating	14,776,480	13,894,496
Administrative	5,788,495	5,293,225
Depreciation	5,654,952	5,394,021
Total operating expenses	26,219,927	24,581,742
Operating Income	21,336,089	20,313,529
Non-Operating Revenues (Expenses):		
Investment income	1,193,936	568,004
Grant revenue	1,184,617	1,502,468
Gain on sale of easements	40,000	4,838,927
Miscellaneous income (expense)	606,499	(180,383)
Loss on disposal of capital assets	(74,363)	-
Interest expense	(5,836,796)	(6,812,458)
Total non-operating revenues (expenses)	(2,886,107)	(83,442)
Change in Net Position	18,449,982	20,230,087
Net Position:		
Beginning of year	76,172,891	55,942,804
End of year	$ 94,622,873	$ 76,172,891

The accompanying notes are an integral part of these financial statements.

CAPITAL REGION WATER

BALANCE SHEET

DECEMBER 31, 2018

Assets and Deferred Outflows of Resources	
Assets:	
Current assets:	
Cash and cash equivalents	$ 48,169,716
Accounts receivable, net of allowance for uncollectible accounts of $5,914,774	10,001,747
Grants receivable	905,431
Due from the City of Harrisburg	3,686,285
Prepaid expenses	403,089
Inventory	347,960
Total current assets	63,514,228
Restricted assets:	
Cash and cash equivalents - restricted under trust indentures and guarantee agreement	19,430,292
Investments - restricted under trust indentures	19,433,058
Total restricted assets	38,863,350
Noncurrent assets:	
Capital assets, not being depreciated	16,946,141
Capital assets, net of accumulated depreciation of $128,988,007	160,175,578
Net pension asset	1,009,658
Total noncurrent assets	178,131,377
Total Assets	280,508,955
Deferred Outflows of Resources:	
Deferred loss on refunding	7,877,263
Deferred outflows of resources for other postemployment benefits	77,533
Deferred outflows of resources for pension	651,522
Total Deferred Outflows of Resources	8,606,318
Total Assets and Deferred Outflows of Resources	$ 289,115,273

CAPITAL REGION WATER

STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

YEAR ENDED DECEMBER 31, 2018

Operating Revenues:	
User charges	$ 44,895,271
Total operating revenues	44,895,271
Operating Expenses:	
Operating	13,894,496
Administrative	5,293,225
Depreciation	5,394,021
Total operating expenses	24,581,742
Operating Income	20,313,529
Non-Operating Revenues (Expenses):	
Investment income	568,004
Grant revenue	1,502,468
Gain on sale of easements	4,838,927
Miscellaneous expense	(180,383)
Interest expense	(6,812,458)
Total non-operating revenues (expenses)	(83,442)
Change in Net Position	20,230,087
Net Position:	
Beginning of year - restated	55,942,804
End of year	$ 76,172,891

The accompanying notes are an integral part of these financial statements.

CITY OF ALTOONA
BLAIR COUNTY, PENNSYLVANIA
STATEMENT OF NET POSITION
DECEMBER 31, 2020
(AMOUNTS EXPRESSED IN WHOLE DOLLARS)

	PRIMARY GOVERNMENT	COMPONENT UNITS		
	Governmental Activities	Altoona Water Authority	Redevelopment Authority of Altoona	The Parking Authority of the City of Altoona
ASSETS				
Cash and Cash Equivalents	$ 31,413,012	$ 5,350,729	$ 246,634	$ 128,655
Investments	237,289	10,115,673	0	0
Taxes Receivable	4,127,451	0	0	0
Accounts Receivable	0	3,890,554	0	692
Intergovernmental Receivables	200,975	0	0	0
Loans Receivable - Current	687,316	0	9,826	0
Other Receivables	537,728	8,295	0	0
Prepaid Expenses	302,750	228,189	0	1,017
Inventory	406,484	0	0	0
Loans Receivable - Long-Term	5,731,660	0	94,387	0
Right to Use Asset, Net	0	94,458,106	0	0
Capital Assets, Net of Accumulated Depreciation	404,818,897	0	248,717	2,489,094
TOTAL ASSETS	$448,463,562	$114,051,546	$ 599,564	$2,619,458
Deferred Outflows of Resources				
Deferred Charges:				
Bond Discounts	$ 43,943	$ 0	$ 0	$ 0
Defined Benefit Pensions	9,503,418	1,160,795	0	0
OPEB Plans	410,933	0	0	0
Total Deferred Outflows of Resources	$ 9,958,294	$ 1,160,795	$ 0	$ 0
LIABILITIES				
Accounts Payable	$ 1,940,050	$ 1,137,391	$ 580	$ 17,229
Accrued Payroll	478,552	0	0	4,136
Payroll Taxes and Benefits Payable	321,792	0	0	3,263
Accrued Expenses	0	302,112	0	0
Accrued Payroll, Taxes, and Withholding	0	247,835	0	0
Accumulated Compensated Absences	0	0	0	1,093
Accrued Interest	484,310	0	0	291
Deposits Held	136,987	83,805	0	0
Unearned Revenues - Grants	6,720,952	0	0	0
Unearned Revenues - Rent Received in Advance	0	0	200	32,749
Noncurrent Liabilities:				
Due Within One Year	4,813,139	4,243,433	0	23,132
Due in More Than One Year	129,441,566	139,374,630	0	141,860
TOTAL LIABILITIES	$144,337,348	$145,389,206	$ 780	$ 223,753
Deferred Inflows of Resources				
Defined Benefit Pensions	$ 13,641,984	$ 1,975,668	$ 0	$ 0
NET POSITION				
Net Investment in Capital Assets	$335,150,152	$ 0	$ 248,717	$2,324,102
Restricted for:				
Highway Aid	966,475	0	0	0
Capital Expenditures	6,100,506	0	0	0
Recreation	243,369	0	0	0
Other Projects	4,410,401	0	344,636	0
Water Authority	0	0	0	0
Unrestricted (Deficit)	(46,428,379)	(32,152,533)	5,431	71,603
TOTAL NET POSITION	$300,442,524	($ 32,152,533)	$ 598,784	$2,395,705

See Accompanying Notes and Independent Auditor's Report

ALTOONA WATER AUTHORITY
WATER DIVISION
WATER OPERATING FUND

	2020 BUDGET 0%
REVENUE	
WATER SALES	17,900,000
SALES TO OTHER UTILITIES	500,000
BULK SALES	-
CAPITAL SURCHARGE	500,000
PENALTIES	90,000
INSTALL/RENEW-SERVICE LINES	95,000
METER INCOME	30,000
SHUT OFFS	60,000
FIRE LINES	330,000
FINAL READINGS	45,000
CAPACITY FEES	30,000
REIMBURSEMENTS-BELLWOOD BORO	96,589
REIMBURSEMENTS-HOLLIDAYSBURG BORO	342,652
INTEREST INCOME	50,000
SERVICE-WASTEWATER DIVISION	1,161,358
TIMBER SALES	50,000
OTHER RENTALS	172,000
MISCELLANEOUS INCOME	96,000
BAD DEBT RECOVERY	4,000
TOTAL REVENUES	**21,552,599**
EXPENDITURES-ADMINSITRATIVE	
WAGES	794,997
OFFICER'S COMPENSATION	1,200
CONSULTING ENGINEERS	50,000
AUDITING	15,000
LEGAL FEES	25,000
TRUSTEES EXPENSE	-
OTHER PROFESSIONAL FEES	75,000
ADVERTISING	6,000
PUBLIC RELATIONS AND MARKETING	1,000
TRAVEL/CONFERENCES/EDUCATION	3,000
DUES & SUPSCRIPTIONS	7,500
MAINTENANCE BUILDING	20,000
MAINTENANCE-EQUIPMENT	12,000
OFFICE SUPPLIES	6,000
POSTAGE	2,000
LEASE PAYMENT	3,799,870
HUMAN RESOURCE EXPENSE	2,500
SAFETY COMMITTEE EXPENSE	12,000
TELEPHONE EXPENSE	15,000
BAD DEBT EXPENSE	20,000
UTILITIES	22,000
SMALL TOOLS, EQUIPMENT, FURNITURE	4,500
TOTAL ADMINISTRATIVE EXPENDITURES	**4,894,567**

ALTOONA WATER AUTHORITY
WATER DIVISION
WATER OPERATING FUND

	2020 BUDGET
EXPENDITURES-EMPLOYEE BENEFITS & INSURANCE	
SOCIAL SECURITY	423,599
WORKERS COMPENSATION	84,000
PA UNEMPLOYMENT COMPENSATION	5,000
PENSION	488,366
GROUP LIFE, AD&D, LTD , STD	90,000
HOSPITALIZATION & MAJOR MEDICAL	1,515,415
HEALTH & WELFARE(AFSCME)	28,000
MEDICAL EXAMINATIONS	8,000
INSURANCE-FLEET	17,773
INSURANCE-ALL RISK PROPERTY	142,219
INSURANCE-PUBLIC OFFICIAL LIABILITY	5,954
CONTINGENCIES	250,000
TOTAL EMPLOYEE FRINGE BENEFITS & INSURANCE	**3,058,326**
TOTAL OPERATING EXPENDITURES	**15,711,419**
CAPITAL EXPENDITURES	
CONSTRUCTION & RENEWAL	438,500
VEHICLES	310,143
OFFICE FURNITURE & EQUIPMENT	-
METERS	10,000
COMPUTER EQUIPMENT	7,500
FIRE HYDRANTS	40,000
PLANT EQUIPMENT/RENEWAL	480,264
OTHER EQUIPMENT	24,650
TOTAL CAPITAL EXPENDITURES	**1,311,057**
DEBT SERVICE & INTEREST	
DEBT SERVICE PAYMENT	4,408,904
TOTAL DEBT SERVICE PAYMENT	**4,408,904**
TOTAL EXPENDITURES	**21,431,380**
NET REVENUE/(DEFICIT)	**121,219**

ALTOONA WATER AUTHORITY
WASTEWATER DIVISION
SEWER OPERATING FUND

	2020 BUDGET
REVENUE	**0%**
WASTEWATER RENTALS	11,600,000
CAPITAL SURCHARGE	500,000
PENALTIES	65,000
CAPACITY FEES	10,000
SEWER INSTALL/TAP FEES	20,000
SEWER-SURCHARGE/PRETREATMENT	150,000
SEPTIC HAULER FEES	500,000
INTERMUNICIPAL SERVICE REIMBURSEMENT	668,680
INTEREST INCOME	75,000
MISCELLANEOUS INCOME	90,000
RECOVERY - CHARGED OFF ACCOUNTS	2,000
TOTAL REVENUES	**13,680,680**
EXPENDITURES-ADMINISTRATIVE	
OFFICER'S COMPENSATION	1,200
CONSULTING ENGINEERS	85,000
AUDITING	12,000
LEGAL FEES	40,000
TRUSTEE EXPENSE	5,200
OTHER PROFESSIONAL FEES	35,000
ADVERTISING	3,000
PUBLIC RELATIONS EXPENSE	1,000
TRAVEL/CONFERENCES/EDUCATION	5,000
DUES & SUPSCRIPTIONS	7,700
MAINTENANCE-EQUIPMENT	12,000
OFFICE SUPPLIES	5,000
POSTAGE	3,000
LEASE PAYMENT	2,137,427
PAYMENT FOR WATER DIVISION SERVICES	1,161,358
HUMAN RESOURCE EXPENSE	2,500
SAFETY COMMITTEE EXPENSE	10,000
BAD DEBT EXPENSE	15,000
TELEPHONE EXPENSE	7,000
SMALL TOOLS, EQUIPMENT, FURNITURE	2,000
TOTAL ADMINISTRATIVE EXPENDITURES	**3,550,385**

ALTOONA WATER AUTHORITY
WASTEWATER DIVISION
SEWER OPERATING FUND

	2020 BUDGET
EXPENDITURES-SANITARY SEWERS	
WAGES	690,528
MAINTENANCE-BUILDING	5,000
GIS SYSTEM EXPENSE	17,033
TELEPHONE EXPENSE	2,400
SAFETY EQUIPMENT/CLOTHING	4,000
MATERIALS & SUPPLIES	200,000
MAINTENANCE-VEHICLE	50,000
GASOLINE & OIL	25,000
DIESEL FUEL	30,000
STREET CUTS	150,000
ONE CALL SYSTEM EXPENSE	4,000
SMALL TOOLS, EQUIPMENT, FURNITURE	7,100
TOTAL SANITARY SEWERS EXPENDITURES	**1,185,061**
EXPENDITURES-EMPLOYEE BENEFITS & INSURANCE	
SOCIAL SECURITY	164,435
WORKERS COMPENSATION	42,000
PA UNEMPLOYMENT COMPENSATION	2,500
PENSION	230,800
GROUP LIFE, AD&D, LTD	30,000
HOSPITALIZATION & MAJR MEDICAL	653,800
HEALTH & WELFARE(AFSCME)	11,000
MEDICAL EXAMINATIONS	5,000
INSURANCE-FLEET	11,972
INSURANCE-ALL RISK PROPERTY	113,442
INSURANCE-BOILER MACHINERY	-
INSURANCE-PUBLIC OFFICIAL LIAB	5,658
CONTINGENCIES	100,000
TOTAL EMPLOYEE FRINGE BENEFITS & INSURANCE	**1,370,607**
TOTAL OPERATING EXPENDITURES	**9,369,495**

CITY OF ALTOONA
BLAIR COUNTY, PENNSYLVANIA
STATEMENT OF NET POSITION
DECEMBER 31, 2019
(AMOUNTS EXPRESSED IN WHOLE DOLLARS)

	PRIMARY GOVERNMENT	COMPONENT UNITS		
	Governmental Activities	Altoona Water Authority	Redevelopment Authority of Altoona	The Parking Authority of the City of Altoona
ASSETS				
Cash and Cash Equivalents	$ 24,556,757	$ 2,142,068	$ 217,510	$ 157,819
Investments	366,982	12,127,836	0	0
Taxes Receivable	4,174,803	0	0	0
Accounts Receivable	0	3,750,328	2,816	3,568
Intergovernmental Receivables	321,540	0	0	0
Loans Receivable – Current	795,935	0	8,972	0
Other Receivables	193,952	14,619	0	0
Prepaid Expenses	314,090	25,755	0	1,667
Inventory	512,219	0	0	0
Loans Receivable – Long-Term	5,374,360	0	103,723	0
Right to Use Asset, Net	0	100,528,196	0	0
Capital Assets, Net of Accumulated Depreciation	405,378,818	0	254,542	2,527,780
TOTAL ASSETS	$441,989,456	$118,588,802	$ 587,563	$2,690,834
Deferred Outflows of Resources				
Deferred Charges:				
Bond Discounts	$ 780,363	$ 0	$ 0	$ 0
Defined Benefit Pensions	10,878,514	1,651,319		
OPEB Plans	1,130,677	0	0	0
Total Deferred Outflows of Resources	$ 12,789,554	$ 1,651,319	$ 0	$ 0
LIABILITIES				
Accounts Payable	$ 2,790,042	$ 1,732,865	$ 4,978	$ 14,842
Accrued Payroll	362,296	0	0	0
Payroll Taxes and Benefits Payable	134,704	0	0	3,459
Accrued Expenses	0	0	0	2,958
Accrued Payroll, Taxes, and Withholding	0	427,226	0	0
Accumulated Compensated Absences	0	279,288	0	2,119
Accrued Interest	295,444	0	0	321
Deposits Held	112,334	83,805	0	0
Unearned Revenues – Grants	6,271,037	0	0	0
Unearned Revenues - Rent Received in Advance	0	0	200	39,412
Noncurrent Liabilities:				
Due Within One Year	3,835,073	7,205,690	0	22,257
Due in More Than One Year	118,568,396	150,406,922	0	164,998
TOTAL LIABILITIES	$132,369,326	$160,135,796	$ 5,178	$ 250,366
Deferred Inflows of Resources				
Defined Benefit Pensions	$ 12,696,000	$ 1,965,233	$ 0	$ 0
NET POSITION				
Net Investment in Capital Assets	$345,530,381	$ 0	$ 254,542	$2,340,525
Restricted for:			0	0
Highway Aid	894,316	0	0	0
Capital Expenditures	8,184,878	0	0	0
Recreation	231,511	0	0	0
Other Projects	5,470,093	0	339,715	0
Water Authority	0	0	0	0
Unrestricted (Deficit)	(50,597,495)	(41,860,908)	(11,872)	99,943
TOTAL NET POSITION	$309,713,684	($ 41,860,908)	$ 582,385	$2,440,468

See Accompanying Notes and Independent Auditor's Report

ALTOONA WATER AUTHORITY
STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

	Year Ended December 31, 2017	2016
Operating Revenues, Securing Revenue Bonds		
Water/Sewer Rentals	$ 28,033,026	$ 27,234,701
Installations and Renewals Service Lines	119,509	116,080
Meter Sales, Shut-Offs, and Remotes	224,910	224,676
Timber Sales	40,197	142,007
Septic Hauler Fees	75,649	81,269
Fire Hydrant and Line Rentals	343,767	331,999
Service to Wastewater Division	1,057,455	1,097,406
Miscellaneous	322,114	414,937
Intermunicipal Service Reimbursements	1,409,183	1,346,227
Total Operating Revenues	31,625,810	30,989,302
Operating Expenses - Functional and Departmental		
Administration	2,117,738	5,106,472
Billing and Collection	709,035	750,662
Purification and Distribution/Disposal	5,001,575	5,078,445
Meter Division	482,163	476,819
Maintenance	3,823,793	3,918,953
Fringe Benefits and Insurance	3,706,216	3,838,891
Depreciation and Amortization	6,796,548	7,861,126
Total Operating Expenses-Functional and Departmental	22,637,068	27,031,368
Operating Income	8,988,742	3,957,934
Nonoperating Revenues and (Expenses)		
Capital Contribution to City of Altoona	(223,701,014)	--
Investment Income	80,223	50,052
Interest Expense	(2,813,892)	(2,983,688)
Fees and Miscellaneous	(379)	(839)
Gain on Disposition of Fixed Assets	45,961	34,612
Contributed Capital	16,825	--
Amortization Bond Issue Costs	(125,478)	(126,251)
Total Nonoperating Revenues and (Expenses)	(226,497,754)	(3,026,114)
Net Income	(217,509,012)	931,820
Net Position - January 1	146,894,669	145,962,849
Net Position - December 31	**$(70,614,343)**	**$ 146,894,669**

See Accompanying Notes to Financial Statements

ALTOONA WATER AUTHORITY
STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

	Year Ended December 31, 2018	2017
Operating Revenues, Securing Revenue Bonds		
Water/Sewer Rentals	$ 30,794,341	$ 28,033,026
Installations and Renewals Service Lines	139,503	119,509
Meter Sales, Shut-Offs, and Remotes	250,565	224,910
Timber Sales	116,337	40,197
Septic Hauler Fees	2,269,905	75,649
Fire Hydrant and Line Rentals	341,023	343,767
Service to Wastewater Division	1,047,022	1,057,455
Miscellaneous	421,392	322,114
Intermunicipal Service Reimbursements	1,231,099	1,409,183
Total Operating Revenues	36,611,187	31,625,810
Operating Expenses - Functional and Departmental		
Administration	2,180,781	2,117,738
Billing and Collection	681,880	709,035
Purification and Distribution/Disposal	5,060,425	5,001,575
Meter Division	505,784	482,163
Maintenance	3,956,167	3,823,793
Fringe Benefits and Insurance	4,133,886	3,706,216
Depreciation and Amortization	6,070,090	6,796,548
Total Operating Expenses-Functional and Departmental	22,589,013	22,637,068
Operating Income	14,022,174	8,988,742
Nonoperating Revenues and (Expenses)		
Capital Contribution to City of Altoona	(4,277,135)	(223,701,014)
Investment Income	170,111	80,223
Interest Expense	(6,783,092)	(2,813,892)
Fees and Miscellaneous	--	(379)
Gain on Disposition of Fixed Assets	105,075	45,961
Contributed Capital	201,042	16,825
Amortization Bond Issue Costs	(154,988)	(125,478)
Total Nonoperating Revenues and (Expenses)	(10,738,987)	(226,497,754)
Net Income/(Loss)	3,283,187	(217,509,012)
Net Position - January 1	(70,614,343)	146,894,669
Net Position - December 31	**$(67,331,156)**	**$(70,614,343)**

See Accompanying Notes to Financial Statements

ALTOONA WATER AUTHORITY
WATER DIVISION
WATER REVENUE FUND

	2019 BUDGET
REVENUE	
WATER SALES	17,474,179
SALES TO OTHER UTILITIES	450,000
BULK SALES	-
CAPITAL SURCHARGE	500,000
PENALTIES	90,000
INSTALL/RENEW-SERVICE LINES	95,000
METER INCOME	30,000
SHUT OFFS	60,000
FIRE LINES	330,000
FINAL READINGS	45,000
CAPACITY FEES	30,000
REIMBURSEMENTS-BELLWOOD BORO	261,257
REIMBURSEMENTS-HOLLIDAYSBURG BORO	743,153
INTEREST INCOME	70,000
SERVICE-WASTEWATER DIVISION	1,112,400
TIMBER SALES	50,000
OTHER RENTALS	172,000
MISCELLANEOUS INCOME	96,000
BAD DEBT RECOVERY	4,000
TOTAL REVENUES	**21,612,989**
EXPENDITURES-ADMINSITRATIVE	
WAGES	770,879
OFFICER'S COMPENSATION	1,200
CONSULTING ENGINEERS	45,000
AUDITING	15,000
LEGAL FEES	25,000
TRUSTEES EXPENSE	4,200
OTHER PROFESSIONAL FEES	100,000
ADVERTISING	6,000
PUBLIC RELATIONS AND MARKETING	1,000
TRAVEL/CONFERENCES/EDUCATION	2,500
DUES & SUPSCRIPTIONS	6,500
MAINTENANCE BUILDING	15,000
MAINTENANCE-EQUIPMENT	12,000
OFFICE SUPPLIES	6,000
POSTAGE	2,000
LEASE PAYMENT	2,730,010
HUMAN RESOURCE EXPENSE	2,500
SAFETY COMMITTEE EXPENSE	12,000
TELEPHONE EXPENSE	15,000
BAD DEBT EXPENSE	20,000
UTILITIES	22,000
SMALL TOOLS, EQUIPMENT, FURNITURE	2,500
TOTAL ADMINISTRATIVE EXPENDITURES	**3,816,289**

ALTOONA WATER AUTHORITY
WATER DIVISION
WATER REVENUE FUND

	2019 BUDGET
EXPENDITURES-BILLING & COLLECTION	
WAGES	467,320
TRAVEL/CONFERENCES/EDUCATION	500
MAINTENANCE-EQUIPMENT	10,000
OFFICE SUPPLIES	20,000
UTILITY BILLING SOFTWARE HOSTING	85,000
POSTAGE	145,000
COLLECTION EXPENSE	7,000
TELEPHONE EXPENSE	3,000
SMALL TOOLS, EQUIPMENT, FURNITURE	4,000
TOTAL BILLING & COLLECTION EXPENDITRURES	**741,820**
EXPENDITURES-PURIFICATION & DISTRIBUTION	
WAGES	1,247,592
TRAVEL/CONFERENCES/EDUCATION	7,000
DAM INSPECTIONS	27,000
TELEPHONE EXPENSE	2,700
MAINTENANCE-WATER PUMP STATION	-
MAINTENANCE-TANKS	-
MAINTENANCE-WATERSHED	15,000
SOURCE WATER PROTECTION	6,000
UTILITIES	105,000
SMALL TOOLS, EQUIPMENT, FURNITURE	8,000
TOTAL PURIFICATION & DISTRIBUTION EXPENDITURES	**1,418,292**
EXPENDITURES-HORSESHOE CURVE WTP	
LAB COSTS/SUPPLIES	32,500
TELEPHONE EXPENSE	4,200
ELECTRICITY	130,000
CHEMICALS	89,250
MAINTENANCE	86,250
SLUDGE DISPOSAL	10,000
UTILITIES - PROPANE HEATING	65,000
TOTAL HORSESHOE CURVE EXPENDITURES	**417,200**
EXPENDITURES-MILL RUN WTP	
LAB COSTS/SUPPLIES	17,300
TELEPHONE EXPENSE	1,300
ELECTRICITY	40,000
CHEMICALS	18,900
MAINTENANCE	25,000
SLUDGE DISPOSAL	3,000
UTILITIES - PROPANE HEATING	15,000
TOTAL MILL RUN EXPENDITURES	**120,500**

ALTOONA WATER AUTHORITY
WATER DIVISION
WATER REVENUE FUND

	2019 BUDGET
EXPENDITURES-TIPTON WTP	
LAB COSTS/SUPPLIES	25,800
TELEPHONE EXPENSE	1,500
ELECTRICITY	54,000
CHEMICALS	31,500
MAINTENANCE	23,000
SLUDGE DISPOSAL	3,000
UTILITIES - PROPANE HEATING	10,000
TOTAL TIPTON EXPENDITURES	**148,800**
EXPENDITURES-KETTLE WTP	
LAB COSTS/SUPPLIES	3,000
TELEPHONE EXPENSE	1,000
ELECTRICITY	7,000
CHEMICALS	2,000
MAINTENANCE	5,000
SLUDGE DISPOSAL	
UTILITIES - PROPANE HEATING	4,500
TOTAL KETTLE EXPENDITURES	**22,500**
EXPENDITURES-HOMER GAP WTP	
LAB COSTS/SUPPLIES	2,000
TELEPHONE EXPENSE	400
ELECTRICITY	7,000
CHEMICALS	2,000
MAINTENANCE	4,000
SLUDGE DISPOSAL	-
UTILITIES - PROPANE HEATING	5,000
TOTAL HOMER GAP EXPENDITURES	**20,400**
EXPENDITURES-PLANE NINE WTP	
LAB COSTS/SUPPLIES	32,500
TELEPHONE EXPENSE	1,500
ELECTRICITY	75,000
CHEMICALS	31,500
MAINTENANCE	23,000
SLUDGE DISPOSAL	3,000
UTILITIES - PROPANE HEATING	15,000
INSURANCE	11,000
TOTAL PLANE NINE EXPENDITURES	**192,500**

ALTOONA WATER AUTHORITY
WATER DIVISION
WATER REVENUE FUND

	2019 BUDGET
EXPENDITURES-BELLWOOD WTP	
LAB COSTS/SUPPLIES	32,500
TELEPHONE EXPENSE	1,400
ELECTRICITY	75,000
CHEMICALS	54,600
MAINTENANCE	28,750
SLUDGE DISPOSAL	4,000
UTILITIES - PROPANE HEATING	20,000
INSURANCE	10,000
TOTAL BELLWOOD EXPENDITURES	**226,250**
EXPENDITURES-METER DIVISION	
WAGES	450,182
MAINTENANCE-EQUIPMENT	30,000
TELEPHONE EXPENSE	5,000
OFFICE SUPPLIES/UNIFORMS/MAINT.	2,000
MATERIALS & SUPPLIES	20,000
GASOLINE & OIL	18,000
SMALL TOOLS, EQUIPMENT, FURNITURE	3,500
	-
TOTAL METER DIVISION EXPENDITURES	**528,682**
EXPENDITURES-MAINTENANCE	
WAGES	2,446,757
TRAVEL/CONFERENCES/EDUCATION	14,000
MAINTENANCE-BUILDING	10,000
MAINTENANCE-EQUIPMENT	8,000
MAINTENANCE-COMMUNICATION EQUIPMENT	500
OFFICE SUPPLIES	3,000
GIS SYSTEM EXPENSE	11,200
TELEPHONE EXPENSE	16,000
SAFETY EQUIPMENT/CLOTHING	10,000
MAINTENANCE - WATER PUMP STATIONS	12,000
MAINTENANCE - TANKS	30,000
UTILITIES	18,000
MECHANICS UNIFORMS	2,000
MATERIALS & SUPPLIES	400,000
LEASE EXPENSE	14,051
MAINTENANCE-VEHICLE	75,000
GASOLINE & OIL	55,000
DIESEL FUEL	65,000
STREET CUTS	325,000
ONE CALL SYSTEM EXPENSE	7,000
SMALL TOOLS, EQUIPMENT, FURNITURE	15,000
TOTAL MAINTENANCE EXPENDITURES	**3,537,508**

ALTOONA WATER AUTHORITY
WATER DIVISION
WATER REVENUE FUND

	2019 BUDGET
EXPENDITURES-EMPLOYEE BENEFITS & INSURANCE	
SOCIAL SECURITY	411,779
WORKMENS COMPENSATION	140,000
PA UNEMPLOYMENT COMPENSATION	5,000
PENSION	486,300
GROUP LIFE, AD&D, LTD , STD	90,000
HOSPITALIZATION & MAJOR MEDICAL	1,480,000
HEALTH & WELFARE(AFSCME)	28,329
MEDICAL EXAMINATIONS	8,000
INSURANCE-FLEET	24,601
INSURANCE-ALL RISK PROPERTY	147,898
INSURANCE-PUBLIC OFFICIAL LIABILITY	3,685
CONTINGENCIES	-
TOTAL EMPLOYEE FRINGE BENEFITS & INSURANCE	**2,825,592**
TOTAL OPERATING EXPENDITURES	**14,016,333**
CAPITAL EXPENDITURES	
CONSTRUCTION & RENEWAL	612,912
VEHICLES	-
OFFICE FURNITURE & EQUIPMENT	-
METERS	-
COMPUTER EQUIPMENT	-
FIRE HYDRANTS	-
PLANT EQUIPMENT/RENEWAL	-
OTHER EQUIPMENT	-
TOTAL CAPITAL EXPENDITURES	**612,912**
DEBT SERVICE & INTEREST	
DEBT SERVICE PAYMENT	6,435,936
TOTAL DEBT SERVICE PAYMENT	**6,435,936**
TOTAL EXPENDITURES	**21,065,181**
NET REVENUE/(DEFICIT)	**547,808**

ALTOONA WATER AUTHORITY
WASTEWATER DIVISION
SEWER REVENUE FUND

	2019 BUDGET
REVENUE	**0%**
WASTEWATER RENTALS	11,343,481
CAPITAL SURCHARGE	500,000
PENALTIES	65,000
CAPACITY FEES	10,000
SEWER INSTALL/TAP FEES	20,000
SEWER-SURCHARGE/PRETREATMENT	150,000
SEPTIC HAULER FEES	190,000
INTERMUNICIPAL SERVICE REIMBURSEMENT	592,855
INTEREST INCOME	25,000
MISCELLANEOUS INCOME	90,000
RECOVERY - CHARGED OFF ACCOUNTS	2,000
TOTAL REVENUES	**12,988,336**
EXPENDITURES-ADMINISTRATIVE	
OFFICER'S COMPENSATION	1,200
CONSULTING ENGINEERS	113,000
AUDITING	12,000
LEGAL FEES	40,000
TRUSTEE EXPENSE	5,200
OTHER PROFESSIONAL FEES	35,000
ADVERTISING	3,000
PUBLIC RELATIONS EXPENSE	1,000
TRAVEL/CONFERENCES/EDUCATION	5,000
DUES & SUPSCRIPTIONS	6,700
MAINTENANCE-EQUIPMENT	12,000
OFFICE SUPPLIES	5,000
POSTAGE	3,000
PAYMENT FOR CITY SERVICES	1,535,630
PAYMENT FOR WATER DIVISION SERVICES	1,112,400
HUMAN RESOURCE EXPENSE	2,500
SAFETY COMMITTEE EXPENSE	10,000
BAD DEBT EXPENSE	15,000
TELEPHONE EXPENSE	7,000
SMALL TOOLS, EQUIPMENT, FURNITURE	2,000
TOTAL ADMINISTRATIVE EXPENDITURES	**2,926,630**

ALTOONA WATER AUTHORITY
WASTEWATER DIVISION
SEWER REVENUE FUND

	2019 BUDGET
EXPENDITURES-DISPOSAL PLANTS	
WAGES	1,338,792
TRAVEL/CONFERENCE/EDUCATION	16,000
PRETREATMENT MONITORING	60,000
TELEPHONE EXPENSE	4,500
SAFETY EQUIPMENT/CLOTHING	1,500
MAINTENANCE - PUMP STATIONS	4,000
SMALL TOOLS, EQUIPMENT, FURNITURE	10,000
TOTAL DISPOSAL PLANTS EXPENDITURES	**1,434,792**
EXPENDITURES - EASTERLY PLANT	
LAB COSTS & SUPPLIES	55,000
TELEPHONE EXPENSE	2,000
ELECTRICITY-PLANTS	350,000
CHEMICALS	70,000
MAINTENANCE-PLANTS	103,000
MAINTENANCE-CSO'S	15,000
SLUDGE DISPOSAL	20,000
NATURAL GAS & OIL	35,000
TOTAL EASTERLY PLANT EXPENDITURES	**650,000**
EXPENDITURES - WESTERLY PLANT	
LAB COSTS & SUPPLIES	55,000
TELEPHONE EXPENSE	10,000
ELECTRICITY-PLANTS	500,000
CHEMICALS	95,000
MAINTENANCE-PLANTS	204,000
MAINTENANCE-CSO'S	15,000
SLUDGE DISPOSAL	20,000
NATURAL GAS & OIL	55,000
TOTAL WESTERLY PLANT EXPENDITURES	**954,000**

ALTOONA WATER AUTHORITY
WASTEWATER DIVISION
SEWER REVENUE FUND

	2019 BUDGET
EXPENDITURES-SANITARY SEWERS	
WAGES	682,400
MAINTENANCE-BUILDING	4,000
GIS SYSTEM EXPENSE	11,200
TELEPHONE EXPENSE	2,400
SAFETY EQUIPMENT/CLOTHING	4,000
MATERIALS & SUPPLIES	180,000
MAINTENANCE-VEHICLE	40,000
GASOLINE & OIL	20,000
DIESEL FUEL	30,000
STREET CUTS	150,000
ONE CALL SYSTEM EXPENSE	4,000
SMALL TOOLS, EQUIPMENT, FURNITURE	3,000
TOTAL SANITARY SEWERS EXPENDITURES	**1,131,000**
EXPENDITURES-EMPLOYEE BENEFITS & INSURANCE	
SOCIAL SECURITY	154,621
WORKMENS COMPENSATION	68,000
PA UNEMPLOYMENT COMPENSATION	2,500
PENSION	230,000
GROUP LIFE, AD&D, LTD	30,000
HOSPITALIZATION & MAJR MEDICAL	636,354
HEALTH & WELFARE(AFSCME)	11,600
MEDICAL EXAMINATIONS	5,000
INSURANCE-FLEET	16,436
INSURANCE-ALL RISK PROPERTY	103,458
INSURANCE-BOILER MACHINERY	-
INSURANCE-PUBLIC OFFICIAL LIAB	3,474
CONTINGENCIES	-
TOTAL EMPLOYEE FRINGE BENEFITS & INSURANCE	**1,261,443**
TOTAL OPERATING EXPENDITURES	**8,357,865**

ALTOONA WATER AUTHORITY
WASTEWATER DIVISION
SEWER REVENUE FUND

	2019 BUDGET
CAPITAL EXPENTITURES	
CONSTRUCTION & RENEWAL	-
VEHICLES	431,000
OFFICE FURNITURE & EQUIPMENT	8,000
COMPUTER EQUIPMENT	15,500
PLANT EQUIPMENT/RENEWAL	-
OTHER EQUIPMENT	9,000
TOTAL CAPITAL EXPENDITURES	**463,500**
DEBT SERVICE & INTEREST	
DEBT SERVICE PAYMENT	4,154,608
TOTAL DEBT SERVICE PAYMENT	**4,154,608**
TOTAL EXPENDITURES	**12,975,973**
NET REVENUE/(DEFICIT)	**12,363**

CITY OF READING

COMBINING STATEMENT OF NET POSITION - WATER FUNDS

December 31, 2019

	City Water Fund	Reading Area Water Authority	Eliminations	Total Water Fund
ASSETS				
Current assets:				
Cash	$ 1,858,893	$ 13,894,351	$ -	$ 15,753,244
Investments	119,120	-	-	119,120
Accounts receivable, net	1,687	5,230,760	-	5,232,447
Interfund receivables	293,208	-	(224,755)	68,453
Inventory	-	160,309	-	160,309
Prepaid expenses	-	54,600	-	54,600
Total current assets	2,272,908	19,340,020	(224,755)	21,388,173
Restricted assets - cash and investments	-	9,570,456	-	9,570,456
Noncurrent assets:				
Capital assets not being depreciated	2,059,359	270,252	-	2,329,611
Capital assets, net of accumulated depreciation	9,380,774	66,185,454	-	75,566,228
Total capital assets, net	11,440,133	66,455,706	-	77,895,839
Rights to leased land	-	917,715	-	917,715
Total noncurrent assets	11,440,133	67,373,421	-	78,813,554
TOTAL ASSETS	13,713,041	96,283,897	(224,755)	109,772,183
DEFERRED OUTFLOWS				
Deferred charge on bond refunding	123,536	917,612	-	1,041,148
Deferred outflows of resources for pension	599,238	-	-	599,238
Deferred outflows of resources for other postemployment benefits	20,939	-	-	20,939
TOTAL DEFERRED OUTFLOWS	743,713	917,612	-	1,661,325
LIABILITIES				
Current liabilities:				
Accounts payable	14,606	378,233	-	392,839
Interfund payables	4,214,064	224,755	(224,755)	4,214,064
Accrued interest	-	297,398	-	297,398
Accrued payroll and compensated absences	-	790,915	-	790,915
Escrow deposits	-	107,245	-	107,245
Current portion notes and bonds payable	99,498	3,379,254	-	3,478,752
Total current liabilities	4,328,168	5,177,800	(224,755)	9,281,213
Noncurrent liabilities:				
Notes and Bonds payable, net	3,065,323	77,462,829	-	80,528,152
Net pension liability	1,178,813	-	-	1,178,813
Other postemployment benefits	144,972	-	-	144,972
Total noncurrent liabilities	4,389,108	77,462,829	-	81,851,937
TOTAL LIABILITIES	8,717,276	82,640,629	(224,755)	91,133,150
DEFERRED INFLOWS				
Deferred inflows of resources for pension	576,698	-	-	576,698
Deferred inflows of resources for other postemployment benefits	1,900	-	-	1,900
TOTAL DEFERRED INFLOWS	578,598	-	-	578,598
NET POSITION				
Net investment in capital assets	8,398,848	(13,468,765)	-	(5,069,917)
Restricted for debt service	-	7,592,650	-	7,592,650
Restricted for capital assets	-	1,879,990	-	1,879,990
Unrestricted	(3,237,968)	18,557,005	-	15,319,037
TOTAL NET POSITION	$ 5,160,880	$ 14,560,880	$ -	$ 19,721,760

See note to supplementary information.

CITY OF READING

COMBINING STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION - WATER FUNDS

Year Ended December 31, 2019

	City Water Fund	Reading Area Water Authority	Eliminations	Total Water Fund
OPERATING REVENUES				
Charges for services	$ 12,151,531	$ 32,093,301	$ (12,151,531)	$ 32,093,301
Other	487,110	41,836	-	528,946
TOTAL OPERATING REVENUES	12,638,641	32,135,137	(12,151,531)	32,622,247
OPERATING EXPENSES				
Lease payments	-	12,142,535	(12,142,535)	-
Personnel	441,051	6,372,046	-	6,813,097
Depreciation and amortization	596,856	4,311,994	-	4,908,850
Risk management	65,800	-	-	65,800
Contracted Services	-	907,019	-	907,019
Chemicals and supplies	-	1,173,058	-	1,173,058
Utilities	-	655,444	-	655,444
Other	1,869,230	3,016,908	(8,996)	4,877,142
TOTAL OPERATING EXPENSES	2,972,937	28,579,004	(12,151,531)	19,400,410
OPERATING INCOME	9,665,704	3,556,133	-	13,221,837
NONOPERATING REVENUES (EXPENSES)				
Intergovernmental revenue	-	125,000	-	125,000
Interest income	2,445	597,173	-	599,618
Interest expense	(154,896)	(3,768,727)	-	(3,923,623)
Gain (loss) on sale of solid waste accounts receivable	-	68,728	-	68,728
Other	-	19,797	-	19,797
NET NONOPERATING REVENUES (EXPENSES)	(152,451)	(2,958,029)	-	(3,110,480)
INCOME BEFORE TRANSFERS	9,513,253	598,104	-	10,111,357
Transfers out - lease payments	(9,774,710)	-	-	(9,774,710)
CHANGE IN NET POSITION	(261,457)	598,104	-	336,647
NET POSITION - BEGINNING OF YEAR - RESTATED	5,422,337	13,962,776	-	19,385,113
NET POSITION - END OF YEAR	$ 5,160,880	$ 14,560,880	$ -	$ 19,721,760

Financial Information

Net Position - The following schedule presents a summary of net position comparison at December 31, 2018, 2017, and 2016:

	2018	2017 (As Restated)	2016 (As Restated)
Assets			
Unrestricted current assets	**$ 25,886,197**	$ 24,371,571	$ 20,614,911
Restricted current assets	**3,389,010**	11,067,725	19,177,064
Capital assets, net	**64,973,550**	59,036,648	55,262,527
Other asset	**351,810**	1,020,000	1,020,000
Deferred Outflow of Resources	**1,054,979**	1,197,798	1,346,286
Total Assets and Deferred Outflow of Resources	**$ 102,255,546**	$ 96,693,742	$ 97,420,788
Liabilities			
Current liabilities	**$ 7,496,258**	$ 5,387,837	$ 5,985,559
Long-term debt	**80,796,512**	84,017,089	87,200,895
Total Liabilities	**$ 88,292,770**	$ 89,404,926	$ 93,186,454
Net Position			
Net investment in capital assets	**$ (18,130,096)**	$ (27,177,795)	$ (22,222,481)
Restricted for debt service	**7,513,275**	7,426,839	7,409,503
Unrestricted	**24,579,597**	27,039,772	19,047,312
Total Net Position	**$ 13,962,776**	$ 7,288,816	$ 4,234,334

Current liabilities increased by 39.1% in 2018 compared to a decrease by 10.0% in 2017 and an increase by 20.7% in 2016. The 2018 increase is attributable to increases in capital accounts payable.

Revenues - The following schedule presents a summary of revenues for the years ended December 31, 2018, 2017, and 2016:

	2018	2017	2016
Operating Revenues			
Water billings	**$ 29,663,185**	$ 29,736,140	$ 29,622,297
Interest and penalty charges	**541,209**	472,340	586,502
Tampered meter and other charges	**310,720**	449,933	591,344
Tapping and connection fees	**50,610**	177,175	86,244
Abandonment fees	**20,107**	60,907	32,001
Total Operating Revenues	**$ 30,585,831**	$ 30,896,495	$ 30,918,388

The 2018 fiscal year's total operating revenue decreased by 1.0% compared to 2017, and decreased by 0.1% and increased by 11.7% in 2017 and 2016, respectively.

Financial Information (continued)

Expenses - The following schedule presents a summary of expenses for the years ended December 31, 2018, 2017, and 2016:

	2018	2017 (As Restated)	2016 (As Restated)
Operating Expenses			
Lease payments, City of Reading	**$ 11,640,032**	$ 11,426,339	$ 11,441,419
Chemical supplies	**1,051,101**	746,486	1,197,002
Meter reading	**-**	-	539,483
Salaries, payroll taxes, and employee benefits	**6,213,345**	5,877,245	5,529,809
Contracted services	**967,302**	849,520	1,089,676
Other	**3,895,738**	3,176,042	2,881,120
Total Operating Expenses	**$ 23,767,518**	$ 22,075,632	$ 22,678,509

The $1,691,886 increase in expenses is primarily the result of the increase in chemical supplies, salaries, payroll taxes and employee benefits, and bad debt expense.

Changes in Net Position - The following schedule presents a summary of changes in net position for the years ended December 31, 2018, 2017, and 2016:

	2018	2017 (As Restated)	2016 (As Restated)
Operating revenues	**$ 30,585,831**	$ 30,896,495	$ 30,918,388
Operating expenses	**23,767,518**	22,075,632	22,678,509
Operating Income before Depreciation	**6,818,313**	8,820,863	8,239,879
Depreciation and amortization	**3,872,439**	3,304,835	2,946,682
Operating Income	**2,945,874**	5,516,028	5,293,197
Nonoperating revenues (expenses), net	**3,728,086**	(2,461,546)	(3,468,433)
Increase in Net Position	**$ 6,673,960**	$ 3,054,482	$ 1,824,764

LANCASTER AREA SEWER AUTHORITY
Statements of Net Position
March 31, 2021 and 2020

	2021	2020
Assets and Deferred Outflows of Resources		
Current Assets		
Cash and cash equivalents	$ 4,644,074	$ 2,445,432
Funds in custody of trustee, restricted cash	4,210,000	6,209,890
Investments	-	1,500,000
Accounts receivable	3,593,825	2,752,178
Prepaid expenses	71,764	69,116
Total Current Assets	12,519,663	12,976,616
Capital Assets		
Capital assets not being depreciated		
Land	875,181	95,181
Construction in progress	4,742,245	5,206,076
Capital assets being depreciated		
Sewer system - lines	122,165,152	112,758,402
Sewer system - pump stations	41,931,866	41,163,499
Sewer system - treatment plant	72,170,735	70,517,190
Buildings and improvements	4,090,201	3,669,937
Technology	1,424,091	1,424,091
Vehicles	2,529,916	2,346,319
Equipment	1,077,480	996,387
Accumulated depreciation	(103,992,369)	(97,771,861)
Capital Assets, Net	147,014,498	140,405,221
Accounts receivable, net of current portion	161,167	188,278
Funds in custody of trustee, restricted cash, net of current portion	21,447,170	19,013,907
Funds in custody of trustee, restricted investments	4,337,053	6,978,398
Total Assets	185,479,551	179,562,420
Deferred Outflows of Resources		
Pension	496,415	957,717
Total Assets and Deferred Outflows of Resources	$ 185,975,966	$ 180,520,137

The Notes to Financial Statements are an integral part of these statements. | 14

LANCASTER AREA SEWER AUTHORITY
Statements of Revenues, Expenses, and Changes in Net Position
Years Ended March 31, 2021 and 2020

	2021	2020
Operating Revenue		
Sewer rental	$ 22,534,309	$ 21,682,126
Industrial waste surcharges	357,471	416,698
Bulk treatment fees	406,091	118,171
Trucked waste program	503,123	465,481
Interest and penalties	254,311	317,239
Miscellaneous income	321,335	304,333
Total operating revenue	24,376,640	23,304,048
Operating Expenses		
Administrative	3,841,748	4,069,985
Collection department	7,913,564	6,702,101
Treatment plant	5,168,757	4,508,047
Pretreatment program and laboratory department	306,245	346,310
Columbia Borough	741,975	776,025
West Earl	335,295	-
Total operating expenses	18,307,584	16,402,468
Operating income	6,069,056	6,901,580
Nonoperating Revenues (Expenses)		
Interest income	99,485	793,490
Tapping fees	1,322,458	1,123,675
Capacity reservation fees	287,960	215,181
Proceeds from sale of assets	66,100	40,911
Interest expense	(2,519,082)	(2,603,702)
Bond issue costs	(109,314)	-
Amortization	555,179	286,257
Total nonoperating revenues (expenses)	(297,214)	(144,188)
Income before capital contributions	5,771,842	6,757,392
Capital contributions	1,075,815	851,741
Increase in net position	6,847,657	7,609,133
Net position at beginning of year	104,086,085	96,476,952
Net position at end of year	$ 110,933,742	$ 104,086,085

The Notes to Financial Statements are an integral part of these statements. | 16

Table 2 below shows a Condensed Statement of Revenue, Expenses, and Changes in Net Position for the years ended March 31, 2018, 2017, and 2016. The change in net position increased from $ 4.6 million in fiscal year 2017 to $ 9.0 million in fiscal year 2018. Operating income increased $ 381,000 over last year while non-operating revenue (expense) increased $ 3.2 million over fiscal year 2017.

	2018	2017	2016
Operating revenue	$ 21,499,186	$ 20,849,832	$ 19,713,716
Operating expenses	15,978,558	15,710,138	14,557,000
Operating income	5,520,628	5,139,694	5,156,716
Non-operating revenue (expenses)	2,251,417	(908,165)	(1,983,244)
Income before capital contribution	7,772,045	4,231,529	3,173,472
Capital contribution	1,224,093	324,142	551,477
Change in net position	8,996,138	4,555,671	3,724,949
Net position, beginning of year	81,380,843	76,825,172	73,100,223
Net position, end of year	$ 90,376,981	$ 81,380,843	$ 76,825,172

Table 2 - Condensed Statement of Revenues, Expenses, and Changes in Net Position

Table 3 and Table 4 below show a breakdown of fiscal year 2018 Operating Revenue and Operating Expenses, respectively.

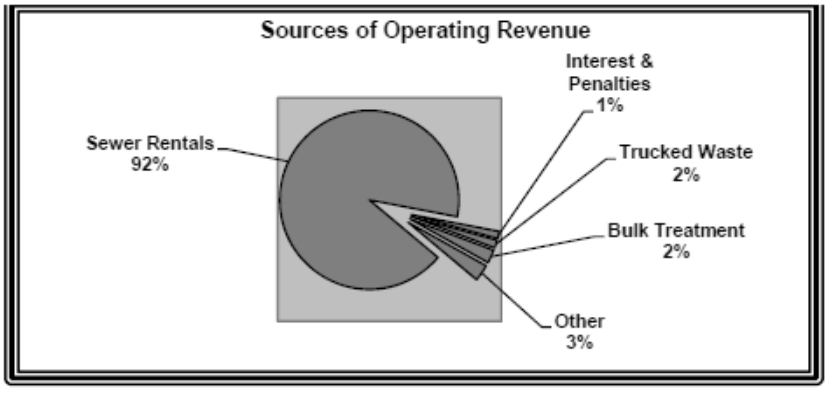


Table 3 - Sources of Operating Revenue - Fiscal Year 2018

Financial Analysis (Continued)

Table 2 below shows a Condensed Statement of Revenue, Expenses, and Changes in Net Position for the years ended March 31, 2019, 2018, and 2017. The change in net position decreased from $ 9.0 million in fiscal year 2018 to $ 6.1 million in fiscal year 2019. Operating income increased $ 564,000 over last year while non-operating revenue (expense) decreased $ 3.1 million over fiscal year 2018.

	2019	2018	2017
Operating revenue	$ 22,974,614	$ 21,499,186	$ 20,849,832
Operating expenses	16,889,502	15,978,558	15,710,138
Operating income	6,085,112	5,520,628	5,139,694
Non-operating revenue (expenses)	(825,158)	2,251,417	(908,165)
Income before capital contribution	5,259,954	7,772,045	4,231,529
Capital contribution	840,017	1,224,093	324,142
Change in net position	6,099,971	8,996,138	4,555,671
Net position, beginning of year	90,376,981	81,380,843	76,825,172
Net position, end of year	$ 96,476,952	$ 90,376,981	$ 81,380,843

Table 2 - Condensed Statement of Revenues, Expenses, and Changes in Net Position

Table 3 and Table 4 below show a breakdown of fiscal year 2019 Operating Revenue and Operating Expenses, respectively.

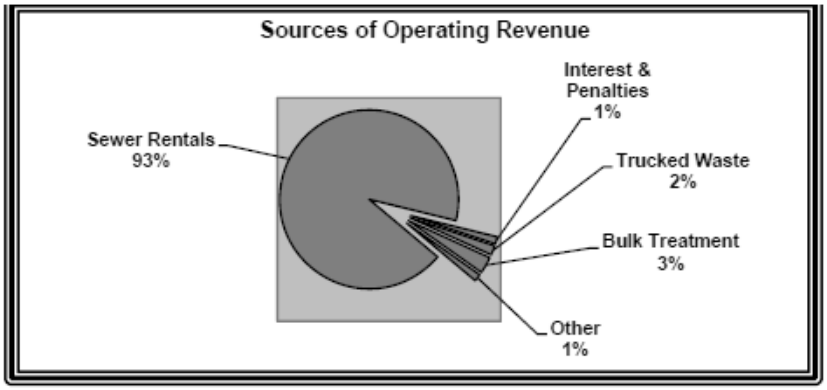


Table 3 - Sources of Operating Revenue - Fiscal Year 2019

Table 2 below shows a Condensed Statement of Revenue, Expenses, and Changes in Net Position for the years ended March 31, 2020, 2019, and 2018. The change in net position increased from $ 6.1 million in fiscal year 2019 to $ 7.6 million in fiscal year 2020. Operating income increased $ 847,000 over last year while non-operating expenses decreased $ 650,000 over fiscal year 2019.

	2020	2019	2018
Operating revenue	$ 23,304,048	$ 22,943,962	$ 21,499,186
Operating expenses	16,402,468	16,889,502	15,978,558
Operating income	6,901,580	6,054,460	5,520,628
Non-operating revenue (expenses)	(144,188)	(794,506)	2,251,417
Income before capital contribution	6,757,392	5,259,954	7,772,045
Capital contribution	851,741	840,017	1,224,093
Change in net position	7,609,133	6,099,971	8,996,138
Net position, beginning of year	96,476,952	90,376,981	81,380,843
Net position, end of year	$ 104,086,085	$ 96,476,952	$ 90,376,981

Table 2 - Condensed Statement of Revenues, Expenses, and Changes in Net Position

Table 3 and Table 4 below show a breakdown of fiscal year 2020 Operating Revenue and Operating Expenses, respectively.

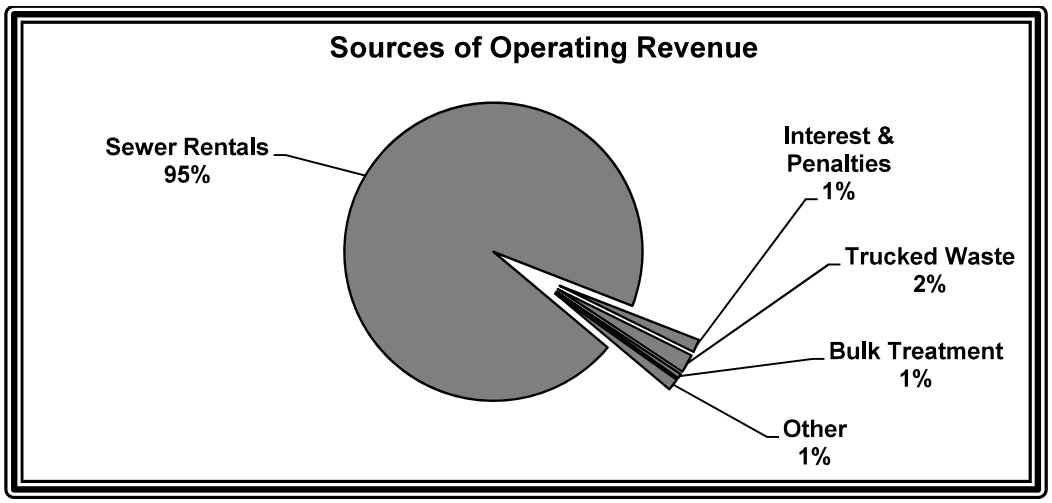


Table 3 - Sources of Operating Revenue - Fiscal Year 2020

Revenue

In fiscal year 2018, revenue exceeded budgeted revenue by 7.2% resulting from capacity reservation and tapping fee income exceeding budget, which offset below-budget investment and other income.

Expenses

Expenses, excluding depreciation, were 5.3% over budget. Interest expense was below budget as 52% of paid interest expense was capitalized as project costs. This was offset by above-budget expenditures in Administrative and Treatment Plant expenses. Higher than budgeted legal expenses of $ 31,000 and amortization of pension liability of $ 58,000 generated above-budget Administrative expenses. Treatment plant expenses for nutrient credit purchases to remain in compliance with the Authority's discharge permit were over-budget by $ 62,000 and expenses for sludge disposal were over-budget by $ 91,000. Above-budget expense for depreciation of $ 573,000 accounts for 71.2% of the negative budget variance in operating expenses.

CAPITAL ASSETS AND DEBT ADMINISTRATION

Capital Assets

The Authority's capital assets, net of accumulated depreciation, as of March 31, 2018 were $ 141.2 million. The Authority capitalizes all assets costing more than $ 20,000 whose expected life exceeds 12 months. A condensed statement of capital assets for fiscal years 2018, 2017, and 2016 is presented in Table 6 below. Additional information on the Authority's capital assets can be found in Note 5 of the financial statements.

	2018	2017	2016
Construction in progress	$ 41,124,606	$ 24,247,571	$ 8,328,405
Land	95,181	95,181	95,181
Sewer System			
Lines	102,594,800	99,909,426	99,088,012
Pump stations	38,845,592	33,042,528	32,887,101
Treatment plant	38,193,779	38,039,056	37,266,392
Buildings and improvements	3,640,150	3,640,150	3,199,420
Technology	1,424,091	1,353,402	1,295,369
Vehicles	2,291,170	1,760,826	1,706,256
Equipment	830,745	830,745	830,745
	229,040,114	202,918,885	184,696,881
Total accumulated depreciation	(87,820,739)	(83,211,180)	(78,843,305)
Total Capital Assets	$ 141,219,375	$ 119,707,705	$ 105,853,576

Table 6 - Condensed Statement of Capital Assets - Fiscal Years 2018, 2017, and 2016

Budgetary Highlights (Continued)

Revenue

In fiscal year 2019, actual revenue exceeded budgeted revenue by $ 820,000 resulting from sewer rental, investment, and other income exceeding budget. These were partially offset by below-budget revenue in capacity reservation and tapping fee income.

Expenses

Expenses, excluding depreciation, were $ 1.5 million over budget. Above average rainfall generated a 40% increase in flow through the collection system and treatment plant for the year. Consequently, electricity and chemical costs, sewer treatment costs from the City of Lancaster and the Borough of Columbia, and nutrient credit purchase costs were $ 1.4 million over budget. When combined with extensive rehabilitation of the centrifuge at the treatment plant, the operating expenses, excluding depreciation, exceeded budget by $ 1.5 million. Above-budget expense for depreciation of $ 308,000 accounts for the balance of the negative budget variance in operating expenses.

CAPITAL ASSETS AND DEBT ADMINISTRATION

Capital Assets

The Authority's capital assets, net of accumulated depreciation, as of March 31, 2019 were $ 142.3 million. The Authority capitalizes all assets costing more than $ 20,000 whose expected life exceeds 12 months. A condensed statement of capital assets for fiscal years 2019, 2018, and 2017 is presented in Table 6 below. Additional information on the Authority's capital assets can be found in Note 5 of the financial statements.

	2019	2018	2017
Construction in progress	$ 37,011,554	$ 41,124,606	$ 24,247,571
Land	95,181	95,181	95,181
Sewer System			
Lines	110,392,727	102,594,800	99,909,426
Pump stations	40,897,235	38,845,592	33,042,528
Treatment plant	38,262,279	38,193,779	38,039,056
Buildings and improvements	3,640,150	3,640,150	3,640,150
Technology	1,424,091	1,424,091	1,353,402
Vehicles	2,295,745	2,291,170	1,760,826
Equipment	977,181	830,745	830,745
	234,996,143	229,040,114	202,918,885
Total accumulated depreciation	(92,678,068)	(87,820,739)	(83,211,180)
Total Capital Assets	$ 142,318,075	$ 141,219,375	$ 119,707,705

**Table 6 - Condensed Statement of Capital Assets -
Fiscal Years 2019, 2018, and 2017**

In fiscal year 2020, actual revenue was below budgeted revenue by $ 7,000 resulting from below-budget revenue in sewer rental and surcharges. These were offset by above-budget revenue in capacity reservation and tapping fee income and investment income.

Expenses

Expenses were $ 127,000 under budget. Above-budget expenses for required equipment maintenance in our collection system were offset by below-budget depreciation costs as well as below-budget expenditures at the treatment plant and laboratory.

CAPITAL ASSETS AND DEBT ADMINISTRATION

Capital Assets

The Authority's total capital assets, net of accumulated depreciation, as of March 31, 2020 were $ 140.4 million. The Authority capitalizes all assets costing more than $ 20,000 whose expected life exceeds 12 months. A condensed statement of capital assets for fiscal years 2020, 2019, and 2018 is presented in Table 6 below. Additional information on the Authority's capital assets can be found in Note 5 of the financial statements.

	2020	2019	2018
Construction in progress	$ 5,206,076	$ 37,011,554	$ 41,124,606
Land	95,181	95,181	95,181
Sewer System			
Lines	112,758,402	110,392,727	102,594,800
Pump stations	41,163,499	40,897,235	38,845,592
Treatment plant	70,517,190	38,262,279	38,193,779
Buildings and improvements	3,669,937	3,640,150	3,640,150
Technology	1,424,091	1,424,091	1,424,091
Vehicles	2,346,319	2,295,745	2,291,170
Equipment	996,387	977,181	830,745
	238,177,082	234,996,143	229,040,114
Total accumulated depreciation	(97,771,861)	(92,678,068)	(87,820,739)
Total Capital Assets	$ 140,405,221	$ 142,318,075	$ 141,219,375

Table 6 - Condensed Statement of Capital Assets -
Fiscal Years 2020, 2019, and 2018

Debt Administration

As of March 31, 2020, the Authority had $ 66.4 million of bonds outstanding including $ 56.5 million in Sewer Revenue Bonds and $ 9.9 million of bonds through a subsidy agreement with the Borough of Columbia. Unamortized bond premiums of $ 2.8 million bring the total bonds payable liability to $ 69.3 million. Bond principal payments of $ 5.8 million and amortization of bond premiums of $ 0.3 million reduced the total bonds payable liability by $ 6.1 million from the March 31, 2019 balance of $ 75.4 million.

MUNICIPAL AUTHORITY OF WESTMORELAND COUNTY
Statements of Net Position
March 31, 2021 and 2020

	2021	2020
Current Assets		
Cash and cash equivalents, unrestricted (Note 3)	$ 32,955,491	$ 29,663,969
Accounts receivable, customers (net of allowance for doubtful accounts of $474,033 in 2021 and 2020)	6,110,790	7,014,694
Unbilled water and sewer service	10,669,704	10,722,797
Surcharges receivable, current portion	350,000	350,000
Other receivables	235,285	216,612
Material and supplies	3,914,453	3,630,945
Prepaid expenses	1,023,104	1,121,573
Total Current Assets	55,258,827	52,720,590
Property, Plant and Equipment		
Property, plant and equipment (Note 2)	857,061,066	813,804,411
Less: accumulated depreciation	(239,562,788)	(225,388,158)
Property, Plant and Equipment, Net	617,498,278	588,416,253
Non-Current Assets		
Surcharges receivable, net of current portion and allowance for doubtful accounts of $200,000 in 2021 and 2020	1,166,543	1,465,670
Prepaid bond insurance	920,538	867,810
Restricted assets:		
Special funds held by trustee (Note 4 & 5)	140,795,056	176,264,906
Restricted cash held by the Authority (Note 6)	3,613,385	6,663,291
Total Non-Current Assets	146,495,522	185,261,677
Total Assets	819,252,627	826,398,520
Deferred Outflows of Resources		
Net difference between projected and actual earnings on pension plan investments	-	7,199,443
Changes in assumptions related to pensions	29,403	-
Difference between expected and actual experience related to pensions	549,765	835,078
Contribution to pension plan subsequent to measurement date	51,812	-
Difference between expected and actual experience related to OPEB	16,345	20,431
Changes in assumptions related to OPEB	7,818,150	7,138,277
Deferred losses on bond refundings, net of amortization (Note 8)	3,104,156	3,413,275
Total Deferred Outflows of Resources	11,569,631	18,606,504

(continued)
See accompanying notes to the financial statements.

MUNICIPAL AUTHORITY OF WESTMORELAND COUNTY
Statements of Revenues, Expenses and Changes in Net Position
Fiscal Years Ended March 31, 2021 and 2020

	2021	2020
Operating Revenues		
Water	$ 88,548,010	$ 86,373,308
Wastewater	17,024,421	16,156,229
Other operating revenues	1,945,458	2,930,304
Total Operating Revenues	107,517,889	105,459,841
Operating Expenses		
Source of supply	1,075,085	1,072,453
Treatment system	8,688,752	8,651,822
Distribution	21,126,537	20,592,367
Engineering	1,674,676	1,599,655
Wastewater system	9,424,097	8,871,707
Landfill	4,842	4,790
Depreciation and amortization	15,777,383	14,151,165
Commercial and general	21,858,960	25,934,541
Management fee	1,350,000	1,300,000
Total Operating Expenses	80,980,332	82,178,500
Operating Income Before Non-Operating Expenses	26,537,557	23,281,341
Non-Operating Revenues (Expenses)		
Investment income	2,891,362	4,775,646
Net increase in the fair value of investments	40,103	43,786
Interest expense	(19,831,042)	(21,188,625)
Loss on disposals of property, plant and equipment	(199,495)	(775,797)
Total Non-Operating Expenses	(17,099,072)	(17,144,990)
Income Before Capital Contributions	9,438,485	6,136,351
Capital Contributions	6,497,060	5,193,678
Increase in Net Position	15,935,545	11,330,029
Total Net Position, Beginning of Fiscal Year	156,507,789	145,177,760
Total Net Position, End of Fiscal Year	$ 172,443,334	$ 156,507,789

See accompanying notes to the financial statements.

MUNICIPAL AUTHORITY OF WESTMORELAND COUNTY
Statements of Net Position
March 31, 2020 and 2019

	2020	2019
Current Assets		
Cash and cash equivalents, unrestricted (Note 3)	$ 29,663,969	$ 27,812,712
Accounts receivable, customers (net of allowance for doubtful accounts of $474,033 in 2020 and $473,827 in 2019)	7,014,694	6,547,940
Unbilled water and sewer service	10,722,797	9,852,958
Surcharges receivable, current portion	350,000	350,000
Other receivables	216,612	498,933
Material and supplies	3,630,945	2,868,304
Prepaid expenses	1,121,573	352,547
Total Current Assets	52,720,590	48,283,394
Property, Plant and Equipment		
Property, plant and equipment (Note 2)	816,019,835	767,648,700
Less: accumulated depreciation	(225,388,158)	(213,403,548)
Property, Plant and Equipment, Net	590,631,677	554,245,152
Non-Current Assets		
Surcharges receivable, net of current portion and allowance for doubtful accounts of $200,000 in 2020 and 2019	1,465,670	1,509,942
Prepaid bond insurance	867,810	913,328
Restricted assets:		
Special funds held by trustee (Note 4 & 5)	176,264,906	207,837,151
Restricted cash held by the Authority (Note 6)	6,663,291	16,415,126
Total Non-Current Assets	185,261,677	226,675,547
Total Assets	828,613,944	829,204,093
Deferred Outflows of Resources		
Net difference between projected and actual earnings on pension plan investments	7,199,443	30,552
Changes in assumptions related to pensions	-	57,541
Difference between expected and actual experience related to pensions	835,078	602,541
Contribution to pension plan subsequent to measurement date	-	150,548
Difference between expected and actual experience related to OPEB	20,431	24,517
Changes in assumptions related to OPEB	7,138,277	1,501,026
Deferred losses on bond refundings, net of amortization (Note 8)	3,413,275	4,283,283
Total Deferred Outflows of Resources	18,606,504	6,650,008

(continued)

See accompanying notes to the financial statements.

MUNICIPAL AUTHORITY OF WESTMORELAND COUNTY
Statements of Net Position
March 31, 2019 and 2018

	2019	Restated 2018
Current Assets		
Cash and cash equivalents, unrestricted (Note 3)	$ 27,812,712	$ 19,209,356
Accounts receivable, customers (net of allowance for doubtful accounts of $473,827 in 2019 and $470,533 in 2018)	6,547,940	6,298,373
Unbilled water and sewer service	9,852,958	9,851,714
Surcharges receivable, current portion	350,000	350,000
Other receivables	498,933	1,070,190
Inventory - material and supplies	2,868,304	2,515,551
Prepaid expenses	352,547	200,121
Total Current Assets	48,283,394	39,495,305
Property, Plant and Equipment		
Property, plant and equipment (Note 2)	767,648,700	711,563,565
Less: accumulated depreciation	(213,403,548)	(201,495,896)
Property, Plant and Equipment, Net	554,245,152	510,067,669
Non-Current Assets		
Surcharges receivable, net of current portion and allowance for doubtful accounts of $200,000 in 2019 and 2018	1,509,942	1,653,673
Prepaid bond insurance	913,328	958,845
Restricted assets:		
Special funds held by trustee (Note 4 & 5)	207,837,151	234,717,525
Restricted cash held by the Authority (Note 6)	16,415,126	19,597,310
Total Non-Current Assets	226,675,547	256,927,353
Total Assets	829,204,093	806,490,327
Deferred Outflows of Resources		
Net difference between projected and actual earnings on pension plan investments	30,552	-
Changes in assumptions related to pensions	57,541	77,283
Difference between expected and actual experience related to pensions	602,541	825,024
Contribution to pension plan subsequent to measurement date	150,548	56,041
Difference between expected and actual experience related to OPEB	24,517	-
Changes in assumptions related to OPEB	1,501,026	-
Deferred losses on bond refundings, net of amortization (Note 8)	4,283,283	4,612,214
Total Deferred Outflows of Resources	6,650,008	5,570,562

(continued)

See accompanying notes to the financial statements.

MUNICIPAL AUTHORITY OF WESTMORELAND COUNTY
Statements of Net Position
March 31, 2018 and 2017

	2018	2017
Current Assets		
Cash and cash equivalents, unrestricted (Note 3)	$ 19,209,356	$ 15,067,865
Accounts receivable, customers (net of allowance for doubtful accounts of $470,533 in 2018 and $458,506 in 2017)	6,298,373	5,597,012
Unbilled water and sewer service	9,851,714	9,777,602
Surcharges receivable, current portion	350,000	350,000
Other receivables	1,070,190	5,178,590
Inventory - material and supplies	2,515,551	2,289,998
Prepaid expenses	200,121	129,312
Total Current Assets	39,495,305	38,390,379
Property, Plant and Equipment		
Property, plant and equipment (Note 2)	711,563,565	662,320,792
Less: accumulated depreciation	(201,495,896)	(189,824,163)
Property, Plant and Equipment, net	510,067,669	472,496,629
Non-Current Assets		
Surcharges receivable, net of current portion and allowance for doubtful accounts of $200,000 in 2018 and 2017	1,653,673	1,959,138
Prepaid bond insurance	958,845	596,655
Restricted assets:		
Special funds held by trustee (Note 4 & 5)	234,717,525	254,963,842
Restricted cash held by authority (Note 6)	19,597,310	19,003,328
Total Non-Current Assets	256,927,353	276,522,963
Total Assets	806,490,327	787,409,971
Deferred Outflows of Resources		
Net difference between projected and actual earnings on pension plan investments	-	170,728
Changes in assumptions related to pensions	77,283	-
Difference between expected and actual experience related to pensions	825,024	104,074
Contribution to pension plan subsequent to measurement date	56,041	-
Deferred losses on bond refundings, net of amortization (Note 8)	4,612,214	1,205,212
Total Deferred Outflows of Resources	5,570,562	1,480,014

(continued)

See accompanying notes to the financial statements.

MUNICIPAL AUTHORITY OF WESTMORELAND COUNTY
Statements of Revenues, Expenses and Changes in Net Position
Fiscal Years Ended March 31, 2020 and 2019

	2020	2019
Operating Revenues		
Water	$ 86,373,308	$ 86,597,707
Wastewater	16,156,229	15,286,438
Other operating revenues	2,930,304	5,450,849
Total Operating Revenues	105,459,841	107,334,994
Operating Expenses		
Source of supply	1,072,453	935,776
Treatment system	8,651,822	8,810,618
Distribution	20,592,367	18,735,370
Engineering	1,599,655	1,530,906
Wastewater system	8,871,707	8,444,588
Landfill	4,790	4,765
Depreciation and amortization	14,151,165	13,433,385
Commercial and general	25,934,541	27,059,890
Management fee	1,300,000	1,300,000
Total Operating Expenses	82,178,500	80,255,298
Operating Income Before Non-Operating Expenses	23,281,341	27,079,696
Non-Operating Revenues (Expenses)		
Investment income	4,775,646	4,943,913
Net increase in the fair value of investments	43,786	20,450
Interest expense	(21,188,625)	(20,975,541)
Loss on disposals of property, plant and equipment	(775,797)	(403,367)
Total Non-Operating Expenses	(17,144,990)	(16,414,545)
Income Before Capital Contributions	6,136,351	10,665,151
Capital Contributions	5,193,678	6,523,749
Increase in Net Position	11,330,029	17,188,900
Total Net Position, Beginning of Fiscal Year	145,177,760	127,988,860
Total Net Position, End of Fiscal Year	$ 156,507,789	$ 145,177,760

See accompanying notes to the financial statements.

MUNICIPAL AUTHORITY OF WESTMORELAND COUNTY
Statements of Revenues, Expenses and Changes in Net Position
Fiscal Years Ended March 31, 2019 and 2018

	2019	Restated 2018
Operating Revenues		
Water	$ 86,597,707	$ 81,638,410
Wastewater	15,286,438	14,901,786
Other operating revenues	5,450,849	3,527,303
Total Operating Revenues	107,334,994	100,067,499
Operating Expenses		
Source of supply	935,776	865,364
Treatment system	8,810,618	8,002,831
Distribution	18,735,370	17,775,014
Engineering	1,530,906	1,307,465
Wastewater system	8,444,588	8,509,813
Landfill	4,765	43,367
Depreciation and amortization	13,433,385	12,577,264
Commercial and general	27,059,890	28,228,521
Management fee	1,300,000	1,225,000
Total Operating Expenses	80,255,298	78,534,639
Operating Income Before Non-Operating Revenues	27,079,696	21,532,860
Non-Operating Revenues (Expenses)		
Investment income	4,943,913	3,535,070
Net increase (decrease) in the fair value of investments	20,450	(407,750)
Interest expense	(20,975,541)	(15,262,836)
Loss on disposals of property	(403,367)	(336,175)
Total Non-Operating Expenses	(16,414,545)	(12,471,691)
Income Before Capital Contributions	10,665,151	9,061,169
Capital Contributions	6,523,749	13,400,327
Increase in Net Position	17,188,900	22,461,496
Total Net Position, Beginning of Fiscal Year	127,988,860	135,957,658
Prior Period Adjustment, see Note 19	-	(30,430,294)
Total Net Position, End of Fiscal Year	$ 145,177,760	$ 127,988,860

See accompanying notes to the financial statements.

MUNICIPAL AUTHORITY OF WESTMORELAND COUNTY
Statements of Revenues, Expenses and Changes in Net Position
Fiscal Years Ended March 31, 2018 and 2017

	2018	2017
Operating Revenues		
Water	$ 81,638,410	$ 77,440,502
Wastewater	14,901,786	14,121,562
Other operating revenues	3,527,303	2,858,021
Total Operating Revenues	100,067,499	94,420,085
Operating Expenses		
Source of supply	865,364	861,886
Treatment system	8,002,831	8,006,826
Distribution	17,775,014	17,459,687
Engineering	1,307,465	1,271,392
Wastewater system	8,509,813	7,632,386
Landfill	43,367	12,005
Depreciation and amortization	12,577,264	11,562,121
Commercial and general	28,228,521	25,817,145
Management fee	1,225,000	1,200,000
Total Operating Expenses	78,534,639	73,823,448
Operating Income Before Non-Operating Revenues	21,532,860	20,596,637
Non-Operating Revenues (Expenses)		
Investment income	3,535,070	3,225,914
Net increase (decrease) in the fair value of investments	(407,750)	431,964
Interest expense	(15,262,836)	(15,032,096)
Loss on disposals of property	(336,175)	(1,732,987)
Total Non-Operating Expenses	(12,471,691)	(13,107,205)
Income Before Capital Contributions	9,061,169	7,489,432
Capital Contributions	13,400,327	13,432,729
Increase in Net Position	22,461,496	20,922,161
Total Net Position, Beginning of Year	135,957,658	115,035,497
Total Net Position, End of Year	$ 158,419,154	$ 135,957,658

See accompanying notes to the financial statements.

ERIE CITY WATER AUTHORITY
(AKA ERIE WATER WORKS)
Statement of Net Position
December 31, 2020 and 2019

	2020	2019
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES		
Current Assets		
Cash and cash equivalents	**$ 15,840,370**	$ 12,385,206
Restricted cash - workers' compensation fund	**279,455**	338,915
Investments - cash and certificates of deposit (at par)	**795,109**	846,875
Receivables - customers, net	**5,791,611**	3,974,224
Current portion of customer receivables	**19,600**	19,600
Inventories, at cost	**1,549,331**	1,627,035
Prepaid expenses	**1,340,963**	865,774
Total current assets	**25,616,439**	20,057,629
Non-Current Assets		
Restricted investments		
Amount provided for retirement of long-term debt	**7,686,000**	8,864,436
Amount provided for future system improvements	**11,941,433**	19,881,874
Board designated reserve for capital expenditures	**5,000,000**	5,000,000
Investment in self-liquidity bonds	**5,225,000**	5,325,000
Long-term customer receivables	**117,932**	137,221
Capital assets, net of accumulated depreciation		
Contributed capital assets	**2,508,257**	2,829,653
Purchased capital assets	**197,500,684**	191,269,705
Total non-current assets	**229,979,306**	233,307,889
Total assets	**255,595,745**	253,365,518
Deferred Outflows of Resources		
Deferred City of Erie lease payments	**103,067,058**	5,033,530
Changes in pension experience	**1,753,594**	1,254,876
Changes in pension investment returns	**-**	-
Changes in pension assumptions	**1,969,111**	2,724,471
Deferred loss on advanced bond refunding, net	**23,376,680**	11,836,635
Deferred bond swap fee, net	**11,179,830**	11,912,546
Total deferred outflow of resources	**141,346,273**	32,762,058
Total assets and deferred outflow of resources	**$ 396,942,018**	$ 286,127,576

The notes to the financial statements are an integral part of these statements.

ERIE CITY WATER AUTHORITY
(AKA ERIE WATER WORKS)
Statement of Revenues, Expenses and Changes in Net Position
December 31, 2020 and 2019

	2020	2019
Operating revenues	**$ 40,725,085**	$ 40,086,711
Operating expenses		
Personnel	**6,112,365**	6,345,483
Personnel benefits	**3,504,971**	4,689,942
Supplies and materials	**2,012,909**	2,010,029
Other services and charges	**5,037,083**	5,498,375
City of Erie lease	**2,850,000**	3,600,000
Total operating expenses	**19,517,328**	22,143,829
Operating income before depreciation	**21,207,757**	17,942,882
Depreciation	**7,746,138**	8,393,230
Operating income	**13,461,619**	9,549,652
Non-operating revenue (expense)		
Interest expense	**(13,588,313)**	(12,123,859)
Other revenue (expense), net	**(153,290)**	1,651,260
Net loss before contributed capital	**(279,984)**	(922,947)
Capital asset contributions	**-**	-
CHANGE IN NET POSITION	**(279,984)**	(922,947)
Net Position		
Beginning of year	**(55,786,094)**	(54,863,147)
End of year	**$ (56,066,078)**	$ (55,786,094)

The notes to the financial statements are an integral part of these statements.

Erie City Water Authority
Statements of Financial Position

	As of December 31,			
	2019	2018	Change	% Change
ASSETS				
Current assets	$ 20,057,629	$ 17,026,267	$ 3,031,362	17.80%
Restricted investments	28,746,310	32,386,195	(3,639,885)	-11.24%
Capital assets, net of accumulated depreciation	194,099,358	191,070,499	3,028,859	1.59%
Other non-current assets	10,462,221	10,481,961	(19,740)	-0.19%
Deferred outflows of resources	32,762,058	34,530,203	(1,768,145)	-5.12%
Total Assets and Deferred Outflows	$ 286,127,576	$ 285,495,125	$ 632,451	0.22%
LIABILITIES AND NET POSITION				
Current liabilities	$ 7,175,123	$ 8,766,073	$ (1,590,950)	-18.15%
Long-term debt, net of unaccreted discounts	306,968,863	310,547,787	(3,578,924)	-1.15%
Other non-current liabilities	25,881,649	21,044,412	4,837,237	22.99%
Deferred inflow of resources	1,888,035	-	1,888,035	0.00%
Total liabilities and deferred inflow of resources	341,913,670	340,358,272	1,555,398	0.46%
Net position -				
Net investment in capital assets	15,948,959	11,468,894	4,480,065	39.06%
Restricted for capital projects, debt service	8,864,436	9,849,537	(985,101)	-10.00%
Unrestricted	(80,599,489)	(76,181,578)	(4,417,911)	5.80%
Total net position	(55,786,094)	(54,863,147)	(922,947)	1.68%
Total liabilities and net position	$ 286,127,576	$ 285,495,125	$ 632,451	0.22%

Changes in Net Position –

The Authority's net position decreased by $922,947 in 2019. The 2019 decrease in the net position resulted from several factors related to materials and supplies costs and personnel related costs that was offset by savings on interest expense.

Total operating revenues for the year ended December 31, 2019 of $40,086,711 increased $316,562 (0.80%) compared to December 31, 2018.

Total operating expenses of $22,143,829 increased $756,012 (3.53%).

Total 2019 expenses of $42,660,918 compared to $44,001,398 in 2018 decreased $1,340,480 (11.11%).

to $285.50 million. Total liabilities and inflows increased $36.14 million [11.88%] to $340.36 million. The primary reasons for the increase are discussed in the following *Changes in Net Position* section.

Restricted investments of $32.39 million increased $21.03 million [285.19%], primarily from $27 million of new capital project funds from the 2018 bond issue.

Capital assets (net of depreciation) increased $3.09 million. Gross capital assets (before depreciation) increased $11.47 million representing capital additions in accordance with the Authority's adopted capital project program.

ERIE CITY WATER AUTHORITY
STATEMENTS OF FINANCIAL POSITION

	As of December 31,			
	2018	2017	$ Change	% Change
ASSETS				
Current assets	$ 17,026,267	$ 13,116,705	$ 3,909,562	29.8%
Restricted investments	32,386,195	11,356,255	21,029,940	185.2%
Capital assets, net of accumulated depreciation	191,070,499	187,981,855	3,088,644	1.6%
Other non-current assets	10,481,961	10,665,706	(183,745)	(1.7%)
Deferred outflows of resources	34,530,203	30,999,314	3,530,889	11.4%
Total Assets and Deferred Outflows	$ 285,495,125	$ 254,119,835	$ 31,375,290	12.3%

	As of December 31,			
	2018	2017	$ Change	% Change
LIABILITIES AND NET ASSETS				
Current liabilities	$ 8,766,073	$ 7,893,978	$ 872,095	29.8%
Long-term debt, net of unaccreted discounts	310,547,787	284,395,079	26,152,708	9.2%
Other non-current liabilities	21,044,412	11,930,218	(9,114,194)	76.4%
Deferred inflow of resources	-	1,113,991	(1,113,991)	-
Total liabilities and deferred outflow of resources	340,358,272	305,333,266	35,025,006	11.5%
Net position –				
Invested in capital assets, net of related debt	11,468,894	7,320,870	4,148,024	56.7%
Restricted for capital projects, debt service	9,849,537	7,691,083	2,158,454	28.1%
Unrestricted	(76,181,578)	(66,225,384)	(9,956,194)	(15.0%)
Total net position	(54,863,147)	(51,213,431)	(3,649,716)	(7.1%)
Total liabilities and net position	$ 285,495,125	$ 254,119,835	($ 31,375,290)	(12.3%)

Changes in Net Position –

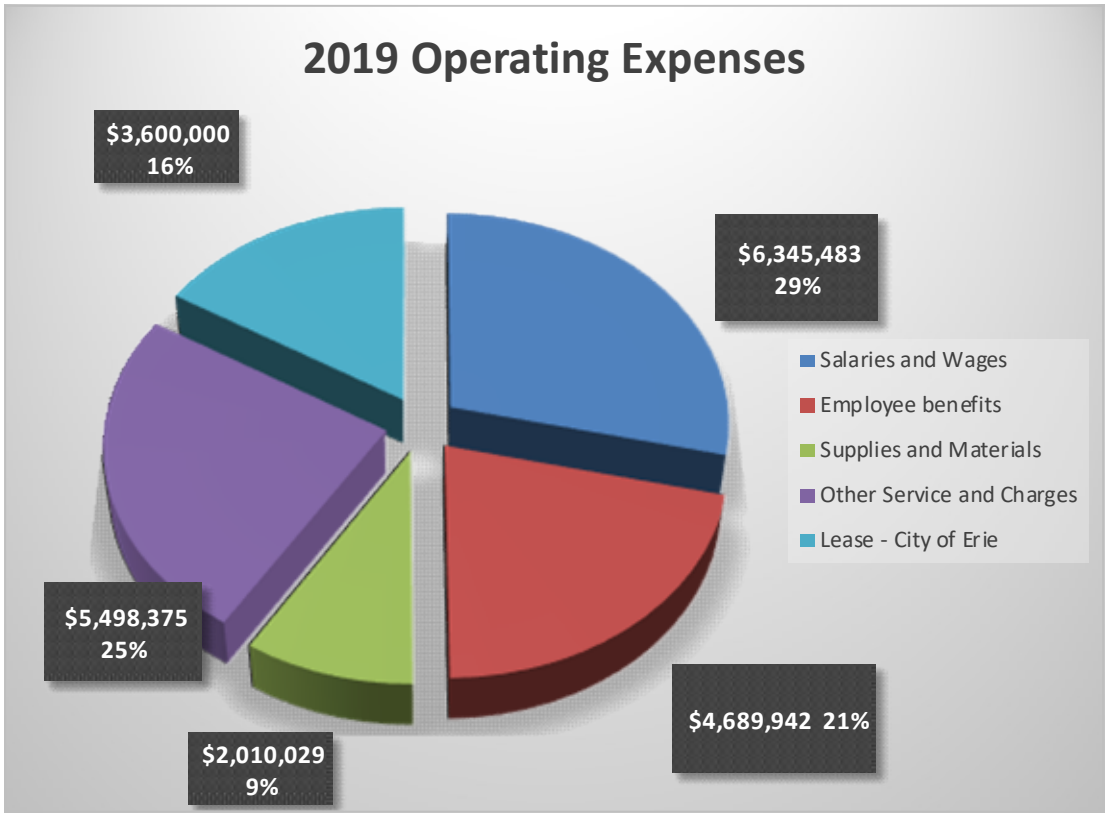
The Authority's net position decreased by <$3.65> million in 2018, compared to a <$.84> million decrease in 2017. The 2018 decrease in the net position resulted from several factors – $1.84 million increase in pension costs, $1.1 million increase in interest expense and $1.03 million of bond issue costs.

Total operating revenues for the year ended December 31, 2018 of $39.8 million increased $1.3 million [3.3%] compared to December 31, 2017.

Total operating expenses of $21.4 million increased $2.48 million [13.1%]. The majority of the

ERIE CITY WATER AUTHORITY
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	For the year ended December 31,			
	2019	2018	Change	% Change
Operations				
Operating revenues	$ 40,086,711	$ 39,770,149	$ 316,562	0.80%
Operating expenses	(22,143,829)	(21,387,817)	(756,012)	3.53%
Depreciation	(8,393,230)	(8,377,223)	(16,007)	0.19%
Operating income	$ 9,549,652	$ 10,005,109	$ (455,457)	-4.55%
Non-operating revenue (expense)				
Interest expense	$ (12,123,859)	$ (14,236,358)	$ 2,112,499	-14.84%
Other revenues	2,302,321	1,948,092	354,229	18.18%
Other expenses	(651,061)	(1,446,534)	795,473	-54.99%
	(10,472,599)	(13,734,800)	3,262,201	-23.75%
Net loss before capital contributions	(922,947)	(3,729,691)	2,806,744	-75.25%
Capital assets contributions	-	79,975	(79,975)	-100.00%
Change in net position	$ (922,947)	$ (3,649,716)	$ 2,726,769	-74.71%

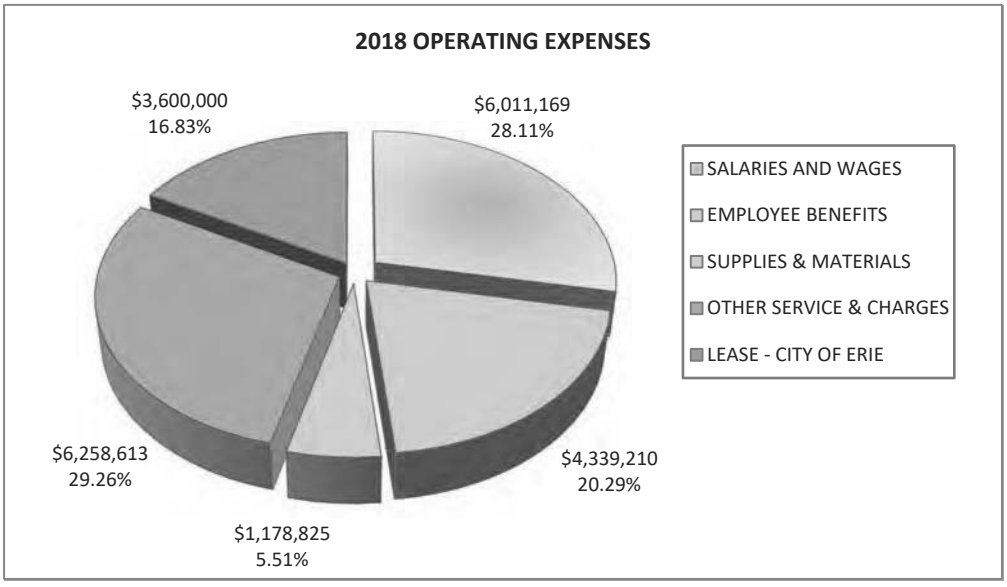


2018 decrease in operating expenses was attributable to higher pension costs and contracted services.

Total 2018 expenses of $44.0 million $40.3 million increased $3.7 million [9.18%] compared to 2017.

ERIE CITY WATER AUTHORITY
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	For the year ended December 31,			
	2018	2017	$ Change	% Change
Operations -				
Operating revenues	$ 39,770,149	$ 38,483,311	$ 1,286,838	3.3%
Operating expenses	(21,387,817)	(18,912,253)	2,475,564	13.1%
Depreciation	(8,377,223)	(8,214,879)	162,344	(2.0%)
Operating income	10,005,109	11,356,179	1,351,070	(11.9%)
Non-operating revenue (expense)				
Interest expense	(14,236,358)	(13,165,069)	1,071,289	8.1%
Other revenues	1,948,092	1,326,328	621,764	46.9%
Other expenses	(1,446,534)	(354,727)	1,091,807	307.8%
	(13,734,800)	(12,193,468)	1,541,332	12.6%
Net loss before capital contributions	(3,729,691)	(837,289)	(2,892,402)	(345.4%)
Capital asset contributions	79,975		79,975	-
Change in net position	($ 3,649,716)	($ 837,289)	($ 2,812,427)	(335.9%)



Chester Water Authority
Statements of Net Position
December 31, 2019 and 2018

Assets and Deferred Outflows of Resources

	December 31, 2019	December 31, 2018
Current Assets		
Cash and cash equivalents	$ 12,498,028	$ 9,680,971
Investments	1,224,596	1,207,385
Accounts receivable, net of allowance for doubtful accounts of $300,000 in both 2019 and 2018	4,715,593	4,215,519
Unbilled revenue	4,184,067	4,143,347
Materials and supplies	2,392,807	2,894,794
Other current assets	225,137	44,735
Total Current Assets	25,240,228	22,186,751
Non-Current Assets		
Property, plant, and equipment—net of accumulated depreciation	282,114,520	277,881,505
Net pension asset	806,245	-
Total Non-Current Assets	282,920,765	277,881,505
Restricted Assets		
Cash and cash equivalents	28,304,535	7,629,992
Total Restricted Assets	28,304,535	7,629,992
Total Assets	336,465,528	307,698,248
Deferred Outflows of Resources		
Changes in pension investment returns and actuarial assumptions	1,134,806	4,646,383
Changes in OPEB investment returns and actuarial assumptions	1,912,766	420,158
Total Deferred Outflows of Resources	3,047,572	5,066,541
Total Assets and Deferred Outflows of Resources	$ 339,513,100	$ 312,764,789

See accompanying notes to financial statements.

Chester Water Authority
Statements of Revenues, Expenses, and Changes In Net Position
For The Years Ended December 31, 2019 and 2018

	December 31, 2019	December 31, 2018
Operating Revenues		
Residential	$ 16,511,126	$ 16,270,379
Commercial	7,179,069	7,006,726
Industrial	9,832,034	8,262,780
Fire protection	4,063,901	3,902,103
Capacity charges, flat and late fee revenues	1,374,484	1,134,612
Sales to other water utilities	6,802,562	6,749,553
Total Operating Revenues	45,763,176	43,326,153
Operating Expenses		
Purification and Pumping	7,409,809	7,479,180
Distribution	6,687,166	7,989,652
Administrative	13,672,346	12,605,483
Finance/customer service, billing and collections	3,834,971	4,189,300
Depreciation	9,453,690	9,575,108
Total Operating Expenses	41,057,982	41,838,723
Operating Income	4,705,194	1,487,430
Non-Operating Revenues/(Expenses)		
Net investment income	155,689	131,632
Interest expense	(2,810,444)	(2,776,729)
Other nonoperating revenues	311,563	514,232
Amortization of bond discounts and debt issuance costs	479,795	401,140
Gain (loss) on disposal of property and equipment	302,194	17,882
Total Non-Operating Revenues/(Expenses)	(1,561,203)	(1,711,843)
Income (Loss) Before Contributions	3,143,991	(224,413)
Capital Contributions	894,723	5,652,845
Change In Net Position	4,038,714	5,428,432
Net Position - Beginning of year, as previously reported	234,034,302	233,538,507
Cumulative effect of prior period adjustment for adoption of GASB 75 - Net OPEB Liability	-	(4,932,637)
Net Position - Beginning of year, restated	234,034,302	228,605,870
Net Position - End of year	$ 238,073,016	$ 234,034,302

See accompanying notes to financial statements.

Chester Water Authority
Statements of Net Position
December 31, 2018 and 2017

Assets and Deferred Outflows of Resources

	December 31, 2018	December 31, 2017
Current Assets		
Cash and cash equivalents	$ 9,680,971	$ 12,277,333
Investments	1,207,385	1,185,056
Accounts receivable, net of allowance for doubtful accounts of $300,000 in both 2018 and 2017	4,215,519	4,018,123
Unbilled revenue	4,143,347	4,100,936
Materials and supplies	2,894,794	2,438,785
Other current assets	44,734	72,551
Total Current Assets	22,186,750	24,092,784
Non-Current Assets		
Property, plant, and equipment—net of accumulated depreciation	277,881,505	271,133,389
Net pension asset	-	1,501,182
Total Non-Current Assets	277,881,505	272,634,571
Restricted Assets		
Cash and cash equivalents	7,629,992	7,549,260
Total Restricted Assets	7,629,992	7,549,260
Total Assets	307,698,247	304,276,615
Deferred Outflows of Resources		
Changes in pension investment returns and actuarial assumptions	4,646,383	1,479,458
Changes in OPEB investment returns and actuarial assumptions	420,158	-
Total Deferred Outflows of Resources	5,066,541	1,479,458
Total Assets and Deferred Outflows of Resources	$ 312,764,788	$ 305,756,073

See accompanying notes to financial statements.

Chester Water Authority
Statements of Revenues, Expenses, and Changes In Net Position
For The Years Ended December 31, 2018 and 2017

	December 31, 2018	December 31, 2017
Operating Revenues		
Residential	$ 16,270,379	$ 16,471,074
Commercial	7,006,726	5,885,341
Industrial	8,262,780	7,414,215
Fire protection	3,902,103	4,001,045
Capacity charges, flat and late fee revenues	1,134,612	1,360,899
Sales to other water utilities	6,749,553	7,158,892
Total Operating Revenues	43,326,153	42,291,466
Operating Expenses		
Purification and Pumping	7,479,180	7,326,031
Distribution	7,989,652	7,159,659
Administrative	12,605,483	11,664,820
Finance/customer service, billing and collections	4,189,300	3,824,583
Depreciation	9,575,108	9,521,150
Total Operating Expenses	41,838,723	39,496,243
Operating Income	1,487,430	2,795,223
Non-Operating Revenues (Expenses)		
Net investment income	131,632	146,144
Interest expense	(2,776,729)	(2,681,713)
Other nonoperating revenues	514,231	982,798
Amortization of bond discounts and debt issuance costs	401,140	250,136
Gain (loss) on disposal of property and equipment	17,882	(481,900)
Total Non-Operating Revenues/(Expenses)	(1,711,844)	(1,784,535)
(Loss) Income Before Contributions	(224,414)	1,010,688
Capital Contributions	5,652,845	2,699,498
Change In Net Position	5,428,431	3,710,186
Net Position—Beginning of year, as previously reported	233,538,507	229,828,321
Cumulative effect of prior period adjustment for adoption of GASB 75 - Net OPEB Liability	(4,932,637)	-
Net Position - Beginning of year, restated	228,605,870	229,828,321
Net Position—End of year	$ 234,034,301	$ 233,538,507

See accompanying notes to financial statements.

PITTSBURGH WATER AND SEWER AUTHORITY

STATEMENTS OF NET POSITION

(Dollars expressed in thousands)

DECEMBER 31, 2020 AND 2019

	2020	2019
Assets		
Current assets:		
Cash and cash equivalents	$ 60,210	$ 64,680
Accounts receivable, net:		
Water:		
Billed	7,400	7,138
Unbilled	7,955	8,965
Total water	15,355	16,103
Wastewater treatment:		
Billed	3,676	2,130
Unbilled	3,457	3,725
Total wastewater treatment	7,133	5,855
Other receivables	1,924	2,450
Total accounts receivable, net	24,412	24,408
Prepaid expenses	1,737	707
Inventory	2,075	1,597
Total current assets	88,434	91,392
Noncurrent assets:		
Restricted assets:		
Cash and cash equivalents	16,201	16,360
Investments	9,705	9,604
Total restricted assets	25,906	25,964
Capital assets, not being depreciated	155,050	135,287
Capital assets, net of accumulated depreciation	766,600	695,291
Total noncurrent assets	947,556	856,542
Total Assets	1,035,990	947,934
Deferred Outflows of Resources		
Deferred charge on refunding	91,827	99,012
Accumulated decrease in fair value of hedging derivatives	33,863	13,351
Total Deferred Outflows of Resources	125,690	112,363

(Continued)

The notes to financial statements are an integral part of this statement.

PITTSBURGH WATER AND SEWER AUTHORITY

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

(Dollars expressed in thousands)

YEARS ENDED DECEMBER 31, 2020 AND 2019

	2020	2019
Operating Revenues:		
Residential, commercial, and industrial water sales	$ 162,676	$ 171,681
Wastewater treatment	71,899	70,970
Other	7,422	6,398
Total operating revenues	241,997	249,049
Operating Expenses:		
Direct operating expenses	92,134	89,512
Wastewater treatment	72,698	72,389
Reimbursement for City of Pittsburgh indirect services	4,289	1,991
Expense of water provided by other entities	386	1,338
Depreciation	21,659	18,011
Total operating expenses	191,166	183,241
Operating Income	50,831	65,808
Non-operating Revenues (Expenses):		
Federal and private grants	7,001	6,922
Interest revenue	201	719
Investment income (loss) - change in fair value of swap	-	(4,180)
Interest and amortization	(37,463)	(38,740)
Bond issuance costs	(2,075)	(2,462)
Total non-operating revenues (expenses)	(32,336)	(37,741)
Net Income before Capital Contribution and Special Item	18,495	28,067
Capital Contribution:		
Donated property	76	110
Special Item:		
Private lead line replacement	(18,832)	(22,283)
Net Income (Loss)	(261)	5,894
Net Position:		
Beginning of year	1,535	(4,359)
End of year	$ 1,274	$ 1,535

The notes to financial statements are an integral part of this statement.

PITTSBURGH WATER AND SEWER AUTHORITY

STATEMENTS OF NET POSITION

(Dollars expressed in thousands)

DECEMBER 31, 2019 AND 2018

	2019	2018
Assets		
Current assets:		
Cash and cash equivalents	$ 64,680	$ 46,920
Accounts receivable, net:		
Water:		
Billed	7,138	8,537
Unbilled	8,965	8,583
Total water	16,103	17,120
Wastewater treatment:		
Billed	2,130	7,014
Unbilled	3,725	3,719
Total wastewater treatment	5,855	10,733
Other receivables	2,450	1,510
Total accounts receivable, net	24,408	29,363
Prepaid expenses	707	520
Inventory	1,597	1,984
Total current assets	91,392	78,787
Noncurrent assets:		
Restricted assets:		
Cash and cash equivalents	16,360	13,970
Investments	9,604	9,356
Total restricted assets	25,964	23,326
Hedging derivative - interest rate swap	-	4,750
Capital assets, not being depreciated	135,287	139,303
Capital assets, net of accumulated depreciation	695,291	618,177
Total noncurrent assets	856,542	785,556
Total Assets	947,934	864,343
Deferred Outflows of Resources		
Deferred charge on refunding	99,012	102,534
Accumulated decrease in fair value of hedging derivatives	13,351	757
Total Deferred Outflows of Resources	112,363	103,291

(Continued)

The notes to financial statements are an integral part of this statement.

PITTSBURGH WATER AND SEWER AUTHORITY

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

(Dollars expressed in thousands)

YEARS ENDED DECEMBER 31, 2019 AND 2018

	2019	2018
Operating Revenues:		
Residential, commercial, and industrial water sales	$ 171,681	$ 159,506
Wastewater treatment	70,970	67,261
Other	6,398	4,967
Total operating revenues	249,049	231,734
Operating Expenses:		
Direct operating expenses	89,512	72,633
Wastewater treatment	72,389	71,822
Reimbursement for City of Pittsburgh services	1,991	4,911
Expense of water provided by other entities:		
Subsidy of customers located in the City	1,338	3,814
Depreciation	18,011	16,894
Total operating expenses	183,241	170,074
Operating Income	65,808	61,660
Non-operating Revenues (Expenses):		
Federal and private grants	6,922	-
Donated property	110	13,649
Interest revenue	719	469
Investment income (loss) - change in fair value of swap	(4,180)	2,542
Interest and amortization	(38,740)	(34,365)
Bond issuance costs	(2,462)	-
Total non-operating revenues (expenses)	(37,631)	(17,705)
Net Income before Special Item	28,177	43,955
Special Item:		
Private lead line replacement	(22,283)	(4,478)
Net Income	5,894	39,477
Net Position:		
Beginning of year	(4,359)	(43,836)
End of year	$ 1,535	$ (4,359)

The notes to financial statements are an integral part of this statement.

PITTSBURGH WATER AND SEWER AUTHORITY

STATEMENTS OF NET POSITION

(Dollars expressed in thousands)

DECEMBER 31, 2018 AND 2017

	2018	2017
Assets		
Current assets:		
Cash and cash equivalents	$ 46,920	$ 11,076
Accounts receivable, net:		
Water:		
Billed	8,537	9,335
Unbilled	8,583	6,760
Total water	17,120	16,095
Wastewater treatment:		
Billed	7,014	9,975
Unbilled	3,719	3,746
Total wastewater treatment	10,733	13,721
Other receivables	1,510	1,074
Total accounts receivable, net	29,363	30,890
Prepaid expenses	520	674
Inventory	1,984	3,777
Total current assets	78,787	46,417
Noncurrent assets:		
Restricted assets:		
Cash and cash equivalents	13,970	18,264
Investments	9,356	11,684
Total restricted assets	23,326	29,948
Hedging derivative - interest rate swap	4,750	-
Capital assets, not being depreciated	139,303	100,240
Capital assets, net of accumulated depreciation	618,177	589,567
Total noncurrent assets	785,556	719,755
Total Assets	864,343	766,172
Deferred Outflows of Resources		
Deferred charge on refunding	102,534	110,326
Accumulated decrease in fair value of hedging derivatives	757	3,279
Total Deferred Outflows of Resources	103,291	113,605

(Continued)

The notes to financial statements are an integral part of this statement.

PITTSBURGH WATER AND SEWER AUTHORITY

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

(Dollars expressed in thousands)

YEARS ENDED DECEMBER 31, 2018 AND 2017

	2018	2017
Operating Revenues:		
Residential, commercial, and industrial water sales	$ 159,506	$ 128,488
Wastewater treatment	67,261	68,935
Other	4,967	5,573
Total operating revenues	231,734	202,996
Operating Expenses:		
Direct operating expenses	72,633	71,156
Wastewater treatment	71,822	75,107
Reimbursement for City of Pittsburgh services	4,911	5,363
Expense of water provided by other entities:		
Subsidy of customers located in the City	3,814	5,594
Depreciation	16,894	16,172
Total operating expenses	170,074	173,392
Operating Income	61,660	29,604
Non-operating Revenues (Expenses):		
Donated property	13,649	1,595
Interest revenue	469	460
Investment income (loss) - change in fair value of swap	2,542	835
Interest and amortization	(34,365)	(34,913)
Bond issuance costs	-	(3,894)
Total non-operating revenues (expenses)	(17,705)	(35,917)
Special Item:		
Private lead line replacement	(4,478)	-
Net Income (Loss)	39,477	(6,313)
Net Position:		
Beginning of year	(43,836)	(37,523)
End of year	$ (4,359)	$ (43,836)

The notes to financial statements are an integral part of this statement.

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Valuation Date
12/31/2020

Returns Reference – Start Year
EARLIEST YEAR

Returns Reference – End Year
2020

Returns Calculation - Mean
Arithmetic
Geometric

ERP Size Premium IRP CoE WACC Summary

	Firms			Portfolio		Size Premium	
Decile	Count	Min size ('000)	Max Size ('000)	Annual Return	Beta	S&P 500	Beta Adjusted
1 - Largest	199	$29,075,803	$1,966,078,882	11.06%	0.92	(0.75%)	

2	186	$13,178,743	$28,808,073	12.82%	1.04	1.01%
3	210	$6,743,361	$13,177,828	13.66%	1.11	1.85%
4	218	$3,861,858	$6,710,676	13.67%	1.13	1.86%
5	255	$2,445,693	$3,836,536	14.49%	1.17	2.68%
6	246	$1,591,865	$2,444,745	14.82%	1.18	3.01%
7	306	$911,586	$1,591,765	15.63%	1.26	3.82%
8	365	$451,955	$911,103	15.91%	1.31	4.10%
9	412	$190,019	$451,800	16.69%	1.34	4.88%
10 - Smallest	569	$2,194	$189,831	19.64%	1.40	7.83%
1 through 2	385	$13,178,743	$1,966,078,882	11.32%	0.94	(0.48%)
3 through 5	683	$2,445,693	$13,177,828	13.80%	1.13	1.99%
6 through 8	917	$451,955	$2,444,745	15.27%	1.23	3.46%
9 through 10	981	$2,194	$451,800	17.53%	1.35	5.72%
1 through 5	1,068	$2,445,693	$1,966,078,882	11.64%	0.96	(0.17%)
6 through 10	1,898	$2,194	$2,444,745	15.49%	1.24	3.68%

S&P 500 Annual Return for Period 1928 - 2020 : 11.81%

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	WORKING NOTES										WORKING N
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
GROSS Property, plant and equipment	-	-	-		47,000,000	47,189,429	47,806,577	48,431,796	49,065,192	49,706,871	50,356,942
Accumulated Depreciation	-	-	-		-	207,261	843,216	1,487,488	2,140,187	2,801,420	3,471,302
NET PPE	-	-	-		47,000,000	46,982,168	46,963,361	46,944,308	46,925,005	46,905,451	46,885,640
Total Debt	-	-	-	-	-	-					
Net Equity	-	-	-	8,146,961	8,146,961	8,146,961					
Investor Provided Capital	-	-	-	8,146,961	8,146,961	8,146,961	-				
Depreciation / GROSS PPE	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	1.57%				0	0
				Muni CAPX	0	222,858	0	0	0	0	0
			IOU savings	0%			100%	100%	100%	100%	100%
				CAPX/Prior Yr. GROSS PPE			1.54%	1.54%	1.54%	1.54%	1.54%
				CAPX	87,357	222,858	726,057	735,552	745,172	754,917	764,790
				Dep rate	0.00%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%
				Half yr. Dep	0.00%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%
				Dep on CAPX	-	1,749	5,700	5,774	5,850	5,926	6,004
				Rate of retirement	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
				Retired property	13,104	33,429	108,909	110,333	111,776	113,238	114,719
				Dep on Retired property	-	525	1,710	1,732	1,755	1,778	1,801
				Dep on Prior yr. GROSS	243,460	239,466	740,874	750,563	760,379	770,324	780,398
				Total Dep	243,460	240,690	744,864	754,605	764,474	774,472	784,601
BEAVER											
Depreciation Expense	-	-	246,236	243,460	239,466						
				part of OCN							
				NET PPE			PURTA	0.001527765			
				Rev			Reg Assessment Fee	0.005652534			
					2020	2021	1 2022	2 2023	3 2024	4 2025	5 2026
BEAVER											
	FIX CIP			CIP	$ -	$ -	$ -	$ -	$ -	$ -	$ -
				part of OCN	= to DepX						
					87,357	222,858					
									191	71	72
					2020	2021					
						-	-	4,750.00	9,500.00	14,250.00	71,250.00
Sewer Rental Charges	0	0	3,054,418	3,147,364	3,023,166	3,023,166	3,023,166	2,349,450	2,350,140	2,351,290	
EDUs	0	0	0	0	5,107	5,107	5107	5108	5110	5113	5128
					0	0	0	1	2	3	15
		0	0	0	2553.5	5107	5107	5107.5	5109	5111.5	
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	591.9651459						
						$ 460.00	$ 460.00	$ 460.00	$ 460.00	$ 460.00	
		#DIV/0!	#DIV/0!	#DIV/0!	1183.930292	591.9651459					
BEAVER					C	3,259	9				
					E	5,107	15				
						0.64					
				1742000							
		Customer Growth				0	0	1	1	2	0.29%
		Delivered to Customer	-	18.41	18	18	18	18	18	18	18
BEAVER		Customers	3,259	3,259	3,259	3,259	3,259	3,260	3,261	3,263	3,272
		Total Revenue (Less TAP)	3,054,418	3,147,364	3,023,166	3,023,166	3,023,166	3,023,630	4,536,836	4,538,923	4,546,898
										99.98%	
		avg CUST rev	937.23	965.75	927.64	927.64	927.64	927.49	1,391.24	1,391.03	1,389.44
		avg CUST flow	-	0	0	0	0	0	0	0	0
		avg EDU rev	#DIV/0!	#DIV/0!	591.97	591.97	591.97	591.94	887.83	887.72	886.68
		avg EDU flow	#DIV/0!	#DIV/0!	0	0	0	0	0	0	0

WORKING NOTES											WORKING N
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
		Rev Calculated				3,023,166	3,023,166	3,023,630	3,024,094	4,538,227	4,545,504

	2021	2022	2023	2024	2025	2026
	Change		50.0%			8.0%
	$ 927.64	$ 927.64	$ 927.64	$ 1,391.45	$ 1,391.45	$ 1,391.45	$ 1,502.77
				$ 463.82	$ -	$ -	$ 111.32
	-	-	464	4,536,836	1,391	6,581
	3,023,166	3,023,166	3,023,630	4,536,836	4,538,923	4,546,898
	-	-	1,511,815	-	-	363,752

Prior yr							
NET PURTA	0.1432%			67,278	67,252	67,224	67,197	67,169
REV Reg Assessment	0.5690%			17,215	17,215	25,819	25,827	25,839
				84,493	84,467	93,043	93,024	93,008

City of Beaver Falls Wastewater System Assets	
Investor Provided (	8,146,961
Gross PP&E	47,000,000
Net PP&E	47,000,000
Revenues	3,025,415
EBITDA	773,752
EBIT	533,061
Customers	3,259
Population	15,580

G PPE	-	-	47,000,000	47,189,429	
NPPE	-	-	47,000,000	46,982,168	
Cust	3,259	3,259	3,259	3,259	

	2016	2017	2018	2019	2020	2021	2022			
BEAVER										
LESS: EOS - Wages & Benefits	0	-	-	-	-	926,870		0.15		LESS: EOS - Wages &
LESS: EOS - Professional Services	0	0	0	0	-	-		0.5		LESS: EOS - Professi
LESS: EOS - Eliminated Expenses	0	0	0	0	-	240,000				LESS: EOS - Elim
BEAVER										
Wages			0	0	0	926,870				
Professional Services					0	0				
Eliminated Exp			0	0	0	240,000				

BEAVER					included in OCN	= to DepX
Reported CAPX - from the financials	0	0	5,945	2,811	87,357	222,858

	2016	2017	2018	2019	2020	Assets	Per Books	Difference
GROSS Property, plant and equipment	-	-	-	-	47,000,000	47,000,000	-	
Accumulated Depreciation	-	-	-	-	-	-	-	
NET PPE	-	-	-	-	47,000,000	47,000,000	-	47,000,000

WORKING NOTES								WORKING N			
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Total Debt	-	-	-	-	-			737,900			
Net Equity	-	-	-	8,146,961	8,146,961						
Investor Provided Capital	-	-	-	8,146,961	8,146,961						
Depreciation Rate	0.00%	0.00%	0.00%	#DIV/0!	1.57%						
Depreciation Expense	-	-	246,236	243,460	239,466	737,900.00					

	2021	2022	2023	2024	2025		
CAPX	0	0	0	0	0	0	

NOTES	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
GROSS Property, plant and equipment	51,015,515	51,682,701	52,358,612	53,043,363	53,737,069	54,439,848	55,151,818	55,873,099	56,603,813	57,344,083	58,094,035	58,853,795	59,623,490	60,403,252	61,193,211
Accumulated Depreciation	4,149,944	4,837,463	5,533,971	6,239,589	6,954,436	7,678,631	8,412,297	9,155,558	9,908,539	10,671,369	11,444,176	12,227,089	13,020,240	13,823,764	14,637,798
NET PPE	46,865,571	46,845,238	46,824,641	46,803,774	46,782,633	46,761,217	46,739,521	46,717,541	46,695,274	46,672,714	46,649,859	46,626,706	46,603,250	46,579,488	46,555,413
Total Debt															
Net Equity															
Investor Provided Capital															
Depreciation / GROSS PPE															
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%
	774,792	784,925	795,190	805,590	816,125	826,799	837,612	848,566	859,664	870,906	882,296	893,835	905,524	917,367	929,364
	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%
	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%
	6,082	6,162	6,242	6,324	6,407	6,490	6,575	6,661	6,748	6,837	6,926	7,017	7,108	7,201	7,296
	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
	116,219	117,739	119,279	120,839	122,419	124,020	125,642	127,285	128,950	130,636	132,344	134,075	135,829	137,605	139,405
	1,825	1,849	1,873	1,897	1,922	1,947	1,973	1,998	2,025	2,051	2,078	2,105	2,133	2,160	2,189
	790,604	800,944	811,418	822,030	832,781	843,672	854,706	865,884	877,208	888,680	900,302	912,076	924,005	936,089	948,331
	794,861	805,257	815,788	826,457	837,266	848,215	859,308	870,546	881,931	893,466	905,150	916,988	928,980	941,129	953,438

BEAVER

Depreciation Expense

	6 2027	7 2028	8 2029	9 2030	10 2031	11 2032	12 2033	13 2034	14 2035	15 2036	16 2037	17 2038	18 2039	19 2040	20 2041
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	56														
	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00
Sewer Rental Charges															
EDUs	5143	5158	5173	5188	5203	5218	5233	5248	5263	5278	5293	5308	5323	5338	5353
	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15

BEAVER

	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%
	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
BEAVER	3,282	3,291	3,301	3,311	3,320	3,330	3,339	3,349	3,359	3,369	3,378	3,388	3,398	3,408	3,418
	4,924,891	4,939,173	4,953,497	5,191,416	5,206,471	5,221,570	5,472,364	5,488,234	5,504,150	5,757,477	5,774,173	5,999,392	6,016,790	6,257,505	6,275,652
		100.00%													
	1,500.60	1,500.60	1,500.60	1,568.12	1,568.12	1,568.12	1,638.69	1,638.69	1,638.69	1,709.15	1,709.15	1,770.68	1,770.68	1,836.20	1,836.20
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	957.59	957.58	957.57	1,000.66	1,000.67	1,000.68	1,045.74	1,045.78	1,045.82	1,090.84	1,090.91	1,130.25	1,130.34	1,172.26	1,172.36
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

!OTES

	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
	4,553,491	4,932,032	4,946,335	4,960,680	5,198,944	5,214,020	5,229,141	5,480,299	5,496,192	5,512,131	5,765,825	5,782,546	6,008,091	6,025,514	6,266,578

	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
			4.5%			4.5%			4.3%		3.6%		3.7%		3.5%
	$ 1,502.77	$ 1,502.77	$ 1,570.40	$ 1,570.40	$ 1,570.40	$ 1,641.06	$ 1,641.06	$ 1,641.06	$ 1,711.63	$ 1,711.63	$ 1,773.25	$ 1,773.25	$ 1,838.86	$ 1,838.86	$ 1,902.30
	$ -	$ -	$ 67.62	$ -	$ -	$ 70.67	$ -	$ -	$ 70.57	$ -	$ 61.62	$ -	$ 65.61	$ -	$ 63.44
	6,593	7,141	7,162	7,183	7,528	7,549	7,571	7,935	7,958	7,981	8,348	8,373	8,699	8,724	9,073
	4,924,891	4,939,173	4,953,497	5,191,416	5,206,471	5,221,570	5,472,364	5,488,234	5,504,150	5,757,477	5,774,173	5,999,392	6,016,790	6,257,505	6,275,652
	-	-	222,907	-	-	234,971	-	-	236,678	-	207,870	-	222,621	-	216,510
	67,140	67,111	67,082	67,053	67,023	66,993	66,962	66,931	66,900	66,868	66,835	66,803	66,769	66,736	66,702
	27,954	28,035	28,117	29,467	29,552	29,638	31,061	31,151	31,241	32,678	32,773	34,051	34,149	35,515	35,618
	95,094	95,146	95,199	96,520	96,575	96,631	98,023	98,082	98,141	99,546	99,608	100,854	100,918	102,251	102,320

BEAVER

LESS: EOS - Wages & Benefits	Wages & Benefits	15% savings	15%	0.15
LESS: EOS - Professional Services	Net Professional Services	50% savings	50%	0.5
LESS: EOS - Eliminated Expenses	Line Rentals	10% savings	100%	1

BEAVER
Wages
Professional Services

Eliminated Exp

BEAVER
Reported CAPX - from the financials

GROSS Property, plant and equipment
Accumulated Depreciation
NET PPE

NOTES	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Total Debt															
Net Equity															
Investor Provided Capital															
Depreciation Rate															
Depreciation Expense															
CAPX															

KROLL

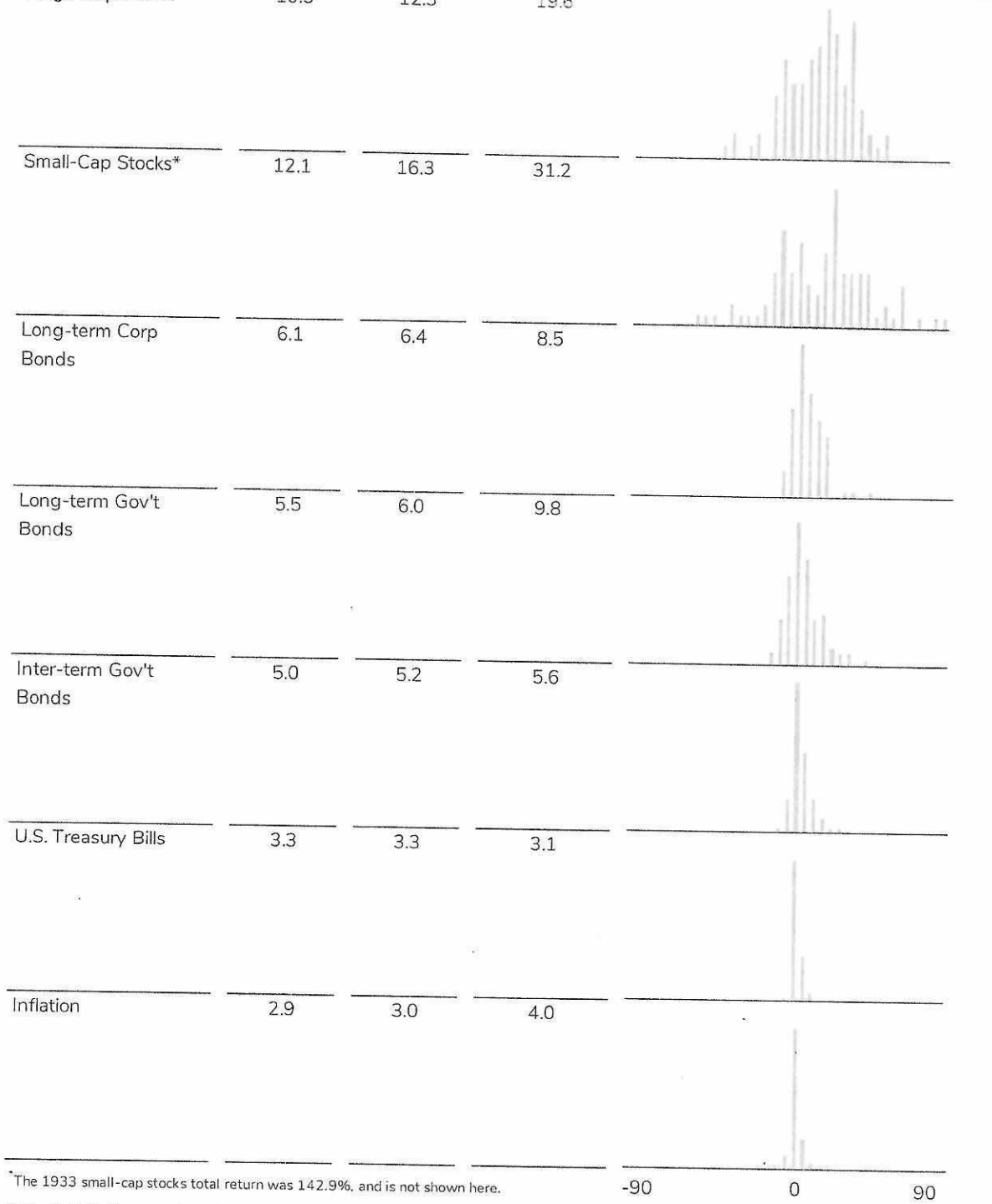
2022 SBBI® Yearbook

Stocks, Bonds, Bills, and Inflation®

U.S. Capital Markets Performance by
Asset Class 1926–2021

Exhibit 2.3: Basic Series, Summary Statistics of Annual Total Returns (%)
1926–2021

Series	Geometric Mean (%)	Arithmetic Mean (%)	Standard Deviation (%)	Distribution (%)
Large-Cap Stocks	10.5	12.3	19.6	
Small-Cap Stocks*	12.1	16.3	31.2	
Long-term Corp Bonds	6.1	6.4	8.5	
Long-term Gov't Bonds	5.5	6.0	9.8	
Inter-term Gov't Bonds	5.0	5.2	5.6	
U.S. Treasury Bills	3.3	3.3	3.1	
Inflation	2.9	3.0	4.0	



*The 1933 small-cap stocks total return was 142.9%, and is not shown here.

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Exhibit 6.8: Total Returns, Income Returns, and Capital Appreciation Returns of the SBBI® Asset Classes; Summary Statistics of Annual Returns (%)
1926–2021

	Geometric Mean (%)	Arithmetic Mean (%)	Standard Deviation (%)	Serial Correlation
Large-Cap Stocks				
Total Return	10.5	12.3	19.6	0.01
Income	3.9	3.9	1.6	0.92
Capital Appreciation	6.4	8.2	19.0	0.01
Small-Cap Stocks (TR)	12.1	16.3	31.2	0.05
Long-term Corp Bonds (TR)	6.1	6.4	8.5	0.01
Long-term Gov't Bonds				
Total Return	5.5	6.0	9.8	-0.16
Income	4.8	4.9	2.6	0.96
Capital Appreciation	0.5	0.9	8.9	-0.25
Inter-term Gov't Bonds				
Total Return	5.0	5.2	5.6	0.14
Income	4.3	4.3	2.9	0.96
Capital Appreciation	0.6	0.7	4.4	-0.17
U.S. Treasury Bills (TR)	3.3	3.3	3.1	0.92
Inflation	2.9	3.0	4.0	0.62

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In general, risk is rewarded by a higher return over the long term. For example, Exhibit 6.8 shows that over the 1926–2021 time horizon small-cap stocks were the riskiest asset class with a standard deviation of 31.2%, but also provided the greatest rewards to long-term investors, with an arithmetic mean annual return of 16.3%. Comparably, the risk (as measured by standard deviation) of large-cap stocks was significantly lower at 19.6%, and the reward (as measured by arithmetic average annual return) of large-cap stocks was correspondently lower at 12.3%.

U.S. Treasury bills, with a standard deviation of 3.1%, were nearly riskless and had the lowest arithmetic mean annual return at 3.3%.

Inflation-Adjusted Series Summary Statistics

Inflation-adjusted basic series summary statistics are presented in Exhibit 6.9. Note that the real rate of interest is close to zero (0.4%) on average. For the 96-year period, the geometric and arithmetic means are lower by the amount of inflation than those of the nominal series.

Note that this increased return comes at a price: risk (as measured by standard deviation) increased from 19.6% for large-cap stocks to 31.2% for small-cap stocks. The relationship between risk and return is a fundamental principle of finance. History tells us that small companies are riskier than large companies. Investors are compensated for taking on this additional risk by the higher returns provided by small companies.

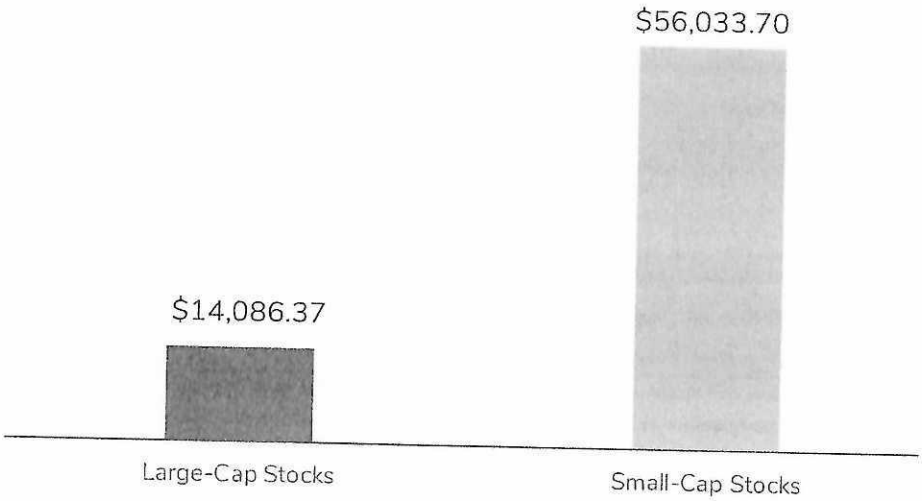
Exhibit 7.1: Summary Statistics of Large-Cap Stocks and Small-Cap Stocks (%)
1926–2021

	Geometric Mean (%)	Arithmetic Mean (%)	Standard Deviation (%)
Large-Cap Stocks	10.5	12.3	19.6
Small-Cap Stocks	12.1	16.3	31.2

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The differences in the performance of large-cap stocks and small-cap stocks can have important implications for investors. Exhibit 7.2 is a graphical depiction of the value of $1 invested at the end of 1925 in large-cap and small-cap stocks and held through December 31, 2021 (a total of 96 years).

Exhibit 7.2: The Value of $1 Invested in Large-Cap and Small-Cap Stocks, 1926–2021
Index (Year-end 1925 = $1.00)



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120 months (10-years), to 240 months (20-years) and finally to 360 months (30-years), small stocks increasingly outperform large stocks (55%, 66%, 88%, and 96% of the time, respectively).

This same pattern of increasing outperformance of small stocks as the holding period is increased can also be seen in the three "Post Banz" periods.

Long-term Returns in Excess of Systematic Risk

The capital asset pricing model, or CAPM, does not fully account for the higher returns of small-cap stocks. The textbook CAPM can be expressed as follows:

$$k_e = R_f + \beta \times (RP_m)$$

Where:

k_e	=	Cost of equity capital
R_f	=	Risk-free rate
β	=	Beta
RP_m	=	Equity risk premium (also referred as ERP)

According to the CAPM, the expected return on a security should consist of the riskless rate plus an additional return to compensate for the systematic risk of the security. The return in excess of the riskless rate is estimated in the context of the CAPM by multiplying the equity risk premium by beta. The equity risk premium is the return that compensates investors for taking on risk equal to the risk of the market as a whole (systematic risk). Beta measures the extent to which a security or portfolio is exposed to systematic risk.

The beta of each decile indicates the degree to which the decile's return moves with that of the overall market. A beta greater than one indicates that the security or portfolio has greater systematic risk than the market; according to the CAPM equation, investors are compensated for taking on this additional risk.

CAPM is an attempt to predict *future* returns. CAPM can be used to see how well it would have done predicting returns that we *already know* (i.e., historical returns; returns that have already occurred). This is called "back-testing". If what "actually happened" is greater than "what CAPM would have predicted", then CAPM fell short of explaining what actually happened.

Smaller companies tend to have returns that are not fully explained by their higher betas, so return in excess of that predicted by CAPM tends to *increase* as one moves from the largest companies to the smallest companies. This size related phenomenon prompted a revision to the CAPM to include a size premium. A size premium (as used in the CAPM equation) is thus a measure of "what actually happened" minus "what textbook CAPM predicted":

Size Premium = Actual Excess Return – Excess Return Predicted by CAPM

A size premium is a common adjustment that analysts make to the textbook CAPM when developing cost of equity capital estimates.[189] [190] This is sometimes referred to as the "modified" CAPM:

$$k_e = R_f + \beta \times (RP_m) + RPs$$

Where:

k_e	=	Cost of equity capital
R_f	=	Risk-free rate
β	=	Beta
RP_m	=	Equity risk premium (also referred as ERP)
RPs	=	Size Premium

The size effect is not without controversy, nor is this controversy something new. Traditionally, small companies are believed to have greater required rates of return than large companies because small companies are inherently riskier. It is not clear, however, whether this is due to size itself, or to other factors closely related to or correlated with size (e.g., liquidity).[191]

189 The CRSP Deciles Size Study and Risk Premium Report Study, both of which provide size premia and other risk premia based upon data licensed from the Center for Research in Security Prices (CRSP) at the University of Chicago Booth School of Business, are fully available in the Kroll Cost of Capital Navigator platform at kroll.com/costofcapitalnavigator (subscription required). CRSP® is a registered trademark and service mark of Center for Research in Security Prices, LLC and has been licensed for use by Kroll, LLC. The Kroll publications and services are not sponsored, sold or promoted by CRSP®, its affiliates or its parent company. To learn more about CRSP, visit www.crsp.org.

190 A detailed discussion of company size and return (and size premia) based upon CRSP deciles 1-10 and the 10th decile split (10a, 10b, 10w, 10x, 10y, and 10z) is available in the Resources Library of the Cost of Capital Navigator at kroll.com/costofcapitalnavigator. (subscription required).

191 For more information, see the Resources section of the Cost of Capital Navigator at kroll.com/costofcapitalnavigator. A comprehensive discussion of the size effect is in the Cost of Capital Navigator "U.S. Cost of Capital Module's" Resources Library.

Exhibit 10.8: Equity Risk Premium Calculated Using the S&P 500 and the Income Return on Three Government Bonds of Different Horizons (%)
1926–2021

	Long-horizon	Intermediate-horizon	Short-horizon
S&P 500	7.46	8.04	9.03

© Kroll, LLC. Source of underlying data: Morningstar, Inc. Used with permission. All rights reserved. Calculations by Kroll. Series used: (i) SBBI Large-cap Stocks total return series (essentially the S&P 500 Index), (ii) SBBI Long-term Government Bond income return series (20-year maturity), (iii) SBBI Intermediate-term Government Bond income return series (5-year maturity), (iv) SBBI 30-Day T-Bill total return series. Maturities are approximate.

The equity risk premium is calculated by subtracting the arithmetic mean of the government bond income return from the arithmetic mean of the stock market total return. Exhibit 10.9 demonstrates this calculation for the long-horizon equity risk premium, the intermediate-horizon equity risk premium, and the short-horizon equity risk premium.

Exhibit 10.9: Calculation of the Long-Horizon Equity Risk Premium, the Intermediate-Horizon Equity Risk Premium, and the Short-Horizon Equity Risk Premium (%)
1926–2021

	Arithmetic Annual Mean			
	S&P 500 (the "Market")	Risk-free Rate		Equity Risk Premium
S&P 500	12.33	4.87	=	7.46
Intermediate-horizon	12.33	4.29	=	8.04
Short-horizon	12.33	3.30	=	9.03

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The Market Benchmark and Firm Size

Although not restricted to the 500 largest companies, the S&P 500 is considered a large-cap index. The returns of the S&P 500 are market-cap-weighted. The larger companies in the index therefore receive the majority of the weight. If using a large-cap index to calculate the equity risk premium, an adjustment is usually needed to account for the different risk and return characteristics of small stocks. This was discussed in Chapter 7 on the size premium.

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Cost of Capital Professional

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Company Name
Gannett Fleming

Valuation Date
12/31/2020

Returns Reference – Start Year
EARLIEST YEAR

Returns Reference – End Year
2020

Returns Calculation - Mean
Arithmetic
Geometric

ERP Size Premium IRP CoE WACC Summary

	Firms			Portfolio		Size Premium	
Decile	Count	Min size ('000)	Max Size ('000)	Annual Return	Beta	S&P 500	Beta Adjusted
1 - Largest	199	$29,075,803	$1,966,078,882	11.06%	0.92	(0.75%)	

2	186	$13,178,743	$28,808,073	12.82%	1.04	1.01%
3	210	$6,743,361	$13,177,828	13.66%	1.11	1.85%
4	218	$3,861,858	$6,710,676	13.67%	1.13	1.86%
5	255	$2,445,693	$3,836,536	14.49%	1.17	2.68%
6	246	$1,591,865	$2,444,745	14.82%	1.18	3.01%
7	306	$911,586	$1,591,765	15.63%	1.26	3.82%
8	365	$451,955	$911,103	15.91%	1.31	4.10%
9	412	$190,019	$451,800	16.69%	1.34	4.88%
10 - Smallest	569	$2,194	$189,831	19.64%	1.40	7.83%
1 through 2	385	$13,178,743	$1,966,078,882	11.32%	0.94	(0.48%)
3 through 5	683	$2,445,693	$13,177,828	13.80%	1.13	1.99%
6 through 8	917	$451,955	$2,444,745	15.27%	1.23	3.46%
9 through 10	981	$2,194	$451,800	17.53%	1.35	5.72%
1 through 5	1,068	$2,445,693	$1,966,078,882	11.64%	0.96	(0.17%)
6 through 10	1,898	$2,194	$2,444,745	15.49%	1.24	3.68%

S&P 500 Annual Return for Period 1928 - 2020 : 11.81%

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	WORKING NOTES										WORKING N
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
GROSS Property, plant and equipment	-	-	-		47,000,000	47,189,429	47,806,577	48,431,796	49,065,192	49,706,871	50,356,942
Accumulated Depreciation	-	-	-		-	207,261	843,216	1,487,488	2,140,187	2,801,420	3,471,302
NET PPE	-	-	-		47,000,000	46,982,168	46,963,361	46,944,308	46,925,005	46,905,451	46,885,640
Total Debt	-	-	-	-	-	-					
Net Equity	-	-	-	8,146,961	8,146,961	8,146,961					
Investor Provided Capital	-	-	-	8,146,961	8,146,961	8,146,961	-				
Depreciation / GROSS PPE	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	1.57%				0	0
				Muni CAPX	0	222,858	0	0	0	0	0
			IOU savings	0%			100%	100%	100%	100%	100%
				CAPX/Prior Yr. GROSS PPE			1.54%	1.54%	1.54%	1.54%	1.54%
				CAPX	87,357	222,858	726,057	735,552	745,172	754,917	764,790
				Dep rate	0.00%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%
				Half yr. Dep	0.00%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%
				Dep on CAPX	-	1,749	5,700	5,774	5,850	5,926	6,004
				Rate of retirement	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
				Retired property	13,104	33,429	108,909	110,333	111,776	113,238	114,719
				Dep on Retired property	-	525	1,710	1,732	1,755	1,778	1,801
				Dep on Prior yr. GROSS	243,460	239,466	740,874	750,563	760,379	770,324	780,398
				Total Dep	243,460	240,690	744,864	754,605	764,474	774,472	784,601
BEAVER											
Depreciation Expense	-	-	246,236	243,460	239,466						
				part of OCN							
				NET PPE			PURTA	0.001527765			
				Rev			Reg Assessment Fee	0.005652534			
					2020	2021	1 2022	2 2023	3 2024	4 2025	5 2026
BEAVER											
	FIX CIP			CIP	$ -	$ -	$ -	$ -	$ -	$ -	$ -
					part of OCN	= to DepX					
					87,357	222,858					
									191	71	72
					2020	2021					
						-	-	4,750.00	9,500.00	14,250.00	71,250.00
Sewer Rental Charges	0	0	3,054,418	3,147,364	3,023,166	3,023,166	3,023,166	2,349,450	2,350,140	2,351,290	
EDUs	0	0	0	0	5,107	5,107	5107	5108	5110	5113	5128
					0	0	0	1	2	3	15
		0	0	0	2553.5	5107	5107	5107.5	5109	5111.5	
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	591.9651459						
						$ 460.00	$ 460.00	$ 460.00	$ 460.00	$ 460.00	
		#DIV/0!	#DIV/0!	#DIV/0!	1183.930292	591.9651459					
BEAVER					C	3,259	9				
					E	5,107	15				
						0.64					
				1742000							
	Customer Growth					0	0	1	1	2	0.29%
	Delivered to Customer		-	18.41	18	18	18	18	18	18	18
BEAVER	Customers		3,259	3,259	3,259	3,259	3,259	3,260	3,261	3,263	3,272
	Total Revenue (Less TAP)		3,054,418	3,147,364	3,023,166	3,023,166	3,023,166	3,023,630	6,956,482	6,959,682	6,971,911
										99.98%	
	avg CUST rev		937.23	965.75	927.64	927.64	927.64	927.49	2,133.24	2,132.91	2,130.48
	avg CUST flow		-	0	0	0	0	0	0	0	0
	avg EDU rev		#DIV/0!	#DIV/0!	591.97	591.97	591.97	591.94	1,361.35	1,361.17	1,359.58
	avg EDU flow		#DIV/0!	#DIV/0!	0	0	0	0	0	0	0

WORKING NOTES											WORKING N
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
		Rev Calculated				3,023,166	3,023,166	3,023,630	3,024,094	6,958,615	6,969,774

	2021	2022	2023	2024	2025	2026
	Change		130.0%			4.0%
	$ 927.64	$ 927.64	$ 927.64	$ 2,133.56	$ 2,133.56	$ 2,133.56	$ 2,218.91
				$ 1,205.93	$ -	$ -	$ 85.34
	-	-	464	6,956,482	2,133	10,092
	3,023,166	3,023,166	3,023,630	6,956,482	6,959,682	6,971,911
	-	-	3,930,719	-	-	278,876

Prior yr							
NET PURTA	0.1432%			67,278	67,252	67,224	67,197	67,169
REV Reg Assessment	0.5690%			17,215	17,215	39,583	39,595	39,613
				84,493	84,467	106,807	106,792	106,782

City of Beaver Falls Wastewater System Assets	
Investor Provided (	8,146,961
Gross PP&E	47,000,000
Net PP&E	47,000,000
Revenues	3,025,415
EBITDA	773,752
EBIT	533,061
Customers	3,259
Population	15,580

G PPE	-	-	47,000,000	47,189,429	
NPPE	-	-	47,000,000	46,982,168	
Cust	3,259	3,259	3,259	3,259	

	2016	2017	2018	2019	2020	2021	2022			
BEAVER										
LESS: EOS - Wages & Benefits	0	-	-	-	-	926,870		0.15		LESS: EOS - Wages &
LESS: EOS - Professional Services	0	0	0	0	-	-		0.5		LESS: EOS - Professi
LESS: EOS - Eliminated Expenses	0	0	0	0	-	240,000				LESS: EOS - Elim
BEAVER										
Wages			0	0	0	926,870				
Professional Services					0	0				
Eliminated Exp			0	0	0	240,000				

BEAVER					included in OCN	= to DepX
Reported CAPX - from the financials	0	0	5,945	2,811	87,357	222,858

	2016	2017	2018	2019	2020		Assets	Per Books	Difference
GROSS Property, plant and equipment	-	-	-	-	47,000,000		47,000,000	-	
Accumulated Depreciation	-	-	-	-	-		-	-	
NET PPE	-	-	-	-	47,000,000		47,000,000	-	47,000,000

WORKING NOTES									WORKING N		
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Total Debt	-	-	-	-	-			737,900			
Net Equity	-	-	-	8,146,961	8,146,961						
Investor Provided Capital	-	-	-	8,146,961	8,146,961						
Depreciation Rate	0.00%	0.00%	0.00%	#DIV/0!	1.57%						
Depreciation Expense	-	-	246,236	243,460	239,466	737,900.00					

	2021	2022	2023	2024	2025		
CAPX	0	0	0	0	0	0	

NOTES	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
GROSS Property, plant and equipment	51,015,515	51,682,701	52,358,612	53,043,363	53,737,069	54,439,848	55,151,818	55,873,099	56,603,813	57,344,083	58,094,035	58,853,795	59,623,490	60,403,252	61,193,211
Accumulated Depreciation	4,149,944	4,837,463	5,533,971	6,239,589	6,954,436	7,678,631	8,412,297	9,155,558	9,908,539	10,671,369	11,444,176	12,227,089	13,020,240	13,823,764	14,637,798
NET PPE	46,865,571	46,845,238	46,824,641	46,803,774	46,782,633	46,761,217	46,739,521	46,717,541	46,695,274	46,672,714	46,649,859	46,626,706	46,603,250	46,579,488	46,555,413
Total Debt															
Net Equity															
Investor Provided Capital															
Depreciation / GROSS PPE															
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%
	774,792	784,925	795,190	805,590	816,125	826,799	837,612	848,566	859,664	870,906	882,296	893,835	905,524	917,367	929,364
	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%	1.57%
	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%	0.79%
	6,082	6,162	6,242	6,324	6,407	6,490	6,575	6,661	6,748	6,837	6,926	7,017	7,108	7,201	7,296
	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
	116,219	117,739	119,279	120,839	122,419	124,020	125,642	127,285	128,950	130,636	132,344	134,075	135,829	137,605	139,405
	1,825	1,849	1,873	1,897	1,922	1,947	1,973	1,998	2,025	2,051	2,078	2,105	2,133	2,160	2,189
	790,604	800,944	811,418	822,030	832,781	843,672	854,706	865,884	877,208	888,680	900,302	912,076	924,005	936,089	948,331
	794,861	805,257	815,788	826,457	837,266	848,215	859,308	870,546	881,931	893,466	905,150	916,988	928,980	941,129	953,438

BEAVER

Depreciation Expense

	6 2027	7 2028	8 2029	9 2030	10 2031	11 2032	12 2033	13 2034	14 2035	15 2036	16 2037	17 2038	18 2039	19 2040	20 2041
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	56														
	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00	71,250.00
Sewer Rental Charges															
EDUs	5143	5158	5173	5188	5203	5218	5233	5248	5263	5278	5293	5308	5323	5338	5353
	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15

BEAVER

	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%	0.29%
	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
BEAVER	3,282	3,291	3,301	3,311	3,320	3,330	3,339	3,349	3,359	3,369	3,378	3,388	3,398	3,408	3,418
	7,271,814	7,292,903	7,314,052	7,555,321	7,577,231	7,599,205	7,849,880	7,872,645	7,895,475	8,155,923	8,179,576	8,383,769	8,408,082	8,634,844	8,659,886
		100.00%													
	2,215.70	2,215.70	2,215.70	2,282.17	2,282.17	2,282.17	2,350.63	2,350.63	2,350.63	2,421.15	2,421.15	2,474.42	2,474.42	2,533.80	2,533.80
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1,413.92	1,413.90	1,413.89	1,456.31	1,456.32	1,456.34	1,500.07	1,500.12	1,500.19	1,545.27	1,545.36	1,579.46	1,579.58	1,617.62	1,617.76
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

!OTES	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
	6,982,020	7,282,358	7,303,478	7,324,657	7,566,276	7,588,218	7,610,224	7,861,262	7,884,060	7,906,923	8,167,749	8,191,436	8,395,925	8,420,274	8,647,365

	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
			3.0%			3.0%			3.0%		2.2%		2.4%		2.5%
	$ 2,218.91	$ 2,218.91	$ 2,285.47	$ 2,285.47	$ 2,285.47	$ 2,354.04	$ 2,354.04	$ 2,354.04	$ 2,424.66	$ 2,424.66	$ 2,478.00	$ 2,478.00	$ 2,537.47	$ 2,537.47	$ 2,600.91
	$ -	$ -	$ 66.57	$ -	$ -	$ 68.56	$ -	$ -	$ 70.62	$ -	$ 53.34	$ -	$ 59.47	$ -	$ 63.44
	10,109	10,544	10,575	10,605	10,955	10,987	11,019	11,382	11,415	11,448	11,826	11,860	12,156	12,192	12,521
	7,271,814	7,292,903	7,314,052	7,555,321	7,577,231	7,599,205	7,849,880	7,872,645	7,895,475	8,155,923	8,179,576	8,383,769	8,408,082	8,634,844	8,659,886
	-	-	219,422	-	-	227,976	-	-	236,864	-	179,951	-	201,794	-	216,497
	67,140	67,111	67,082	67,053	67,023	66,993	66,962	66,931	66,900	66,868	66,835	66,803	66,769	66,736	66,702
	41,270	41,389	41,509	42,878	43,003	43,127	44,549	44,679	44,808	46,286	46,420	47,579	47,716	49,003	49,145
	108,410	108,500	108,591	109,931	110,026	110,120	111,511	111,610	111,708	113,154	113,255	114,382	114,485	115,739	115,847

BEAVER

LESS: EOS - Wages & Benefits	Wages & Benefits	15% savings	15%	0.15
LESS: EOS - Professional Services	Net Professional Services	50% savings	50%	0.5
LESS: EOS - Eliminated Expenses	Line Rentals	10% savings	100%	1

BEAVER
Wages
Professional Services

Eliminated Exp

BEAVER
Reported CAPX - from the financials

GROSS Property, plant and equipment
Accumulated Depreciation
NET PPE

NOTES	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Total Debt															
Net Equity															
Investor Provided Capital															
Depreciation Rate															
Depreciation Expense															
CAPX															

City of Beaver Falls Wastewater System Assets

Total Debt	0	0	0
Purchase of Capital Assets	87357	2811	5945

	2020	2019	2018
Income (Loss) Before Transfers	155255	284990	585660
Interest paid	0	0	0
Depreciation	239466	243460	246236
Total Source	$394,721	$528,450	$831,896
Income tax	0	0	0
Principal	0	0	0
Interest paid	0	0	0
Total Use	$0	$0	$0

W/Out Trans

Debt Service Coverage	#DIV/0!	#DIV/0!	#DIV/0!
Pre-Tax Interest Coverage - Including AFC(3)(x)	#DIV/0!	#DIV/0!	#DIV/0!
Post-Tax Interest Coverage - Including AFC(3)(x)	#DIV/0!	#DIV/0!	#DIV/0!
GCF / Interest Coverage(4)(x)	#DIV/0!	#DIV/0!	#DIV/0!
GCF / Tot. Debt(7)(%)	#DIV/0!	#DIV/0!	#DIV/0!
GCF / Construction(6)(%)	451.85	18799.36	13993.20

Comparable Group

Debt Service Coverage - As Reported

Comparable Group	2020	2019	2018
AMERICAN STATES WATER COMPANY	1.6	2.2	5.4
AMERICAN WATER WORKS COMPANY, INC.	2.3	1.8	1.7
ARTESIAN RESOURCES CORPORATION	3.8	3.7	4.1
CALIFORNIA WATER SERVICE GROUP	3.6	0.4	3.4
ESSENTIAL UTILITIES, INC.	0.4	0.4	0.5
MIDDLESEX WATER COMPANY	4.5	4.0	4.0
SJW GROUP	2.5	3.7	4.9
THE YORK WATER COMPANY	0.7	0.3	0.8
Median	2.4	2.0	3.7

Company Name	2020 DEPRECIATION	2019 DEPRECIATION	2018 DEPRECIATION	2020 TOTAL INTERST EXPENSE	2019 TOTAL INTERST EXPENSE	2018 TOTAL INTERST EXPENSE
AMERICAN STATES WATER COMPANY	37.204	35.713	40.663	22.531	24.586	23.433
AMERICAN WATER WORKS COMPANY, INC.	604.000	582.000	545.000	397.000	386.000	350.000
ARTESIAN RESOURCES CORPORATION	11.143	10.803	10.288	7.619	7.024	6.252
CALIFORNIA WATER SERVICE GROUP	100.935	91.288	85.707	45.047	44.891	39.917
ESSENTIAL UTILITIES, INC.	257.059	156.476	146.673	188.435	149.125	158.833
MIDDLESEX WATER COMPANY	20.838	17.232	15.780	7.493	7.264	6.758
SJW GROUP	91.622	68.489	56.907	54.255	31.796	24.332
THE YORK WATER COMPANY	8.177	7.688	7.010	4.707	5.124	5.509

	2020 INCOME TO PREF+COMM	2019 INCOME TO PREF+COMM	2018 INCOME TO PREF+COMM	2020 REPAY LT DEBT	2019 REPAY LT DEBT	2018 REPAY LT DEBT
AMERICAN STATES WATER COMPANY	86.425	84.342	63.871	71.136	40.325	0.326
AMERICAN WATER WORKS COMPANY, INC.	709.000	621.000	567.000	342.000	495.000	526.000
ARTESIAN RESOURCES CORPORATION	16.817	14.925	14.278	1.772	1.725	1.344
CALIFORNIA WATER SERVICE GROUP	96.831	63.116	65.584	22.141	405.568	16.532
ESSENTIAL UTILITIES, INC.	284.849	224.543	191.988	1,820.571	1,073.708	914.125
MIDDLESEX WATER COMPANY	38.425	33.888	32.452	7.472	7.343	7.024
SJW GROUP	61.515	23.403	38.767	28.931	1.400	0.000
THE YORK WATER COMPANY	16.598	14.402	13.376	39.628	85.906	25.691

Company Name	Pretax Operating Income			Interest expense			Net Income		
	2020	2019	2018	2020	2019	2018	2020	2019	2018
AMERICAN STATES WATER CO	137.153	133.598	105.321	22.531	24.586	23.433	86.425	84.342	63.871
AMERICAN WATER WORKS CO INC	1,321.000	1,219.000	1,139.000	397.000	386.000	350.000	709.000	621.000	567.000
ARTESIAN RESOURCES -CL A	30.120	27.130	25.521	7.619	7.024	6.252	16.817	14.925	14.278
CALIFORNIA WATER SERVICE GP	153.896	125.678	121.373	45.047	44.891	39.917	96.831	63.116	65.584
ESSENTIAL UTILITIES, INC.	453.406	360.651	337.152	188.435	149.125	158.833	284.849	224.543	191.988
MIDDLESEX WATER CO	41.799	38.012	40.134	7.493	7.264	6.758	38.425	33.888	32.452
SJW GROUP	124.150	63.653	73.164	54.255	31.796	24.332	61.515	23.403	38.767
YORK WATER CO	23.323	21.766	21.376	4.707	5.124	5.509	16.598	14.402	13.376

Company Name	Gross Cash Flow			Total debt			CAPX		
	2020	2019	2018	2020	2019	2018	2020	2019	2018
AMERICAN STATES WATER CO	125.872	126.678	98.761	586.555	499.928	416.907	130.423	151.940	126.561
AMERICAN WATER WORKS CO INC	1,507.000	1,398.000	1,294.000	11,025.000	9,547.000	8,625.000	1,822.000	1,654.000	1,586.000
ARTESIAN RESOURCES -CL A	24.401	21.079	24.763	171.460	153.846	133.646	34.277	40.677	49.053
CALIFORNIA WATER SERVICE GP	206.596	168.402	165.097	1,171.852	998.102	880.038	298.651	273.770	271.707
ESSENTIAL UTILITIES, INC.	511.439	354.411	310.688	5,777.606	3,097.913	2,627.187	835.642	550.273	495.737
MIDDLESEX WATER CO	52.811	46.410	45.909	287.541	263.687	208.694	105.619	89.125	72.094
SJW GROUP	143.507	86.320	83.332	1,538.915	1,423.078	531.424	195.323	164.325	135.973
YORK WATER CO	24.333	22.365	20.215	126.304	103.282	96.173	33.299	20.537	16.882

Company Name	Pretax Interest Coverage			Posttax Interest Coverage			GCF Interest Coverage		
	2020	2019	2018	2020	2019	2018	2020	2019	2018
AMERICAN STATES WATER CO	6.1	5.4	4.5	4.8	4.4	3.7	6.6	6.2	5.2
AMERICAN WATER WORKS CO INC	3.3	3.2	3.3	2.8	2.6	2.6	4.8	4.6	4.7
ARTESIAN RESOURCES -CL A	4.0	3.9	4.1	3.2	3.1	3.3	4.2	4.0	5.0
CALIFORNIA WATER SERVICE GP	3.4	2.8	3.0	3.1	2.4	2.6	5.6	4.8	5.1
ESSENTIAL UTILITIES, INC.	2.4	2.4	2.1	2.5	2.5	2.2	3.7	3.4	3.0
MIDDLESEX WATER CO	5.6	5.2	5.9	6.1	5.7	5.8	8.0	7.4	7.8
SJW GROUP	2.3	2.0	3.0	2.1	1.7	2.6	3.6	3.7	4.4
YORK WATER CO	5.0	4.2	3.9	4.5	3.8	3.4	6.2	5.4	4.7
Median	3.7	3.6	3.6	3.2	2.9	3.0	5.2	4.7	4.9

Company Name	GCF To Debt			GCF To CAPX		
	2020	2019	2018	2020	2019	2018
AMERICAN STATES WATER CO	21.5	25.3	23.7	96.5	83.4	78.0
AMERICAN WATER WORKS CO INC	13.7	14.6	15.0	82.7	84.5	81.6
ARTESIAN RESOURCES -CL A	14.2	13.7	18.5	71.2	51.8	50.5
CALIFORNIA WATER SERVICE GP	17.6	16.9	18.8	69.2	61.5	60.8
ESSENTIAL UTILITIES, INC.	8.9	11.4	11.8	61.2	64.4	62.7
MIDDLESEX WATER CO	18.4	17.6	22.0	50.0	52.1	63.7
SJW GROUP	9.3	6.1	15.7	73.5	52.5	61.3
YORK WATER CO	19.3	21.7	21.0	73.1	108.9	119.7
Median	15.9	15.8	18.7	72.2	63.0	63.2

	2020	2019	2018
Pre-Tax Interest Coverage - Including AFC(3)(x)	3.7	3.6	3.6
Post-Tax Interest Coverage - Including AFC(3)(x)	3.2	2.9	3.0
GCF / Interest Coverage(4)(x)	5.2	4.7	4.9
GCF / Tot. Debt(7)(%)	15.9	15.8	18.7
GCF / Construction(6)(%)	72.2	63.0	63.2

Bulletin No. 195

1912 to January 1, 2022

The Handy-Whitman Index® of Public Utility Construction Costs™

Trends of Construction Costs

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TRENDS OF PUBLIC UTILITY CONSTRUCTION COSTS

GEOGRAPHIC REGIONS



Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman
Line #	Line #	Line #	Line #	Line #	Line #
8	**9**	**16**	**34**	**39**	**40**
1912	**0**	**0**	**0**	**9**	**6**	**0**
1913	**0**	**0**	**0**	**10**	**6**	**0**
1914	**0**	**0**	**0**	**8**	**5**	**0**
1915	**0**	**0**	**0**	**9**	**6**	**0**
1916	**0**	**0**	**0**	**11**	**6**	**0**
1917	**0**	**0**	**0**	**16**	**9**	**0**
1918	**0**	**0**	**0**	**19**	**10**	**0**
1919	**0**	**0**	**0**	**20**	**11**	**0**
1920	**0**	**0**	**0**	**22**	**12**	**0**
1921	**0**	**0**	**0**	**22**	**13**	**0**
1922	**0**	**0**	**0**	**20**	**12**	**0**
1923	**0**	**0**	**0**	**21**	**12**	**0**
1924	**0**	**0**	**0**	**22**	**13**	**0**
1925	**18**	**0**	**20**	**21**	**13**	**0**
1926	**19**	**0**	**0**	**21**	**13**	**0**
1927	**18**	**0**	**0**	**21**	**13**	**0**
1928	**18**	**0**	**0**	**20**	**13**	**0**
1929	**18**	**0**	**0**	**20**	**14**	**0**
1930	**17**	**0**	**0**	**20**	**14**	**0**
1931	**16**	**0**	**0**	**20**	**14**	**0**
1932	**15**	**0**	**0**	**18**	**13**	**0**
1933	**15**	**0**	**0**	**18**	**11**	**0**
1934	**16**	**0**	**0**	**19**	**12**	**0**
1935	**16**	**0**	**0**	**19**	**13**	**0**
1936	**16**	**0**	**0**	**20**	**13**	**0**
1937	**18**	**0**	**0**	**21**	**14**	**0**
1938	**18**	**0**	**0**	**22**	**14**	**0**

Series Id: PCU3372--3372--

Series Title: PPI industry group data for Office furniture (including fixtures) mfg, not seasonally adjusted

Industry: Office furniture (including fixtures) mfg

Product: Office furniture (including fixtures) mfg

Base Date: 200312

	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman
	Line #	Line #	Line #	Line #	Line #	Line #
	8	**9**	**16**	**34**	**39**	**40**
1939	**18**	**0**	**20**	**22**	**14**	**0**
1940	**20**	**0**	**0**	**24**	**14**	**0**
1941	**0**	**0**	**0**	**0**	**15**	**0**
1942	**0**	**0**	**0**	**0**	**16**	**0**
1943	**0**	**0**	**0**	**0**	**16**	**0**
1944	**21**	**0**	**0**	**25**	**17**	**0**
1945	**22**	**0**	**0**	**26**	**17**	**0**
1946	**24**	**0**	**0**	**29**	**19**	**0**
1947	**28**	**0**	**32**	**35**	**22**	**0**
1948	**32**	**0**	**35**	**41**	**25**	**0**
1949	**35**	**0**	**36**	**42**	**27**	**52**
1950	**36**	**0**	**38**	**43**	**28**	**59**
1951	**38**	**0**	**40**	**45**	**29**	**61**
1952	**38**	**0**	**41**	**47**	**31**	**61**
1953	**39**	**0**	**42**	**48**	**33**	**65**
1954	**41**	**0**	**0**	**48**	**0**	**67**
1955	**43**	**0**	**0**	**53**	**36**	**70**
1956	**46**	**0**	**0**	**57**	**0**	**77**
1957	**49**	**0**	**0**	**60**	**41**	**78**
1958	**50**	**0**	**0**	**63**	**44**	**78**
1959	**52**	**74**	**54**	**65**	**46**	**78**
1960	**53**	**74**	**55**	**68**	**48**	**78**
1961	**53**	**71**	**56**	**69**	**50**	**78**
1962	**54**	**71**	**58**	**71**	**51**	**84**
1963	**55**	**71**	**59**	**72**	**53**	**87**
1964	**56**	**73**	**60**	**73**	**55**	**87**
1965	**57**	**74**	**62**	**74**	**58**	**93**
1966	**56**	**78**	**64**	**75**	**60**	**101**
1967	**61**	**81**	**67**	**76**	**63**	**101**
1968	**64**	**81**	**69**	**77**	**66**	**101**
1969	**69**	**84**	**73**	**80**	**72**	**106**

Series Id: PCU3372--3372--

Series Title: PPI industry group data for Office furniture (including fixtures) mfg, not seasonally adjusted

Industry: Office furniture (including fixtures) mfg

Product: Office furniture (including fixtures) mfg

Base Date: 200312

Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman
Line #	Line #	Line #	Line #	Line #	Line #
8	**9**	**16**	**34**	**39**	**40**
1970	**75**	**89**	**79**	**84**	**79**	**108**
1971	**84**	**93**	**89**	**94**	**89**	**108**
1972	**92**	**96**	**96**	**98**	**96**	**106**
1973	**100**	**100**	**100**	**100**	**100**	**100**
1974	**117**	**122**	**118**	**110**	**115**	**93**
1975	**127**	**155**	**134**	**146**	**123**	**93**
1976	**130**	**174**	**144**	**154**	**130**	**98**
1977	**137**	**184**	**152**	**162**	**139**	**101**
1978	**148**	**192**	**162**	**173**	**145**	**105**
1979	**163**	**205**	**175**	**185**	**160**	**108**
1980	**181**	**222**	**191**	**202**	**175**	**122**
1981	**191**	**245**	**208**	**219**	**184**	**127**
1982	**198**	**260**	**227**	**231**	**198**	**128**
1983	**206**	**271**	**242**	**239**	**207**	**141**
1984	**218**	**277**	**251**	**244**	**215**	**148**
1985	**225**	**282**	**262**	**254**	**221**	**135**
1986	**233**	**284**	**269**	**255**	**226**	**135**
1987	**239**	**299**	**276**	**263**	**230**	**137**
1988	**251**	**311**	**286**	**280**	**245**	**140**
1989	**265**	**330**	**301**	**295**	**258**	**150**
1990	**271**	**349**	**313**	**301**	**262**	**159**
1991	**274**	**355**	**322**	**307**	**272**	**162**
1992	**281**	**368**	**332**	**311**	**283**	**196**
1993	**294**	**386**	**342**	**321**	**292**	**195**
1994	**308**	**428**	**348**	**327**	**300**	**175**
1995	**316**	**442**	**357**	**332**	**307**	**200**
1996	**321**	**450**	**367**	**339**	**321**	**207**
1997	**331**	**473**	**380**	**347**	**323**	**197**
1998	**337**	**489**	**391**	**355**	**330**	**197**

Series Id: PCU3372--3372--

Series Title: PPI industry group data for Office furniture (including fixtures) mfg, not seasonally adjusted

Industry: Office furniture (including fixtures) mfg

Product: Office furniture (including fixtures) mfg

Base Date: 200312

Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman
Line #	Line #	Line #	Line #	Line #	Line #
8	**9**	**16**	**34**	**39**	**40**
1999	**343**	**505**	**401**	**361**	**334**	**198**
2000	**362**	**530**	**413**	**377**	**348**	**205**
2001	**378**	**527**	**428**	**391**	**354**	**206**
2002	**389**	**529**	**443**	**404**	**360**	**207**
2003	**394**	**543**	**452**	**407**	**368**	**207**
2004	**421**	**572**	**466**	**432**	**388**	**207**
2005	**448**	**612**	**486**	**469**	**410**	**214**
2006	**466**	**624**	**504**	**499**	**454**	**248**
2007	**496**	**634**	**537**	**530**	**485**	**289**
2008	**538**	**663**	**586**	**588**	**514**	**373**
2009	**544**	**691**	**619**	**614**	**537**	**373**
2010	**560**	**704**	**637**	**624**	**555**	**376**
2011	**584**	**752**	**654**	**648**	**576**	**379**
2012	**604**	**788**	**680**	**687**	**598**	**379**
2013	**614**	**836**	**699**	**701**	**602**	**381**
2014	**631**	**896**	**725**	**731**	**608**	**386**
2015	**647**	**945**	**741**	**740**	**618**	**402**
2016	**661**	**1017**	**761**	**755**	**624**	**403**
2017	**675**	**1117**	**785**	**777**	**650**	**419**
2018	**704**	**1210**	**813**	**803**	**668**	**436**
2019	**716**	**1332**	**847**	**830**	**688**	**447**
2020	**735**	**1430**	**893**	**858**	**705**	**466**
2021	**818**	**1490**	**957**	**922**	**743**	**565**
SPOT	**881**	**1593**	**1012**	**984**	**782**	**803**

Series Id: PCU3372--3372--

Series Title: PPI industry group data for Office furniture (including fixtures) mfg, not seasonally adjusted

Industry: Office furniture (including fixtures) mfg

Product: Office furniture (including fixtures) mfg

Base Date: 200312

2003	100.000
2004	105.142
2005	111.458
2006	113.817
2007	116.675
2008	121.225
2009	124.625
2010	125.642
2011	128.900
2012	131.367
2013	132.208
2014	135.617
2015	136.658
2016	137.150
2017	139.367
2018	145.058
2019	151.150
2020	155.075
2021	166.692
SPOT	174.243

Series Id: PCU33411-33411-

Series Title: PPI industry data for Computer & peripheral equipment mfg, not seasonally adjusted

Industry: Computer & peripheral equipment mfg

Product: Computer & peripheral equipment mfg

Base Date: 200612

Series Id: PCU336110336110

Series Title: PPI industry data for Automobile, light truck and utility vehicle mfg, not seasonally adjusted

Industry: Automobile, light truck and utility vehicle mfg

Product: Automobile, light truck and utility vehicle mfg

Base Date: 198206

Series Id: PCU337215337215

Series Title: PPI industry data for Showcases, partitions, shelving, and lockers mfg, not seasonally adjusted

Industry: Showcases, partitions, shelving, and lockers mfg

Product: Showcases, partitions, shelving, and lockers mfg

Base Date: 200312

Series Id: PCU333112333112

Series Title: PPI industry data for Lawn and garden equipment mfg, not seasonally adjusted

Industry: Lawn and garden equipment mfg

Product: Lawn and garden equipment mfg

Base Date: 198212

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Series Id: PCU33411-33411-

Series Title: PPI industry data for Computer & peripheral equipment mfg, not seasonally adjusted

Industry: Computer & peripheral equipment mfg

Product: Computer & peripheral equipment mfg

Base Date: 200612

Series Id: PCU336110336110

Series Title: PPI industry data for Automobile, light truck and utility vehicle mfg, not seasonally adjusted

Industry: Automobile, light truck and utility vehicle mfg

Product: Automobile, light truck and utility vehicle mfg

Base Date: 198206

Series Id: PCU337215337215

Series Title: PPI industry data for Showcases, partitions, shelving, and lockers mfg, not seasonally adjusted

Industry: Showcases, partitions, shelving, and lockers mfg

Product: Showcases, partitions, shelving, and lockers mfg

Base Date: 200312

Series Id: PCU333112333112

Series Title: PPI industry data for Lawn and garden equipment mfg, not seasonally adjusted

Industry: Lawn and garden equipment mfg

Product: Lawn and garden equipment mfg

Base Date: 198212

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	Series Id: PCU33411-33411-	Series Id: PCU336110336110	Series Id: PCU337215337215	Series Id: PCU333112333112
	Series Title: PPI industry data for Computer & peripheral equipment mfg, not seasonally adjusted	Series Title: PPI industry data for Automobile, light truck and utility vehicle mfg, not seasonally adjusted	Series Title: PPI industry data for Showcases, partitions, shelving, and lockers mfg, not seasonally adjusted	Series Title: PPI industry data for Lawn and garden equipment mfg, not seasonally adjusted
	Industry: Computer & peripheral equipment mfg	Industry: Automobile, light truck and utility vehicle mfg	Industry: Showcases, partitions, shelving, and lockers mfg	Industry: Lawn and garden equipment mfg
	Product: Computer & peripheral equipment mfg	Product: Automobile, light truck and utility vehicle mfg	Product: Showcases, partitions, shelving, and lockers mfg	Product: Lawn and garden equipment mfg
	Base Date: 200612	Base Date: 198206	Base Date: 200312	Base Date: 198212
1970				
1971				
1972				
1973				
1974				
1975		**1975** 62.900		
1976		**1976** 64.025		
1977		**1977** 68.192		
1978		**1978** 72.892		
1979		**1979** 78.667		
1980		**1980** 85.983		
1981		**1981** 94.533		
1982		**1982** 99.567		**1982** 100.000
1983		**1983** 102.108		**1983** 102.067
1984		**1984** 104.625		**1984** 102.408
1985		**1985** 107.208		**1985** 103.458
1986		**1986** 111.008		**1986** 104.708
1987		**1987** 112.967		**1987** 105.625
1988		**1988** 114.117		**1988** 108.192
1989		**1989** 117.358		**1989** 113.275
1990		**1990** 119.850		**1990** 116.592
1991		**1991** 125.292		**1991** 118.800
1992		**1992** 129.108		**1992** 119.675
1993		**1993** 133.167		**1993** 120.600
1994		**1994** 137.950		**1994** 122.608
1995	**1995** 276.983	**1995** 139.100		**1995** 124.158
1996	**1996** 249.050	**1996** 140.433	100.000	**1996** 125.867
1997	**1997** 219.583	**1997** 138.700	100.000	**1997** 125.983
1998	**1998** 191.717	**1998** 136.842	100.000	**1998** 124.892

Series Id: PCU33411-33411-

Series Title: PPI industry data for Computer & peripheral equipment mfg, not seasonally adjusted

Industry: Computer & peripheral equipment mfg

Product: Computer & peripheral equipment mfg

Base Date: 200612

1999	1999	172.783
2000	2000	162.158
2001	2001	153.075
2002	2002	139.533
2003	2003	123.950
2004	2004	115.350
2005	2005	107.775
2006	2006	102.067
2007	2007	94.450
2008	2008	86.425
2009	2009	81.092
2010	2010	76.475
2011	2011	73.408
2012	2012	70.658
2013	2013	67.642
2014	2014	66.392
2015	2015	63.208
2016	2016	59.858
2017	2017	58.775
2018	2018	58.483
2019	2019	56.308
2020	2020	54.950
2021	2021	55.315
SPOT	SPOT	56.274

Series Id: PCU336110336110

Series Title: PPI industry data for Automobile, light truck and utility vehicle mfg, not seasonally adjusted

Industry: Automobile, light truck and utility vehicle mfg

Product: Automobile, light truck and utility vehicle mfg

Base Date: 198206

1999	1999	137.642
2000	2000	138.767
2001	2001	137.542
2002	2002	134.892
2003	2003	135.083
2004	2004	136.475
2005	2005	135.067
2006	2006	130.817
2007	2007	131.117
2008	2008	132.892
2009	2009	136.742
2010	2010	136.783
2011	2011	137.683
2012	2012	141.250
2013	2013	142.733
2014	2014	145.333
2015	2015	148.883
2016	2016	150.108
2017	2017	152.067
2018	2018	153.250
2019	2019	153.592
2020	2020	153.108
2021	2021	157.532
SPOT	SPOT	159.847

Series Id: PCU337215337215

Series Title: PPI industry data for Showcases, partitions, shelving, and lockers mfg, not seasonally adjusted

Industry: Showcases, partitions, shelving, and lockers mfg

Product: Showcases, partitions, shelving, and lockers mfg

Base Date: 200312

		100.000
		100.000
		100.000
		100.000
2003	2003	100.000
2004	2004	110.708
2005	2005	118.792
2006	2006	119.442
2007	2007	120.875
2008	2008	125.950
2009	2009	128.725
2010	2010	129.350
2011	2011	133.467
2012	2012	136.242
2013	2013	137.158
2014	2014	138.667
2015	2015	140.100
2016	2016	140.425
2017	2017	142.400
2018	2018	150.242
2019	2019	157.433
2020	2020	158.917
2021	2021	183.701
SPOT	SPOT	200.445

Series Id: PCU333112333112

Series Title: PPI industry data for Lawn and garden equipment mfg, not seasonally adjusted

Industry: Lawn and garden equipment mfg

Product: Lawn and garden equipment mfg

Base Date: 198212

1999	1999	124.517
2000	2000	124.642
2001	2001	125.167
2002	2002	125.925
2003	2003	125.883
2004	2004	126.575
2005	2005	126.617
2006	2006	127.625
2007	2007	129.558
2008	2008	132.750
2009	2009	134.583
2010	2010	134.158
2011	2011	133.217
2012	2012	135.425
2013	2013	135.525
2014	2014	136.225
2015	2015	136.342
2016	2016	136.267
2017	2017	136.742
2018	2018	138.500
2019	2019	140.458
2020	2020	141.825
2021	2021	145.765
SPOT	SPOT	150.494

Series Id: PCU334516334516

Series Title: PPI industry data for Analytical laboratory instrument mfg, not seasonally adjusted

Industry: Analytical laboratory instrument mfg

Product: Analytical laboratory instrument mfg

Base Date: 198512

Series Id: PCU333120333120

Series Title: PPI industry data for Construction machinery mfg, not seasonally adjusted

Industry: Construction machinery mfg

Product: Construction machinery mfg

Base Date: 198012

Series Id: PCU334220334220

Series Title: PPI industry data for Broadcast and wireless communications equipment mfg, not seasonally adjusted

Industry: Broadcast and wireless communications equipment mfg

Product: Broadcast and wireless communications equipment mfg

Base Date: 199112

Series Id: PCU33431-33431-

Series Title: PPI industry data for Audio and video equipment mfg, not seasonally adjusted

Industry: Audio and video equipment mfg

Product: Audio and video equipment mfg

Base Date: 200312

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Series Id: PCU334516334516

Series Title: PPI industry data for Analytical laboratory instrument mfg, not seasonally adjusted

Industry: Analytical laboratory instrument mfg

Product: Analytical laboratory instrument mfg

Base Date: 198512

Series Id: PCU333120333120

Series Title: PPI industry data for Construction machinery mfg, not seasonally adjusted

Industry: Construction machinery mfg

Product: Construction machinery mfg

Base Date: 198012

Series Id: PCU334220334220

Series Title: PPI industry data for Broadcast and wireless communications equipment mfg, not seasonally adjusted

Industry: Broadcast and wireless communications equipment mfg

Product: Broadcast and wireless communications equipment mfg

Base Date: 199112

Series Id: PCU33431-33431-

Series Title: PPI industry data for Audio and video equipment mfg, not seasonally adjusted

Industry: Audio and video equipment mfg

Product: Audio and video equipment mfg

Base Date: 200312

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	Series Id: PCU334516334516 Series Title: PPI industry data for Analytical laboratory instrument mfg, not seasonally adjusted Industry: Analytical laboratory instrument mfg Product: Analytical laboratory instrument mfg Base Date: 198512	Series Id: PCU333120333120 Series Title: PPI industry data for Construction machinery mfg, not seasonally adjusted Industry: Construction machinery mfg Product: Construction machinery mfg Base Date: 198012	Series Id: PCU334220334220 Series Title: PPI industry data for Broadcast and wireless communications equipment mfg, not seasonally adjusted Industry: Broadcast and wireless communications equipment mfg Product: Broadcast and wireless communications equipment mfg Base Date: 199112	Series Id: PCU33431-33431- Series Title: PPI industry data for Audio and video equipment mfg, not seasonally adjusted Industry: Audio and video equipment mfg Product: Audio and video equipment mfg Base Date: 200312
1970				
1971				
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1973				
1974				
1975				
1976		**1976** 67.800		
1977		**1977** 70.867		
1978		**1978** 77.317		
1979		**1979** 84.833		
1980		**1980** 95.700		
1981		**1981** 106.333		
1982		**1982** 112.133		
1983		**1983** 114.383		
1984		**1984** 116.750		
1985	**1985** 100.000	**1985** 119.450		
1986	**1986** 99.967	**1986** 120.792		
1987	**1987** 100.800	**1987** 122.642		
1988	**1988** 103.242	**1988** 125.767		
1989	**1989** 105.742	**1989** 132.408		
1990	**1990** 107.650	**1990** 137.642		
1991	**1991** 108.867	**1991** 141.983	**1991** 100.000	
1992	**1992** 110.867	**1992** 146.950	**1992** 101.583	
1993	**1993** 112.192	**1993** 151.250	**1993** 102.908	
1994	**1994** 113.075	**1994** 153.767	**1994** 103.900	
1995	**1995** 114.608	**1995** 157.250	**1995** 103.517	
1996	**1996** 115.867	**1996** 161.583	**1996** 104.225	
1997	**1997** 117.508	**1997** 164.392	**1997** 105.758	
1998	**1998** 118.325	**1998** 167.775	**1998** 105.525	

Series Id: PCU334516334516

Series Title: PPI industry data for Analytical laboratory instrument mfg, not seasonally adjusted

Industry: Analytical laboratory instrument mfg

Product: Analytical laboratory instrument mfg

Base Date: 198512

1999	1999	116.933
2000	2000	119.217
2001	2001	121.583
2002	2002	124.017
2003	2003	126.208
2004	2004	128.217
2005	2005	129.683
2006	2006	132.208
2007	2007	133.142
2008	2008	136.225
2009	2009	137.945
2010	2010	138.708
2011	2011	139.625
2012	2012	140.383
2013	2013	142.258
2014	2014	144.417
2015	2015	147.000
2016	2016	149.358
2017	2017	153.350
2018	2018	155.183
2019	2019	159.258
2020	2020	161.408
2021	2021	164.466
SPOT	SPOT	165.640

Series Id: PCU333120333120

Series Title: PPI industry data for Construction machinery mfg, not seasonally adjusted

Industry: Construction machinery mfg

Product: Construction machinery mfg

Base Date: 198012

1999	170.833
2000	172.708
2001	173.517
2002	175.942
2003	178.358
2004	183.933
2005	192.367
2006	201.058
2007	206.817
2008	213.375
2009	221.125
2010	220.475
2011	227.800
2012	235.408
2013	239.167
2014	242.375
2015	245.258
2016	247.083
2017	248.408
2018	250.850
2019	262.108
2020	266.758
2021	278.793
SPOT	292.563

Series Id: PCU334220334220

Series Title: PPI industry data for Broadcast and wireless communications equipment mfg, not seasonally adjusted

Industry: Broadcast and wireless communications equipment mfg

Product: Broadcast and wireless communications equipment mfg

Base Date: 199112

1999	104.125
2000	101.475
2001	101.717
2002	98.258
2003	95.100
2004	93.267
2005	92.617
2006	92.117
2007	92.483
2008	94.083
2009	94.558
2010	94.808
2011	94.408
2012	93.042
2013	92.400
2014	92.817
2015	93.358
2016	92.508
2017	90.367
2018	89.642
2019	89.767
2020	90.317
2021	90.584
SPOT	91.307

Series Id: PCU33431-33431-

Series Title: PPI industry data for Audio and video equipment mfg, not seasonally adjusted

Industry: Audio and video equipment mfg

Product: Audio and video equipment mfg

Base Date: 200312

2003	100.000
2004	98.092
2005	95.608
2006	93.683
2007	90.850
2008	89.350
2009	85.467
2010	84.367
2011	84.158
2012	84.308
2013	82.583
2014	82.717
2015	82.892
2016	83.067
2017	83.083
2018	82.733
2019	83.767
2020	85.883
2021	89.366
SPOT	94.023

OCN	OCNLD	RCN		RCNLD	
$8,469	$6,266	$25,285		$12,248	
$15,115	$10,338	$33,537		$17,894	
$11,721	$8,522	$23,038	10%	$15,895	
$7,985	$5,839	$20,970	20%	$9,677	5%
$7,614	$4,750	$24,910	1%	$13,009	
$10,413	$6,688	$28,568		$16,688	
$4,804	$3,417	$27,247		$8,305	22%
$11,339	$8,418	$34,491		$17,239	
$3,958	$2,409	$25,249		$10,124	
$1,838	$1,118	$11,723		$4,701	

OFFICE FURNITURE AND EQUIPMENT

Series Id: PCU3372--3372--
Series Tit PPI industry group data for Office furniture (including fixtures) mfg, not seasonally adjusted
Industry: Office furniture (including fixtures) mfg
Product: Office furniture (including fixtures) mfg
Base Dat 200312

Download:

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2003												100
2004	99.7	101.3	101.6	102.9	105.2	105.6	105.8	107.1	107	108	108.4	109.1
2005	109.6	110.1	109.8	110.5	111.6	111.8	112.2	111.8	112.4	113	112.2	112.5
2006	112.6	112.6	112.8	112.5	113.6	113.7	114.3	114.3	114.6	114.8	115.1	114.9
2007	116.1	116.7	116.4	116.8	116.9	116.7	116.4	116.5	116.4	116.6	117.4	117.2
2008	117.5	117.7	117.6	119.3	119.3	120.6	121.8	123	123.7	124.9	124.5	124.8
2009	125	125	124.9	124.5	124.1	124.1	124.1	124.2	124.9	125	125	124.7
2010	124.6	124.2	124.7	126	125.5	126	126.4	126.1	126.1	126	126.2	125.9
2011	126.9	127.8	128.5	128.7	128.7	128.8	129.6	129.1	129.2	129.4	129.8	130.3
2012	131	131.6	130.9	131.2	131.2	130.9	131.3	131.6	131.7	132.3	131.8	130.9
2013	131.7	130.8	130.6	131.6	132.4	132.3	132.4	132.5	133.2	133.1	133.3	132.6
2014	133.6	133.6	133.9	133.9	135.6	136.3	137	137.2	137.2	137.1	135.8	136.2
2015	136.7	136.5	136.4	136.4	136.2	136.7	136.7	136.8	137.1	136.9	136.8	136.7
2016	137.3	137.1	137	136.8	136.7	136.8	137	138	137.6	136.8	137.2	137.5
2017	137.5	139	138.5	138.9	139.4	138.9	139.9	140.1	140.3	139.6	139.9	140.4
2018	141	141.3	141.4	142.6	143.5	146	145.1	146.1	147.5	148	148.5	149.7
2019	150.1	149.6	149.8	149.1	151.1	150.9	152.1	151.8	151.9	152.2	152.4	152.8
2020	152.5	153.6	155.3	155.1	155.6	154.8	156	154.7	155.9	156	155.4	156
2021	156.5	158.9	159.7	161.7	164.4	168.6	169.426	168.977	171.921	172.699	173.241	174.243
2022	177.734	180.764	83.439(P)	83.342(P)	84.958(P)	89.475(P)						
P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication.												

COMPUTERS

Series Id: PCU33411-33411-
Series Tit PPI industry data for Computer & peripheral equipment mfg, not seasonally adjusted
Industry: Computer & peripheral equipment mfg
Product: Computer & peripheral equipment mfg
Base Dat 200612

Download:

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1995	286.5	284.5	282.9	282.2	279.9	277.8	277	273.4	271.7	270.5	269.1	268.3
1996	265.5	260.9	258.4	253.3	252	249.8	245.8	244.9	243.7	240.5	238.2	235.6
1997	234.4	232	230.5	228.8	221.2	218.1	216.1	213.8	212.3	210.5	209.1	208.2
1998	204.4	201.3	199.1	195.2	193.5	192.5	190.9	187.5	186.8	184.7	183.6	181.1
1999	178.6	177.9	177.2	175.3	175.1	174.8	171.2	169.8	169.5	168.6	168.2	167.2
2000	165.4	165	164.3	163	162.1	161.6	161.8	161	160.9	160.9	160.5	159.4
2001	158.4	157	155.7	155.6	154.9	153.9	153.3	150.5	150.4	149.8	149	148.4
2002	146.4	144.7	143.8	143.2	142.8	141.6	139.2	136.9	136.1	134.7	132.9	132.1
2003	130.3	127.8	126.3	126.1	125	124.5	123.5	122.5	122.4	120.7	119.7	118.6
2004	118.2	117.8	117.4	117.2	116.8	115.7	115.5	114.7	113.9	113.6	111.7	111.7
2005	110.5	110.2	109.5	109.2	108.3	108	107.5	107.3	106.4	105.9	105.6	104.9
2006	104.7	104.2	104	103.2	102.8	102.1	101.7	101.1	100.6	100.3	100.1	100
2007	99.2	98.7	97.9	97.5	96.2	95.1	93.9	92.3	91.7	91	90.2	89.7
2008	88.8	88.4	87.3	86.9	86.9	86.8	86.5	86	85.5	84.9	84.6	84.5
2009	84.4	83.2	83	82.4	82.3	81.5	81.1	81.3	79.1	79.1	78	77.7
2010	77.8	77.6	77.8	77.2	77	76.6	76.2	76	75.6	75.4	75.4	75.1

2011	75	74.7	74.3	74.6	74.3	74.1	72.7	72.1	72	72.1	72.4	72.6
2012	72.7	72.5	71.5	71.4	71.4	70.7	70.6	70.3	69.4	69.7	69	68.7
2013	68.6	68.6	68.5	68.3	67.8	67.3	67.4	67.1	67.3	66.9	67	66.9
2014	66.8	66.7	66.5	66.7	66.6	66.7	66.4	66.3	66.2	66.2	65.8	65.8
2015	66	64.2	63.5	63.3	63.1	62.6	62.9	63	62.9	62.5	62.2	62.3
2016	62.4	62	59.5	59.8	60	60	59.5	59.2	59.2	58.8	58.9	59
2017	58.4	58.5	58.5	59.2	59.1	59	58.9	58.7	58.9	58.8	58.7	58.6
2018	58.5	58.2	58.4	58.3	58.7	58.7	58.6	58.8	58.6	58.8	58.5	57.7
2019	57.7	57.9	57.3	57.2	56.2	55.8	55.7	55.9	54.4	55.8	55.8	56
2020	55.1	55.1	55	55.1	55.2	54.7	55.1	55.1	54.8	54.9	54.9	54.4
2021	54.7	54.9	54.5	55	55.1	55.1	55.391	55.618	55.474	55.733	55.991	56.274
2022	57.485	57.998	58.417(P)	58.433(P)	58.812(P)	58.694(P)						
P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication.												

TRANSPORTATION EQUIPMENT

Series Id: PCU336110336110
Series Tit PPI industry data for Automobile, light truck and utility vehicle mfg, not seasonally adjusted
Industry: Automobile, light truck and utility vehicle mfg
Product: Automobile, light truck and utility vehicle mfg
Base Dat 198206

Download:

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1975												62.9
1976	63	62.9	63	63.1	62.9	63	63	63.3	63.4	66.9	66.9	66.9
1977	66.8	66.8	66.9	67.1	67.2	67.3	67.3	67.4	67.4	71.4	71.3	71.4
1978	71.4	71.4	71.4	71.4	72.5	72.7	72.5	72.5	72.5	75.4	75.4	75.6
1979	76.7	76.9	77	78.3	78.4	78.5	78.7	76.8	77	81.9	81.8	82
1980	83.5	82.8	82.9	85.2	84.6	84.6	86.3	86.7	82.7	90.9	91	90.6
1981	91.4	91.6	90.7	93.3	94.1	94.5	94.6	94.4	90.2	99.7	99.8	100.1
1982	100.5	97.5	97.5	97.4	98.8	100	100.1	100.4	94.9	102.5	102.5	102.7
1983	102.2	101.8	101.4	101.6	101.7	101.8	102	102.3	97.8	104.2	104.2	104.3
1984	104.5	104.5	104.6	104.9	104.6	104.4	104.7	104.4	101	106.1	106.3	105.5
1985	106.7	106.8	106.5	106.5	107	107.3	107.3	107.2	100.2	110.4	110.4	110.2
1986	109	109.3	108.7	110.3	110	110.2	110.3	109.7	105.6	116.9	116.7	115.4
1987	115.3	112.6	111.9	113.7	112.9	112.5	112.4	111.4	108.4	116.5	115.2	112.8
1988	113	113	112.5	112.6	113	113.1	113.2	113.3	110.2	119.5	118.1	117.9
1989	117.8	118.1	116.4	115.4	116.6	116.9	114.7	114.6	113.3	122.5	121.2	120.8
1990	118.4	118.5	118	117.8	117.3	119	119.2	118.2	117.2	125	124.8	124.8
1991	125.1	125.9	125.5	124.4	123.2	122.9	122.8	122.6	120.3	131	130.3	129.5
1992	129.2	129	129.3	129.2	128.9	128.3	128.4	127.5	123.5	132.1	132.1	131.8
1993	132.1	132.9	133	132.9	132.6	132.8	132.9	132.6	128	135.7	136.2	136.3
1994	137.3	137.5	137.4	137.4	138.3	138.1	138.2	138.2	133.9	140	139.3	139.8
1995	140.1	139.9	139.3	139.1	138.7	137.8	137.7	137.2	132.9	141.7	142.4	142.4
1996	141.2	141.1	141.1	140.5	140.6	140.7	139.5	139.2	135.6	142.2	141.9	141.6
1997	141.7	141.5	141.2	140.3	138.4	138	135.9	135.9	133.7	140.6	139.4	137.8
1998	137.8	138	137.8	137.2	135.4	134.3	134.8	133.9	132.7	140.6	140.4	139.2
1999	138.2	138.7	137.7	138	137.2	136	134.7	134.4	133.4	142.1	140.8	140.5
2000	139.9	139.4	139	138.9	138.9	137.4	136.8	135.8	135.5	141.2	141.3	141.1
2001	140.3	137.7	138.1	138.9	136.9	135.9	136.5	136	135.8	138.3	137.8	138.3
2002	136.8	137.7	136.4	136	134.9	134.4	131.3	130.3	130.4	139	136.5	135
2003	135.7	135.8	138.5	134	133.6	132	131.6	132	130.5	140.7	139	137.6
2004	137.4	136.8	137.1	135.9	136.2	136.2	132.8	132.4	131.5	142	139.9	139.5
2005	139.8	137.4	136.8	136.5	135.8	132.6	132.8	131.7	131.9	137.8	134.8	132.9
2006	133.7	133.7	133.4	132.3	132	130.6	123.7	125.7	126.5	129.4	135	133.8
2007	132.8	132.5	131.9	130.5	130.1	129.8	129.2	128.2	126.6	134.1	134.8	132.9
2008	133.6	133.5	132.1	133.1	132.2	129.5	128.2	129.1	128.7	139.4	137.7	137.6
2009	137	136.8	136	136.7	136.1	137.9	134.6	136.1	133.8	138.3	139.5	138.1

2010	139.3	139	137.8	137.2	137.3	135.4	134.8	135	134.5	137.7	137	136.4
2011	137	137	136.7	137.4	136.7	136.9	136.7	136.5	135.7	140.6	140.7	140.3
2012	141	140.4	140.3	140.6	139.7	140.1	140.9	140.8	139.6	143.9	144.1	143.6
2013	143.4	143.3	142.6	142.4	141.7	141.3	140.7	140.4	140.2	144.8	145.6	146.4
2014	146.8	146.6	145.5	145.2	144.4	143.8	143.6	143.4	142.6	148	147.8	146.3
2015	147.8	149.4	149.2	148.7	148.5	148.1	148.5	147.4	147.2	150.7	150.6	150.5
2016	149.9	150.2	149.8	149.6	149.7	149.8	148.5	147.7	147.6	152.7	152.4	153.4
2017	152.6	152.3	152.9	152.8	151.2	151.2	150.1	149.8	149.8	153.5	154.3	154.3
2018	153.3	152.9	152.9	152.5	152.5	152.7	152.2	152.1	152.4	155.3	155.2	155
2019	154.8	154.5	153.7	153.4	153.2	153	152.6	152	151.7	154.6	155.1	154.5
2020	152.9	153.6	152	153	152.4	152	152.1	152.3	152.3	154.3	154.9	155.5
2021	156	155.8	155.4	155.7	156.7	157.5	157.86	158.19	158.147	159.507	159.73	159.847
2022	160.201	161.186	61.190(P)	62.809(P)	63.481(P)	64.069(P)						
P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication.												

STORES EQUIPMENT

Series Id: PCU337215337215
Series Tit PPI industry data for Showcases, partitions, shelving, and lockers mfg, not seasonally adjusted
Industry: Showcases, partitions, shelving, and lockers mfg
Product: Showcases, partitions, shelving, and lockers mfg
Base Dat 200312

Download:

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2003												100
2004	100.2	103.4	104	106.5	112.3	112.6	113.2	113.5	113.5	115.6	116.5	117.2
2005	117.8	117.7	118	117.9	119.1	119.1	119.1	119.1	119.2	119.6	119.4	119.5
2006	119.2	119.2	119.1	119.1	119.1	119.1	119.3	119.3	119.6	119.7	120.2	120.4
2007	121.2	120.9	121.1	121.1	121	121	121	120.8	120.8	120.6	120.6	120.4
2008	120.9	120.9	121.2	122.5	123.1	124.9	127.3	129	129.9	130.4	130.6	130.7
2009	129.7	129.8	129.8	129	128.7	128.3	128.3	128.5	128.3	128.3	128.3	127.7
2010	127.7	127.8	128.3	129.2	129.5	129.8	130	129.9	129.9	130.3	129.4	130.4
2011	130.3	132	133.2	133.9	133.8	133.5	134	134	133.8	134.4	134.2	134.5
2012	135.9	136.3	136.4	136.6	135.9	135.9	136.2	136.3	136.2	136.4	136.5	136.3
2013	136.4	137.1	137.2	137.1	137.1	137.1	137.1	137	137	137.6	137.6	137.6
2014	137.6	137.6	137.7	137.8	138.3	138.3	139.7	140.1	139.4	139	139	139.5
2015	140.1	139.8	140.2	140.3	139.7	139.6	140.3	139.9	140.5	140.6	140.2	140
2016	140.5	140.6	138.9	139.7	140	139.3	139.9	142.2	141	140.2	140.9	141.9
2017	142.1	144.1	143.3	142.3	142.1	141	142.6	142.6	142.7	142	141.4	142.6
2018	142.3	142.9	143.1	145.9	150.2	150.6	150.8	152.9	155.6	155.5	156.3	156.8
2019	159.5	155.5	157.8	157.1	157.6	156.2	156.7	155.8	156.2	158.3	159.3	159.2
2020	158.4	159.8	158.6	158.7	159.5	159	158.6	156.7	159.4	159.5	158.4	160.4
2021	162.4	167.2	167.1	173.4	176.6	186.9	190.22	188.835	195.561	198.508	197.241	200.445
2022	200.101	205.213	06.612(P)	11.514(P)	09.913(P)	12.293(P)						
P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication.												

TOOLS, SHOP AND GARAGE EQUIPMENT

Series Id: PCU333112333112
Series Tit PPI industry data for Lawn and garden equipment mfg, not seasonally adjusted
Industry: Lawn and garden equipment mfg
Product: Lawn and garden equipment mfg
Base Dat 198212

Download:

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1982												100
1983	101.4	101.5	102.2	102.5	102.6	102.7	101.9	101	102.3	102.6	103	101.1
1984	101.3	101.6	101.7	102.1	102.6	102.4	102.5	103.3	102.6	102.8	103	103
1985	103.2	103	103.1	103.4	103.5	103.7	103.8	103.7	103.3	103.5	103.7	103.6
1986	104.1	104.2	104.2	104.8	104.9	105.1	105.5	105.5	104.5	104.6	104.6	104.5
1987	104.5	104.6	104.8	105.4	105.5	105.8	106.1	106.2	105.9	105.7	106.5	106.5
1988	106.8	106.6	106.8	106.8	106.9	107	106.9	108.7	109.6	110.4	110.6	111.2
1989	111.4	111.4	111.8	111.8	112.1	112.6	112.6	114.3	115	115.3	115.5	115.5
1990	115.7	115.7	115.9	116	116	116	116.2	117.1	117.4	117.8	117.6	117.7
1991	118.2	118.2	118.4	118.6	119.1	118.7	118.8	119	119	119.2	119.2	119.2
1992	119.3	119.3	119.7	119.7	119.7	119.5	119.3	119.8	120.5	119.7	119.8	119.8
1993	120.1	120.1	120.1	120.2	120.2	120.1	120	120.8	121.3	121.2	121.4	121.7
1994	121.6	122	122.1	122.1	122.5	122.5	122.5	122.8	123.1	123.3	123.3	123.5
1995	123.6	123.6	123.6	123.8	123.8	123.8	124	124	124.3	124.6	125.4	125.4
1996	125.7	125.8	126	125.5	125.7	125.7	125.8	125.8	125.9	125.9	125.9	126.7
1997	127.5	127.3	126.3	126.3	126.3	126.3	125.8	126.1	124.9	124.9	125	125.1
1998	125.1	125.2	125.4	125.5	125.5	125.5	124	124.2	124.5	124.6	124.6	124.6
1999	124.7	124.7	124.7	124.7	124.6	124.3	124.3	124.4	124.5	124.4	124.4	124.5
2000	124.7	124.7	124.7	124.5	124.2	124.2	124.3	124.3	125	125.1	125	125
2001	125.3	125.3	125.2	125	125.1	125.1	125	125.2	125.1	125.1	125.2	125.4
2002	126	125.6	125.9	126	126	126	125.9	125.9	125.9	125.9	126	126
2003	126	125.9	125.9	125.9	125.9	126	126.3	125.2	125.2	125.7	126.3	126.3
2004	126.2	126.1	126.4	126.3	126.3	126.6	126.7	126.9	127	126.6	127.1	126.7
2005	126.7	126.9	126.9	126.7	127	126.3	126.3	126.4	126.5	126.7	126.5	126.5
2006	126.8	126.9	127.1	127.2	127.2	127.2	127.9	128	127.9	128.4	128.4	128.5
2007	129.5	129.1	129.1	129.1	129.1	128.8	128.8	128.8	129.2	130	131.6	131.6
2008	132.2	132.2	132.2	132	132	132.1	132.8	132.6	132.8	132.9	134.5	134.7
2009	134.6	134.7	135.2	135.2	134.5	134.4	134.5	134.4	134.4	134.5	134.3	134.3
2010	134.6	134.5	134.5	134.4	134.4	134.3	134.4	134.4	133.8	134.2	134.2	132.2
2011	132.2	132.3	132.3	132.4	132.9	133.4	133.4	133.4	133.5	134.2	134.3	134.3
2012	136.3	136.3	136.3	134.6	134.9	135	135.1	135.2	135.2	135.4	135.4	135.4
2013	135.3	135.3	135.3	135.3	135.2	135.2	135	135.1	136.2	136.2	136.2	136
2014	135.9	136	136.5	136.3	136.3	136.3	136.2	136.2	136.2	136.3	136.3	136.2
2015	136.4	136.4	136.4	136.3	136.3	136.3	136.3	136.3	136.3	136.3	136.4	136.4
2016	136.3	135.5	135.5	135.7	135.8	136.6	136.6	136.6	136.6	136.6	136.7	136.7
2017	136.7	136.7	136.7	136.7	136.7	136.7	136.7	136.7	136.7	136.8	136.9	136.9
2018	137.8	137.8	137.8	137.8	137.9	137.9	138.1	138.4	138.6	139.4	140.2	140.3
2019	140.2	140.1	140.1	140.1	140.6	140.5	140.2	140.2	140.2	140.8	141	141.5
2020	141.5	141.5	141.4	141.5	141.5	141.6	141.6	141.9	142	142.2	142.6	142.6
2021	142.7	142.9	143.1	143.4	144.3	144.8	146.118	146.802	147.146	148.367	149.056	150.494
2022	151.29	153.818	53.998(P)	57.201(P)	59.556(P)	61.500(P)						

P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication.

LABORATORY EQUIPMENT

Series Id: PCU334516334516
Series Tit PPI industry data for Analytical laboratory instrument mfg, not seasonally adjusted
Industry: Analytical laboratory instrument mfg
Product: Analytical laboratory instrument mfg
Base Dat 198512

Download:

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1985												100
1986	100.1	99.8	99.5	99.4	99.5	99.7	99.9	100	100.3	100.3	100.5	100.6
1987	101.2	101.3	101.3	101.3	101.4	99.7	99.9	99.9	100.7	100.8	100.7	101.4
1988	102	103.1	104.6	102.9	103	103	103.2	103.4	103.5	103.2	103.4	103.6
1989	104.8	105.1	105.1	105.5	105.3	105.6	106	106.1	105.9	106	106	107.5

1990	108.6	107.9	108.6	108.8	109.1	107.6	107.5	106.6	106.5	106.5	106.9	107.2
1991	108.9	108.9	108.9	109	109	109.1	108.8	108.9	108.7	108.5	108.7	109
1992	109.9	109.1	110	109.7	110.1	110.7	111.6	111.5	111.9	111.9	112.2	111.8
1993	112.2	112.5	112.1	112.2	112.1	112	112.1	112.1	112	112.3	112.4	112.3
1994	112.8	112.6	112.7	112.8	113	113.2	112.8	113.1	113.3	113.5	113.5	113.6
1995	113.5	113.8	114.1	114.3	114.3	114.6	115.2	115	115	115.4	115.4	114.7
1996	115.4	115.9	115.5	115.3	115.4	115.8	115.9	116	115.8	116.4	116.5	116.5
1997	116.5	117.1	117.3	117.1	117.6	117.4	117.4	118.1	118.2	117.8	117.8	117.8
1998	118.6	118.5	118.5	118.5	118.5	118.3	118.3	118.4	118.3	118.2	117.9	117.9
1999	118.7	118.6	117	116.5	116.4	116.3	116.3	116.3	116.3	116.8	116.8	117.2
2000	118.4	118.5	118.6	118.8	118.7	118.6	118.7	118.7	120.4	120.4	120.4	120.4
2001	120.5	121.1	121.3	121.3	121.3	121.7	121.7	121.7	121.7	121.8	122.4	122.5
2002	123.6	123.6	123.6	123.8	124.1	124.2	124.1	124.1	124.1	123.8	124.6	124.6
2003	125.7	125.8	125.8	126.2	126.2	126.3	126.4	126.4	126.4	126.4	126.4	126.5
2004	127.7	127.9	127.9	127.9	128	128.2	128.2	128.3	128.6	128.6	128.6	128.7
2005	129.3	129.5	129.4	129.5	129.3	129.3	129.6	129.6	129.6	130.3	130.4	130.4
2006	131.4	132.1	132.1	132	132.1	132.3	132.3	132.3	132.4	132.5	132.5	132.5
2007	133.2	132.5	132.4	132.4	132.9	132.9	133	133	133.4	134	134	134
2008	135.2	135.3	135.5	135.7	135.6	135.8	135.8	136.1	137.3	137.4	137.5	137.5
2009	137.5	137.6	137.9	138.2	138.2	138	138	138	137.7	138	138.3	
2010	138.6	138.6	138.6	138.6	138.7	138.7	138.6	138.6	138.7	138.8	139	139
2011	139.2	139.4	139.3	139.4	139.4	139.8	139.8	139.8	139.8	139.9	139.8	139.9
2012	140.2	140.3	140.3	140.3	140.3	140.3	140.3	140.4	140.4	140.4	140.4	141
2013	141.8	142.1	142.1	142.1	142.1	142.2	142.3	142.5	142.5	142.5	142.4	142.5
2014	143.3	143.4	144	144.2	144.2	144.3	144.5	144.7	144.7	145.2	145.2	145.3
2015	146.7	146.7	146.7	146.7	147	147	147	147	146.7	147.5	147.5	147.5
2016	148.6	149.2	149.1	149.4	149.4	149.4	149.5	149.5	149.5	149.5	149.5	149.7
2017	152.4	153	153.5	153.5	153.5	153.5	153.1	153.3	153.3	153.7	153.7	153.7
2018	155.1	155.1	155	155.2	155.2	155.4	155.2	155.2	155.2	155.2	155.2	155.2
2019	158.8	158.8	159.3	159.3	159.3	159.3	159.3	159.4	159.4	159.4	159.4	159.4
2020	161.3	161.3	161.3	161.3	161.4	161.4	161.4	161.5	161.5	161.5	161.5	161.5
2021	163.9	163.9	163.9	163.8	163.8	163.8	164.504	164.504	164.504	165.572	165.766	165.64
2022	168.224	172.306	72.102(P)	75.349(P)	76.471(P)	77.025(P)						
P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication.												

POWER OPERATED EQUIPMENT

Series Id PCU333120333120
Series Title PPI industry data for Construction machinery mfg, not seasonally adjusted
Industry Construction machinery mfg
Product Construction machinery mfg
Base Date 198012

Download:

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1976												67.8
1977	68.6	69	69.1	69.7	70.2	70.4	71	71.4	71.4	72.2	73.4	74
1978	74.2	74.7	75	75.9	76.5	76.7	77.3	77.9	78.7	79.7	80.4	80.8
1979	81.4	82.1	82.5	83.4	84	84.1	85.1	85.6	85.8	87.4	87.8	88.8
1980	91.3	92	92.4	94	94.6	95.2	96.2	96.8	97.5	99	99.4	100
1981	101.7	102.7	103.5	104.7	105.3	106.4	107.9	108.2	108.5	109.2	109.6	108.3
1982	110.2	110.1	110.7	111.4	112.1	112.2	112.9	113	113.1	113.2	113.3	113.4
1983	113.5	113.5	114.2	114.3	114	114.1	114.2	114.8	115	115	115	115
1984	115.7	116	115.7	116.3	116.9	117	117.3	117.1	117.2	117.2	117.3	117.3
1985	118.9	119.1	118.8	118.8	118.8	119.7	119.8	119.8	119.9	120	120.1	119.7
1986	120.3	120.4	120.4	120.6	120.7	120.8	120.8	120.8	120.8	120.8	121.5	121.6
1987	122.2	122.3	122.8	121.7	122.6	122.6	122.7	122.8	122.9	122.9	123	123.2
1988	124.3	124.7	124.7	124.8	125	125.1	126	126.4	126.4	126.4	127.6	127.8
1989	129.9	130.1	130.5	130.8	131	132.4	133.1	134	134	134.2	134.4	134.5

1990	135.5	136.2	136.3	136.3	136.5	137.2	138.4	138.9	138.8	138.9	139.2	139.5
1991	140	140.6	140.7	140.7	140.8	141.8	142.8	142.8	142.9	143.1	143.7	143.9
1992	144.2	144.8	145	145.7	145.9	146.8	148	148.1	148.3	148.4	148.8	149.4
1993	150.6	151.4	151.5	151.1	151.3	151.2	151.3	151.3	151	151.3	151.4	151.6
1994	153.2	153.3	153.4	153.6	153.5	153.4	153.6	153.6	153.9	154.3	154.6	154.8
1995	156	156.4	156.5	156.7	157.1	157.3	157.1	157.1	157.6	157.9	158.1	159.2
1996	160.3	160.9	160.9	161.1	161.3	161.5	161.8	161.9	162	162.3	162.5	162.5
1997	164.1	164.1	164	164.2	164.2	163.9	164	164.3	164.3	164.8	165.4	165.4
1998	167.2	167.3	167.4	167.5	167.8	167.8	167.8	168	168	168	168	168.5
1999	169.5	170	170	170.8	171	171	171	171.1	171.1	171.4	171.6	171.5
2000	172.3	172.3	172.4	172.7	172.6	172.6	172.8	172.8	173	173	173	173
2001	173.1	172.9	173	173.6	173.5	173.5	173.5	173.6	173.5	174.1	174.2	173.7
2002	174.2	174.2	176.2	176.4	176.3	176.1	176.1	176.1	176.3	176.3	176.5	176.6
2003	177.7	177.9	177.9	178.4	178.6	178.7	178.4	178.5	178.4	178.5	178.6	178.7
2004	180	181.1	181.4	182.6	182.6	183.1	185.3	186	186.2	186.5	186.2	186.2
2005	188.6	188.3	189.2	189.7	193.2	193.4	193.9	194.5	194.1	194.2	194.5	194.8
2006	197.8	199.1	199.9	199.8	200.3	201.3	201.3	201.3	202.3	202.6	203.5	203.5
2007	205.2	205.8	205.7	206.3	206.3	206.8	207.2	207.3	207.2	207.8	208	208.2
2008	209.5	210.2	210.9	211.3	211.7	212.6	213.9	214.3	215	215.5	218	217.6
2009	220.7	220.5	221.8	221.2	221.7	221.7	221.6	220.9	220.3	220.2	221.2	221.7
2010	221.4	221.1	221.1	221.7	220.9	218.5	218.4	219.8	220.8	220.4	220.1	221.5
2011	222.8	224.4	225.6	225.2	226.2	227.4	228.3	228.8	230.2	230.7	231.6	232.4
2012	234.1	235.7	234.4	234.8	234.6	234.8	235.3	235.3	234.7	235.9	237.4	237.9
2013	239.1	239.3	237.9	238.6	238.6	238.9	239.6	239.3	239.4	239.8	239.2	240.3
2014	242.1	242.1	241.9	242.7	242.6	242.7	242.4	242.5	242.1	242.2	242.6	242.6
2015	245.1	245.1	245	245.2	245.2	245.2	245.2	245.3	245.4	245.4	245.5	245.5
2016	246.9	247	246.7	246.8	247.1	247.2	247.3	247.3	247.2	247.3	247.1	247.1
2017	247.8	247.5	247.9	247.5	248.3	248.3	248.6	248.7	248.8	248.8	249.3	249.4
2018	245.1	245.4	245.7	245.9	246.2	246.7	247.9	256.6	257.5	257.5	257.8	257.9
2019	260.6	261	261	261.2	261.6	261.7	261.8	261.9	263.2	263.1	263.9	264.3
2020	266.2	266.6	266.6	266.8	266.8	266.8	266.7	266.7	266.7	266.9	266.9	267.4
2021	271.3	271.9	272.2	272.4	273.6	277	277.356	278.263	279.552	289.054	290.326	292.563
2022	293.518	293.693	94.221(P)	02.832(P)	04.699(P)	05.271(P)						
P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication.												

COMMUNICATION EQUIPMENT

Series Id: PCU334220334220
Series Tit PPI industry data for Broadcast and wireless communications equipment mfg, not seasonally adjusted
Industry: Broadcast and wireless communications equipment mfg
Product: Broadcast and wireless communications equipment mfg
Base Dat 199112

Download:

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1991												100
1992	100.9	101.3	101.6	101.5	101.5	101.5	101.3	101.5	101.7	101.9	102.1	102.2
1993	103.1	103.2	103.2	102.6	102.6	102.7	102.6	102.6	102.4	103.4	103.3	103.2
1994	103.4	103.6	104	104.1	104.1	104.1	104.1	104	104	103.9	103.7	103.8
1995	104	103.6	103.7	104.1	104	103.2	103.2	103.3	103.4	103.3	103.2	103.2
1996	104	103.9	104.1	104.2	104.1	104.1	103.9	104	104.1	104.3	105	105
1997	105.3	105.4	105.3	105.6	105.6	105.9	105.9	105.9	106.2	106.2	105.9	105.9
1998	106.2	106.4	106	105.3	105.2	105.2	105.5	105.3	105.3	105.3	105.3	105.3
1999	106	104.7	104.7	104.8	104.8	104.8	104.8	104.8	102.2	102.5	102.7	102.7
2000	103	102.1	101.7	101.8	101.1	101.2	101.2	101.2	101.1	101.1	101.1	101.1
2001	101.5	101.4	101.4	101.5	101.8	101.8	101.8	101.8	101.9	101.9	101.9	101.9
2002	101.6	100.3	100.4	98.8	98.7	98.4	96.6	96.9	97	97	97	96.4
2003	96.5	96.5	96.5	96.2	95.5	95.5	94.5	94.2	94.2	93.9	93.9	93.8
2004	93.4	93.4	93.5	93.5	93.7	93.8	93.5	93.2	92.8	92.7	92.9	92.8

2005	93	92.9	92.5	92.5	92.4	91.9	92.1	92.7	92.7	92.7	93	93
2006	92.7	92.2	91.7	91.7	91.7	91.9	91.9	92.3	92.4	92.3	92.3	92.3
2007	92.3	92.4	92.4	92.6	93.1	92.5	92.3	92.3	92.3	92.5	92.5	92.6
2008	93.1	93.6	93.4	93.6	94.2	94.2	94.5	94.5	94.2	94.3	94.7	94.7
2009	94.5	94.2	94.2	94.4	94.5	94.6	94.7	94.7	94.6	94.7	94.8	94.8
2010	94.8	94.8	94.7	94.5	94.5	94.4	95	95	94.9	94.9	95.1	95.1
2011	94.9	94.9	95	94.7	94.8	94.4	94.6	94.6	94.5	93.4	93.6	93.5
2012	93.7	93.7	93.7	93.6	93.7	93.7	93.6	93.4	91.9	91.7	91.9	91.9
2013	92.1	92.2	92.2	92.5	92.4	92.5	92.4	92.5	92.8	92.2	92.4	92.6
2014	92.6	92.7	92.7	92.7	92.7	92.8	92.8	92.7	93	93.1	92.9	93.1
2015	93.3	93.3	93.4	93.4	93.7	93.9	93.7	93.5	92.8	93.1	93.1	93.1
2016	92.9	93.2	93	93.1	93	92.6	92.5	92.7	92.7	91.7	92	90.7
2017	91.1	90.7	91	90.9	90.6	90.7	90.7	90.1	89.5	89.5	89.9	89.7
2018	89.7	90	89.6	89.6	89.6	89.6	89.7	89.9	89.5	89.5	89.5	89.5
2019	89.9	89.5	89.5	89.6	89.5	89.5	89.7	89.7	89.6	90.2	90.2	90.3
2020	90.7	90.4	90.5	90.5	90.4	90.4	90.5	90.2	90.3	89.9	90	90
2021	90.1	90.3	90.4	90.5	90.2	90.2	90.309	90.429	90.842	91.237	91.185	91.307
2022	92.023	92.061	92.015(P)	92.623(P)	92.994(P)	93.323(P)						
P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication.												

MISCELLANEOUS EQUIPMENT

Series Id: PCU33431-33431-
Series Tit PPI industry data for Audio and video equipment mfg, not seasonally adjusted
Industry: Audio and video equipment mfg
Product: Audio and video equipment mfg
Base Dat 200312

Download:

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2003												100
2004	99.9	100.6	99.8	98.7	98.7	98.3	97.3	97.1	96.8	96.6	96.6	96.7
2005	96.8	96.8	96.4	96	96.2	96.2	96.1	96.2	94.1	94.1	94.2	94.2
2006	95.5	95.5	95.4	95.4	93.4	93.1	92.5	92.5	92.5	92.8	92.8	92.8
2007	92.8	92.6	92.6	92.6	92.6	92.6	91.6	88.5	88.5	88.6	88.6	88.6
2008	88.6	88.6	88.9	88.8	88.8	88.9	90.6	90.6	90.9	89.7	89.3	88.5
2009	88.7	88	87.4	86.3	85.3	84.3	84.2	84.2	84.3	84.3	84.3	84.3
2010	84.4	84.4	84.4	84.4	84.4	84.3	84.3	84.3	84.3	84.5	84.5	84.2
2011	83.2	83.7	84.1	83.5	83.5	83.5	83.9	84.7	84.7	85	85.1	85
2012	84.4	84.9	84.9	84.3	84.2	84.2	84.3	84.1	84.1	84.1	84.1	84.1
2013	84.7	82.3	82.4	82.4	82.2	82.4	82.5	82.5	82.4	82.4	82.4	82.4
2014	82.5	82.6	82.6	82.7	82.7	82.7	82.7	82.8	82.8	82.8	82.8	82.9
2015	82.9	83	83	82.9	82.9	82.9	82.9	83	82.8	82.8	82.8	82.8
2016	82.8	82.9	82.9	83	83	83.1	83.1	83.2	83.2	83.2	83.2	83.2
2017	83.2	83.2	83.1	83.2	83.3	83.2	83.1	82.9	83	83	82.9	82.9
2018	82.9	82.9	83.2	82.8	82.7	82.7	82.8	82.7	82.5	82.4	82.6	82.6
2019	82.9	83	83	82.9	83.4	83.2	83.2	83.4	84.5	85.2	85.3	85.2
2020	85.8	85.8	85.9	85.7	85.7	85.7	86	86	86	86	86	86
2021	86	86	86	86	86.5	87.4	89.774	91.945	91.945	92.885	93.917	94.023
2022	95.075	95.811	97.101(P)	97.117(P)	97.273(P)	97.617(P)						
P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication.												

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DEALS AUGUST 6, 2018 / 5:11 PM / 6 MONTHS AGO

SJW Group makes $1.1 billion all-cash offer for Connecticut Water

3 MIN READ

NEW YORK (Reuters) - SJW Group (SJW.N) and Connecticut Water Service Inc (CTWS.O) said on Monday they were changing from a merger to an acquisition agreement, with SJW offering to buy the New England utility for $1.1 billion in cash instead of combining stock.

The switch to an all-cash offer is worth $70 per Connecticut Water share, a 33 percent premium to Connecticut Water's share price prior to the original deal announced in March, according to a joint statement.

It was also higher than the implied $61.86 per share value of the Clinton, Connecticut-based firm under the merger-of-equals transaction, which would have created a combined company in which existing SJW shareholders would hold 60 percent of the stock.

SJW closed 2.3 percent lower, while Connecticut Water was 9 percent higher at $68.50.

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To pay for the acquisition, SJW will initially utilize a $975 million bridge loan from financial adviser JP Morgan Chase (JPM.N). Ultimately, the purchase would be covered by debt and between $450 million and $500 million of equity finance.

The new deal aims to conclude in the first quarter of 2019, subject to approvals from Connecticut Water's shareholders, as well as regulators in Connecticut and Maine.

The duo's original all-stock merger announcement in March triggered competing offers from Eversource Energy (ES.N) and California Water Service Group (CWT.N).

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"We have converted from a stock-for-stock deal to a cash offer, which will resolve any further market distractions from the inferior proposals," SJW Chief Executive Eric Thornburg told Reuters, in reference to the actions by Eversource and CalWater.

Switching to an acquisition, versus a merger structure, means that SJW shareholders will no longer be required to vote on approving the deal, the statement said.

RBS sounds alarm over Brexit

CalWater has an open tender offer to acquire SJW that runs until Sept. 28.

However, asked if the change was aimed at heading off any shareholder challenge to the deal, Thornburg told Reuters it "wasn't a consideration" and it had received nothing but support from its shareholders.

CalWater declined to comment. A spokesman for Eversource said the company was evaluating developments but, as it has made clear, it will be disciplined in pursuing this or any other transaction.

Reporting by David French in New York; Additional Reporting by Liana B. Baker; Editing by Lisa Shumaker

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CONNECTICUT WATER SERVICE INC / CT
BALANCE_SHEET2
Form Type: 10-K
Period End: Dec 31, 2017
Date Filed: Mar 15, 2018
Table Of Contents

CONNECTICUT WATER SERVICE, INC.

CONSOLIDATED BALANCE SHEETS

December 31, (in thousands, except share amounts)	2017	2016
ASSETS		
Utility Plant	$ 927,289	$ 777,860
Construction Work in Progress	11,761	33,748
	939,050	811,608
Accumulated Provision for Depreciation	(241,327)	(210,212)
Net Utility Plant	697,723	601,396
Other Property and Investments	10,662	9,071
Cash and Cash Equivalents	3,618	1,564
Accounts Receivable (Less Allowance, 2017 - $1,265; 2016 - $1,100)	14,965	13,024
Accrued Unbilled Revenues	8,481	8,171
Materials and Supplies, at Average Cost	1,593	1,536
Prepayments and Other Current Assets	7,021	5,069
Total Current Assets	35,678	29,364
Unrecovered Income Taxes - Regulatory Asset	66,631	93,264
Pension Benefits - Regulatory Asset	11,339	12,266
Post-Retirement Benefits Other Than Pension - Regulatory Asset	116	265
Goodwill	67,016	30,427
Deferred Charges and Other Costs	9,618	8,449
Total Regulatory and Other Long-Term Assets	154,720	144,671
Total Assets	$ 898,783	$ 784,502
CAPITALIZATION AND LIABILITIES		
Common Stockholders' Equity:		
Common Stock Without Par Value: Authorized - 25,000,000 Shares		
Issued and Outstanding:		
2017 - 12,065,016; 2016 - 11,248,458	$ 191,641	$ 145,739
Retained Earnings	102,417	91,213
Accumulated Other Comprehensive Loss	(428)	(924)
Common Stockholders' Equity	293,630	236,028
Preferred Stock	772	772
Long-Term Debt	253,367	197,047
Total Capitalization	547,769	433,847
Current Portion of Long-Term Debt	6,173	4,859
Interim Bank Loans Payable	19,281	32,953
Accounts Payable and Accrued Expenses	11,319	13,116
Accrued Interest	1,439	1,012
Current Portion of Refund to Customers - Regulatory Liability	64	855
Other Current Liabilities	3,262	2,330
Total Current Liabilities	41,538	55,125
Advances for Construction	20,024	19,127
Deferred Federal and State Income Taxes	33,579	50,558
Unfunded Future Income Taxes	58,384	90,977
Long-Term Compensation Arrangements	32,649	33,540
Unamortized Investment Tax Credits - Regulatory Liability	1,133	1,189
Excess Accumulated Deferred Income Tax - Regulatory Liability	30,937	4,373
Refund to Customers - Regulatory Liability	-	108
Other Long-Term Liabilities	1,241	701
Total Long-Term Liabilities	177,947	200,573
Contributions in Aid of Construction	131,529	94,957
Commitments and Contingencies	-	-
Total Capitalization and Liabilities	$ 898,783	$ 784,502

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CONNECTICUT WATER SERVICE INC / CT
INCOME_STATEMENT2
Form Type: 10-K
Period End: Dec 31, 2017
Date Filed: Mar 15, 2018
Table Of Contents

CONNECTICUT WATER SERVICE, INC.

CONSOLIDATED STATEMENTS OF INCOME

For the Years Ended December 31, (in thousands, except per share data)	2017	2016	2015
Operating Revenues	$ 107,054	$ 98,667	$ 96,041
Operating Expenses			
Operation and Maintenance	48,017	44,191	48,052
Depreciation	16,684	13,905	12,871
Income Taxes	(1,993)	2,570	(818)
Taxes Other Than Income Taxes	10,941	9,796	9,294
Total Operating Expenses	73,649	70,462	69,399
Net Operating Revenues	33,405	28,205	26,642
Other Utility Income, Net of Taxes	824	744	797
Total Utility Operating Income	34,229	28,949	27,439
Other Income (Deductions), Net of Taxes			
(Loss) Gain on Real Estate Transactions	33	(54)	349
Non-Water Sales Earnings	1,167	1,219	1,394
Allowance for Funds Used During Construction	774	1,198	530
Other	(2,308)	(1,009)	(214)
Total Other Income (Loss), Net of Taxes	(334)	1,354	2,059
Interest and Debt Expenses			
Interest on Long-Term Debt	9,054	7,714	7,087
Other Interest Income, Net	(359)	(922)	(458)
Amortization of Debt Expense and Premium, Net	146	124	108
Total Interest and Debt Expenses	8,841	6,916	6,737
Net Income	25,054	23,387	22,761
Preferred Stock Dividend Requirement	38	38	38
Total Net Income Applicable to Common Stock	$ 25,016	$ 23,349	$ 22,723
Weighted Average Common Shares Outstanding:			
Basic	11,540	11,009	10,958
Diluted	11,762	11,228	11,164
Earnings Per Common Share:			
Basic	$ 2.17	$ 2.12	$ 2.07
Diluted	$ 2.13	$ 2.08	$ 2.04

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

For the Years Ended December 31, (in thousands)	2017	2016	2015
Net Income	$ 25,054	$ 23,387	$ 22,761
Other Comprehensive Income (Loss), net of tax			
Adjustment to post-retirement benefit plans, net of tax benefit (expense) of $(419), $15, and $(505) in 2017, 2016, and 2015, respectively	289	(24)	765
Unrealized Investment gain (loss), net of tax (expense) benefit of $(13), $(22) and $62, in 2017, 2016, and 2015, respectively	207	35	(97)
Other Comprehensive Income, net of tax	$ 496	$ 11	$ 668
Comprehensive Income	$ 25,550	$ 23,398	$ 23,429

A-6 LIST OF TOWNS SERVED

List by operating divisions the towns served directly, indicating those in which franchise is for limited area by an asterisk (*) after name. Give population of the area and the number of customers.

Line No.	Town	Population of Area	Number of Customers	Line No.	Town	Population of Area	Number of Customers
					Sub Totals Forward:	30,120	725
1	Belmont N. H.	7,356	160	16			
2	Bow, N.H.	7,519	95	17			
3	Carroll, N.H.	763	409	18			
4	Belmont, NH	7,356	22	19			
5	Gilford, NH	7,126	39	20			
6				21			
7				22			
8				23			
9				24			
10				25			
11				26			
12				27			
13				28			
14				29			
15	Sub Totals Forward:	30,120	725	30	Total	30,120	725

A-7 PAYMENTS TO INDIVIDUALS

List names of all individuals, partnerships, or corporations to whom payments totaling $10,000 or more for services rendered were made or accrued during the year, and the amount paid or accrued to each. Where payments or accruals to the individual members of a partnership or firm together total $10,000 or more, list each individual and the amount paid or due each.

Line No.	Name	Address	Amount
1	NESC	Plainville,, Ct.	222,877
2	City of Laconia	Laconia, NH	91,004
3	Rowell's Services	Northfield, NH	57,242
4	Eversource	Boston, MA	43,226
5	CoBank	Greenwood Village, CO	43,000
6	Stephen P. St. Cyr & Associates	Biddeford, Me.	40,959
7	NH Brown Law	Somersworth, NH	37,206
8	PKF O'Conner Davies	Shelton, Ct.	36,020
9	State of NH	Concord, NH	16,544
10	Fortin Construction	Londonderry, NH	16,155
11	Town of Carroll	Carroll, NH	15,201
12	Town of Belmont	Belmont, NH	14,953
13	Harcros Chemicals	Chicago, IL	12,909
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30	Total		$ 647,296

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CONSUMPTION INFORMATION (Dover Division)

1. Estimated total population of territory covered by franchise		
2. Estimated population reached by the distributing system		
3. Estimated population actually supplied		1,809
4. Total consumption during the year in gallons		50,866,736
5. Average daily consumption (in gallons)		138,429
6. Day on which the greatest amount was pumped		8/13/2020
7. Gallons pumped on above day		368,000
8. Week during which greatest amount was pumped	8/9/20-8/15/20	
9. Gallons pumped during above week		1,906,000
10. Gallons per day per service		218
11. Consumption metered		50,866,736
12. Consumption metered,	100 percent of total consumption	

13. CUSTOMERS

Number Being Supplied at Beginning of Year	Discontinued Since	Connected Since	Number Being Supplied at Close of Year
637	1	0	636

Name of City, Town, or District	Number of Customers as of December 31
Dover, MA	636

Sixty-four of these connections represent contractual service to Town of Dover plus one master meter at town connection.

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CONSUMPTION INFORMATION (Plymouth Division)

1. Estimated total population of territory covered by franchise	2,513
2. Estimated population reached by the distributing system	2,513
3. Estimated population actually supplied	2,513
4. Total consumption during the year (GALS)	101,211,880
5. Average daily consumption	294,414
6. Day on which the greatest amount was pumped	7/27/2020
7. Gallons pumped on above day	724,300
8. Week during which greatest amount was pumped	7/26/2020-8/1/2020
9. Gallons pumped during above week	4,544,900
10. Gallons per day per service	219
11. Consumption metered	101,211,880
12. Consumption metered,	100% percent of total consumption

13. CUSTOMERS

Number Being Supplied at Beginning of Year	Discontinued Since	Connected Since	Number Being Supplied at Close of Year
853	0	9	862

Name of City, Town, or District	Number of Customers as of December 31
Plymouth, MA	862

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CONSUMPTION INFORMATION (Springdale Division)

1. Estimated total population of territory covered by franchise		115
2. Estimated population reached by the distributing system		115
3. Estimated population actually supplied		115
4. Total consumption during the year (GALS)		7,463,606
5. Average daily consumption		20,448
6. Day on which the greatest amount was pumped		6/27/2020
7. Gallons pumped on above day		88,000
8. Week during which greatest amount was pumped	6/21/20-6/27/20	
9. Gallons pumped during above week		407,000
10. Gallons per day per service		418
11. Consumption metered		7,463,606
12. Consumption metered,	100 percent of total consumption	

13. CUSTOMERS

Number Being Supplied at Beginning of Year	Discontinued Since	Connected Since	Number Being Supplied at Close of Year
41	0	1	42

Name of City, Town, or District	Number of Customers as of December 31
Dover, MA	42

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CONSUMPTION INFORMATION

1. Estimated total population of territory covered by franchise	1100	
2. Estimated population reached by the distributing system	1100	
3. Estimated population actually supplied	1100	
4. Total consumption during the year	31,956,826	gals.
5. Average daily consumption	87,553	gals.
6. Day on which the greatest amount was pumped	7/20/2020	
7. Gallons pumped on above day	173,596	
8. Week during which greatest amount was pumped	7/16/20-7/25/20	
9. Gallons pumped during above week	975,066	
10. Gallons per day per service	180	
11. Consumption metered	31,956,826	gals.
12. Consumption metered,	100	% of total consumption

13. CUSTOMERS

Number Being Supplied at Beginning of Year	Discontinued Since	Connected Since	Number Being Supplied at Close of Year
487	0		487

Name of City, Town, or District	Number of Customers as of December 31
Sheffield, MA	
*487 metered customers, 3 fixed fee customers	490

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Filed by Eversource Energy
(Commission File No. 001-05324) pursuant
to Rule 425 under the Securities Act of 1933

Subject Company: New England Service Company





JOINT NEWS RELEASE

New England Service Company To be Acquired by Aquarion Water Company

Region's largest private water company expands operations in
Connecticut, Massachusetts and New Hampshire

BRIDGEPORT, CONN. – April 8, 2021 – Aquarion Company (Aquarion), parent of Aquarion Water Company, and New England Service Company (NESC) (OTC Pink Sheets Trading Symbol: NESW) today announced that they have entered into a definitive agreement whereby Aquarion will acquire all outstanding shares of NESC and NESC will become a wholly-owned subsidiary of Aquarion. Aquarion is a water supply company and holding company based in Bridgeport, Connecticut, providing regulated water service to customers in Connecticut, Massachusetts, and New Hampshire. NESC is a holding company based in Plainville, Connecticut providing regulated water service to customers in Connecticut, Massachusetts, and New Hampshire.

Under the agreement, which was unanimously approved by the Boards of Directors of both Aquarion and NESC, the acquisition will be executed through a stock-for-stock transaction that is structured to be a tax-free reorganization. The agreement provides that the stockholders of NESC will receive 0.51208 shares of the common shares of Aquarion's parent, Eversource Energy (Eversource) (NYSE: ES), in exchange for each share of NESC common stock. The fixed exchange ratio implies a $44.90 per share price based on the $87.68 closing price of Eversource Energy common shares on April 6, 2021. In connection with the exchange, Eversource Energy will issue approximately 463,000 shares of ES Common Stock at closing.

The merger includes NESC's Valley Water System in Connecticut, Colonial Water Company and Mountain Water Systems in Massachusetts, and Abenaki Water Company in New Hampshire, as well as unregulated service operations throughout New England. The merger will add nearly 10,000 customers to Aquarion's existing base of 216,000 customers. Under the agreement, all NESC employees will be retained.

"This merger will create long-term benefits for customers, employees, and the communities we serve," said Donald Morrissey, President of Aquarion Water Company. "We will make investments in these water systems focused on reliability and water quality and deliver a superior customer experience. We also welcome NESC's dedicated employees to the Aquarion team. I'm confident that we share a similar passion for delivering superior water service to customers and the communities we serve and being great stewards of the environment."

Over the last ten years, Aquarion has integrated over 70 water systems into its operations, strengthening the company's ability to deliver high-quality water to communities throughout the region.

"I am pleased to announce the NESC and Aquarion combination and look forward to working with Aquarion's leadership team on a smooth transition for our customers and employees," said Don Vaughan, NESC Chairman. He also noted, "Aquarion is well-positioned to deliver the reliable high-quality water service that our customers expect." NESC President, Nicholas LaChance, added "The stockholders, customers and employees of NESC will benefit from this deal with Aquarion. We view this transaction with Aquarion as a win for all of our stakeholders, and we look forward to working closely with their team."

The completion of the transaction will require approval by the stockholders of NESC, and the NESC Board of Directors has resolved to recommend the adoption of the merger agreement by the stockholders. The transaction is also subject to the approval of regulatory authorities, including the Connecticut Public Utilities Regulatory Authority, Massachusetts Department of Public Utilities, and New Hampshire Public Utilities Commission, and satisfaction of several other conditions. The parties plan to file all required regulatory applications over the coming months with an anticipated closing by the end of 2021.

Advisors and Counsel

Ropes & Gray LLP served as counsel to Aquarion Company and Eversource Energy in the transaction. Boenning & Scattergood, Inc. provided a fairness opinion to the Board of Directors of New England Service Company. Cranmore, FitzGerald and Meaney served as counsel to New England Service Company.

About Aquarion Water Company:

Aquarion Water Company is the public water supply company for more than 625,000 people in 52 cities and towns throughout Connecticut, as well as serving customers in Massachusetts and New Hampshire. It is the largest investor-owned water utility in New England and among the seven largest in the U.S. Based in Bridgeport, CT, Aquarion has been in the public water supply business since 1857. Across its operations, Aquarion strives to act as a responsible steward of the environment and to assist the communities it serves in promoting sustainable practices. Aquarion Company is a wholly-owned subsidiary of Eversource.

For more information on Aquarion Water Company, please visit www.aquarionwater.com or www.facebook.com/aquarionwater.

About New England Service Company

Headquartered in Plainville, Connecticut, NESC is predominantly involved in the operation, management and financing of water systems and other related activities. NESC was formed in 1997 to operate in both regulated and unregulated water markets. NESC is the sole stockholder of four regulated water companies.

For more information on New England Service Company please visit
www.NewEnglandServiceCompany.com

This news release includes statements concerning Aquarion and Aquarion Water Company's expectations, beliefs, plans, objectives, goals, strategies, assumptions of future events, future financial performance or growth and other statements that are not historical facts, including statements regarding the planned merger with New England Service Company, the timing of such transaction and benefits anticipated from such transaction. These statements are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Generally, readers can identify these forward-looking statements through the use of words or phrases such as "will," "estimate," "expect," "anticipate," "intend," "plan," "project," "believe," "forecast," "should," "could" and other similar expressions. Forward-looking statements involve risks and uncertainties that may cause actual results or outcomes to differ materially from those included in the forward-looking statements. Factors that may cause actual results to differ materially from those included in the forward-looking statements include, but are not limited to: the transaction is subject to conditions to closing, including regulatory approvals, that may not be satisfied; it may take longer than anticipated to consummate the transaction; we may not realize the benefits we anticipate from the transaction; unforeseen liabilities; risks relating to integration of the acquired business; and other presently unknown or unforeseen factors.

Other risk factors are detailed in Eversource Energy's reports filed with the Securities and Exchange Commission (SEC) and updated as necessary, and are available on Eversource Energy's website at www.eversource.com and on the SEC's website at www.sec.gov. All such factors are difficult to predict and contain uncertainties that may materially affect Aquarion or Aquarion Water Company's actual results, many of which are beyond our control. You should not place undue reliance on the forward-looking statements; each speaks only as of the date on which such statement is made, except as required by federal securities laws, and Aquarion Water Company undertakes no obligation to update any forward-looking statement or statements to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events.

Additional Information

This communication does not constitute an offer to buy or solicitation of any offer to sell securities. This communication relates to a proposed business combination transaction between Aquarion Company and New England Service Company. In connection with the proposed business combination, Eversource Energy will file a registration statement with the SEC. This communication is not a substitute for any registration statement, prospectus/proxy statement or other document Eversource Energy, Aquarion Company and/or New England Service Company may file with the SEC in connection with the proposed transaction. INVESTORS AND SECURITY HOLDERS OF NEW ENGLAND SERVICE COMPANY ARE URGED TO READ CAREFULLY THE REGISTRATION STATEMENT, PROSPECTUS, PROXY STATEMENT AND OTHER DOCUMENTS FILED WITH THE SEC WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT EVERSOURCE ENERGY, AQUARION COMPANY, NEW ENGLAND SERVICE COMPANY AND THE PROPOSED TRANSACTION. Investors and security holders may obtain free copies of these documents (when they are available) and other related documents filed with the SEC at the SEC's web site at www.sec.gov or by directing a request to Eversource's Investor Relations department at (860) 665-5154 or by email to jeffrey.kotkin@eversource.com.

Certain Information Regarding Participants

This filing may be deemed solicitation material in respect of the proposed business combination transaction between Aquarion Company and New England Service Company. The directors, trustees, executive officers and certain other members of management and employees of Eversource Energy, Aquarion Company and New England Service Company may be deemed "participants" in the solicitation of proxies from stockholders of New England Service Company in favor of the proposed merger. You can find information about Eversource's trustees and executive officers in Eversource's annual report on Form 10-K for the year ended December 31, 2020, which was filed with the SEC on February 17, 2021 and its proxy statement for its 2021 annual meeting filed with the SEC on March 26, 2021. Information regarding the persons who may, under the rules of the SEC, be considered participants in the solicitation of the stockholders of New England Service Company in connection with the proposed merger will be set forth in the registration statement, prospectus/proxy statement or other documents filed with the SEC if any when they become available. You may obtain these documents (when they become available) free of charge at the SEC's web site at www.sec.gov and from Investor Relations at Eversource as described above.

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NEW ENGLAND SERVICE COMPANY, INC. AND SUBSIDIARIES

Consolidated Balance Sheets

	December 31, 2020	December 31, 2019
ASSETS		
Utility plant, at cost	$ 52,176,919	$ 50,866,999
Less accumulated depreciation and amortization	(17,108,971)	(16,242,563)
Net Utility Plant	35,067,948	34,624,436
Non-utility property, plant and equipment	2,340,344	2,229,441
Less: accumulated depreciation	(841,502)	(736,994)
Net Non-Utility Property, Plant and Equipment	1,498,842	1,492,447
Current Assets		
Cash and cash equivalents	1,217,863	781,095
Marketable securities	387,294	456,385
Accounts receivable	682,735	728,725
Accrued unbilled revenues	391,450	369,136
Regulatory asset - revenue adjustment mechanism, current portion	83,303	218,322
Income taxes receivable	-	5,286
Materials and supplies inventory	105,343	99,032
Prepaid expenses	51,811	52,968
Total Current Assets	2,919,799	2,710,949
Other Assets		
Investment in cooperative capital plan	28,473	21,500
Deferred charges and other regulatory assets	2,243,524	1,750,628
Regulatory asset - revenue adjustment mechanism, net of current portion	10,426	48,847
Preliminary survey and investigation	5,111	4,883
Regulatory asset - income taxes recoverable	4,263,900	4,238,900
Total Other Assets	6,551,434	6,064,758
Total Assets	$ 46,038,023	$ 44,892,590

See Notes to Consolidated Financial Statements

NEW ENGLAND SERVICE COMPANY, INC. AND SUBSIDIARIES

Consolidated Balance Sheets *(continued)*

	December 31, 2020	December 31, 2019
STOCKHOLDERS' EQUITY AND LIABILITIES		
Stockholders' Equity		
Common stock, no par; 3,000,000 shares authorized; 906,418 shares issued, 903,325 and 900,850 shares outstanding at December 31, 2020 and 2019	$ 3,784,217	$ 3,784,217
Additional paid in capital	297,426	297,426
Treasury stock, at cost, 3,093 and 5,568 shares at December 31, 2020 and 2019	(72,974)	(128,758)
Retained earnings	12,776,934	12,511,864
Total Stockholders' Equity	16,785,603	16,464,749
Long-term debt, net of current portion	9,148,153	9,349,951
Current Liabilities		
Note payable, bank	122,000	70,500
Current portion of long-term debt	678,831	570,170
Accounts payable and accrued expenses	765,365	544,412
Accrued property and other taxes	234,396	215,792
Deferred revenues	117,927	76,874
Total Current Liabilities	1,918,519	1,477,748
Other Liabilities		
Deferred income taxes	5,739,210	5,443,590
Regulatory - excess deferred income taxes	762,275	763,669
Regulatory - excess income taxes	293,643	195,762
Security deposits and other deferred credits	105,525	109,249
Customer advances for construction	97,586	42,738
Contributions in aid of construction	9,519,329	9,431,954
Amortized contributions in aid of construction	1,668,180	1,614,180
Total Other Liabilities	18,185,748	17,601,142
Total Stockholder's Equity and Liabilities	$ 46,038,023	$ 44,893,590

See Notes to Consolidated Financial Statements

NEW ENGLAND SERVICE COMPANY, INC. AND SUBSIDIARIES

Consolidated Statements of Income

	Year Ended December 31, 2020	2019
OPERATING REVENUES		
Contracts with customers		
Utility revenues	$ 6,531,154	$ 6,047,244
Contracting and jobbing	1,519,110	1,497,323
Total Contracts with Customers	8,050,264	7,544,567
Alternative revenue programs	(56,176)	97,506
Total Operating Revenues	7,994,088	7,642,073
OPERATING EXPENSES		
Operation expenses	3,399,314	3,292,866
Maintenance expenses	369,749	322,583
Cost of contracting and jobbing	737,715	804,274
Depreciation and amortization	1,170,093	1,129,426
Taxes other than income taxes	757,357	743,266
Interest charges	347,298	350,372
Total Operating Expenses	6,781,526	6,642,787
Income from Operations	1,212,562	999,286
OTHER INCOME AND (DEDUCTIONS)		
Rental income and other	2,000	3,114
Investment income	21,350	70,550
Allowance for funds used during construction	10,771	5,275
Non-operating expense	(3,454)	(2,676)
Total Other Income	30,667	76,263
Income Before Income Taxes	1,243,229	1,075,549
Income tax expense	310,230	289,200
Net Income	$ 932,999	$ 786,349
PER SHARE AMOUNTS		
Weighted average shares outstanding	902,454	897,030
Net income	$ 1.03	$ 0.88
Dividends	$ 0.74	$ 0.70
Book value	$ 18.60	$ 18.35

See Notes to Consolidated Financial Statements

VALLEY WATER SYSTEMS, INC.

Notes to Financial Statements
Years Ended December 31, 2020 and 2019

1. Description of the Company

Valley Water Systems, Inc. (the "Company"), a wholly owned subsidiary of New England Service Company ("NESC"), is a public utility distributing water to approximately 6,760 customers in the towns of Plainville, Farmington, and Southington, Connecticut area. As a public utility operating in Connecticut, the Company functions under rules and regulations prescribed by the State of Connecticut Public Utilities Regulatory Authority ("PURA").

2. Summary of Significant Accounting Policies

Basis of Presentation

The Company maintains its accounts in accordance with the PURA Uniform System of Accounts as prescribed for Water Utilities Class A. The Company prepares its financial statements in accordance with accounting principles generally accepted in the United States of America which include the provisions of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 980, *Regulated Operations* ("ASC 980"). Under ASC 980, regulated companies defer costs and credits on the balance sheet as regulatory assets and liabilities when it is probable that those costs and credits will be recognized in the rate setting process in a period different from the period in which they would have been reflected in income by an unregulated company. These deferred regulatory assets and liabilities are then reflected in the income statement in the period in which the same amounts are reflected in rates charged for service.

Use of Estimates

The preparation of financial statements require management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported revenues and expenses. Accordingly, actual results could differ from these estimates.

Cash and Cash Equivalents

Cash and cash equivalents includes cash balances held in bank accounts and highly liquid debt instruments with maturities of three months or less at the time of purchase.

From time to time, the Company had on deposit at financial institutions cash and cash equivalents which exceed current federal deposit insurance limitations. The Company had not experienced any losses in such accounts to date and believes it is not exposed to any significant credit risk on cash and cash equivalents.

Accounts Receivable

Accounts receivable are stated at the amount management expects to collect from outstanding balances. The Company continuously monitors the creditworthiness of customers and establishes, when necessary, an allowance for amounts that may become uncollectible in the future based on current economic trends, historical payment and bad debt write-off experience.

subsidiary water companies, serving approximately 200,000 customers in 52 towns and cities with a population of approximately 674,000 throughout Connecticut's seven counties.[2] A map showing AWC-CT's current service area is attached to the Joint Application as Exhibit I. AWC-CT has provided water and water services to Connecticut residents and customers continuously since 1857. AWC-CT is well known to PURA and well respected by the water industry in Connecticut, and nationally. AWC-CT had over $1.68 billion of utility plant assets as of December 31, 2020 and operating revenues of $189.6 million in 2020.

Q. Please describe New England Service Company.

A. NESC is a Connecticut stock corporation. NESC was formed in 1996 as a holding company to operate in both regulated and unregulated water utility markets. NESC has one regulated water distribution operating subsidiary in Connecticut. VWS, a utility established in 1884 as the Plainville Water Company, delivers water to over 6,800 customers or a population of approximately 18,000 in Plainville, Southington, and Farmington, Connecticut. A map showing VWS' current service area is attached to the Joint Application as Exhibit I.

In addition to owning VWS, NESC is also the sole stockholder of Colonial Water Company, a utility that provides water to about 1,530 customers in Dover and Plymouth, Massachusetts; Mountain Water Systems, a utility that provides water to about 490 customers in Sheffield, Massachusetts; and Abenaki Water Company, a combination of

[2] AWC-CT has acquired and integrated 16 new water systems since its last general rate proceeding in September 2013 via the acquisitions of the assets of the Indian Fields, West Service Corp. (2 systems), Bedrock, East Derby, Litchfield Hills, Southeastern CT Water Authority Lantern Hill Division, Hickory Hills Corporation, Arlington Acres, Pleasure Valley, Hillside Water Corporation, Town of Marlborough, and Town of New Fairfield systems, in addition to the transfer of the Laurel Ridge, West Shore Owners Association and Interlaken Water System assets.

The Water Utility Industry consists of seven companies that provide water services to residential, commercial, and industrial customers. The group is now ranked 46th for relative year-ahead performance, which is near the middle of the pack of the 97 industries followed by *Value Line*.

Many investors are drawn to the water utility group for its well-defined earnings and dividend growth prospects. The stocks also have low Beta coefficients.

Every company here is in the midst of a large construction program. This is due to the nation's water infrastructure being in poor shape. Capital budgets should remain meaningful for years to come, which will require external financing.

The role of regulators cannot be overstated. Fortunately, relations between the water companies and authorities has been constructive.

Stocks in the Water Utility Industry do not come cheap. Indeed, they trade at high price/ earnings multiples. Scarcity is one of the reasons. The market capitalization of the entire industry is small compared to others, on a relative basis.

INDUSTRY TIMELINESS: 46 (of 97)

COVID-19 Update

Since the pandemic began, water utilities' earnings and revenues have been not been affected. Demand for water is very inelastic when it is priced reasonably, as is the case in most of the country. The biggest change was just the cessation of shutoffs for nonpayment. This has never been a major issue in this industry, as water is essential and is often one of the first bill paid by consumers. Going forward, even if more deviant types of the coronavirus emerge, the impact on these companies' bottom line ought to be marginal.

Fragmented Industry

An overwhelming majority of water districts in the United States are small and operated by local municipalities or states. Indeed, there are easily more than 50,000 separate water entities operating throughout the country. As a result, it is a very inefficient market. *American Water Works* has been the most active acquirer of these smaller districts. With the average age of a typical domestic pipeline being well over 50 years (more below), many operators do not have the needed funds to modernize their assets. We expect consolidation to remain a trend.

Aging Infrastructure

For decades, there was too little investment made in replacing pipes, valves and other assets associated with the collection and distribution of water. Customers bills were also kept artificially low. This caused the water infrastructure to become old and badly in need of repair. In addition, as the nation's population grew, water usage increased significantly. As water supplies came under more pressure, especially in the Southwest, the amount of water lost while being transported because of broken pipes took on more importance.

Large Building Programs

Investment in infrastructure has increased significantly over the past decade, as the industry is now trying to upgrade its water systems. Every company in this group is now undertaking a strategy of spending heavily to address the problem. To finance the new construction, water bills have had to be raised. Regions of the country where water is not plentiful even had to raise the price to consumers to reduce excess consumption. In one of the spending bills now before Congress, the federal government would allocate $111 billion toward helping the water industry. The aid would be meant mostly for the many different water authorities that are owned by cities and states, however.

Financial Strength And Regulation

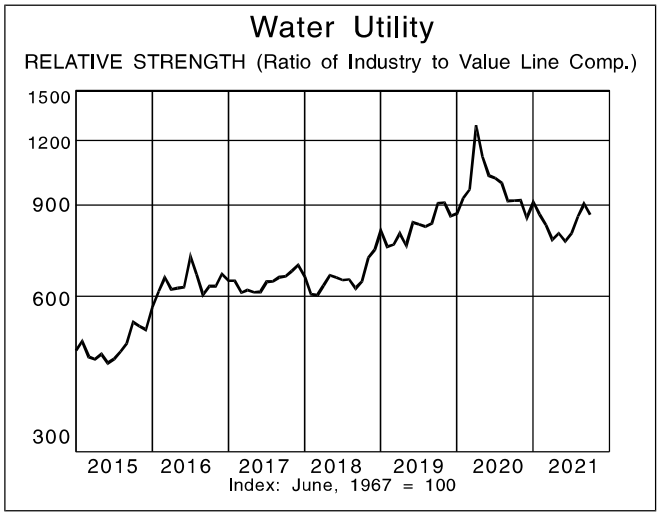
These construction projects forced utilities to issue debt to finance a healthy part of the expenditures. Thus, balance sheets in the group, are just in average condition. We expect them to become slightly more leveraged in the future, as borrowing increases.

As we stated earlier, the role played by state water authorities in the process is critical. They establish the rate of return that water utilities can earn on their equity. Should regulation be too restrictive, utilities will be less inclined to spend money. Regulators have to find that fine line between where water customers aren't being overcharged, but their monthly bill are high enough so that these companies can make a profit. Unlike gas and electric utilities, where there can discord between the parties involved, the water industry has generally been harmonious. This has enabled large sums to be spent by companies to better maintain and refurbish their existing assets.

Conclusion

In the Water Utility Industry, *California Water* is the only stock that is ranked favorably for year-ahead price performance. Investors typically have to pay a premium to own these stocks. Also, because the stocks in the group have performed so well over the past five years, almost all of them have well-below average total return prospects over the pull to 2024-2026. As always, we recommend that subscribers read each individual report before making commitments.

James A. Flood



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AMER. STATES WATER NYSE-AWR

RECENT PRICE 86.71 | P/E RATIO 35.7 (Trailing: 34.7 Median: 24.0) | RELATIVE P/E RATIO 1.89 | DIV'D YLD 1.7% | VALUE LINE

TIMELINESS 3 Raised 3/5/21
SAFETY 2 Raised 7/20/12
TECHNICAL 2 Raised 10/8/21
BETA .65 (1.00 = Market)

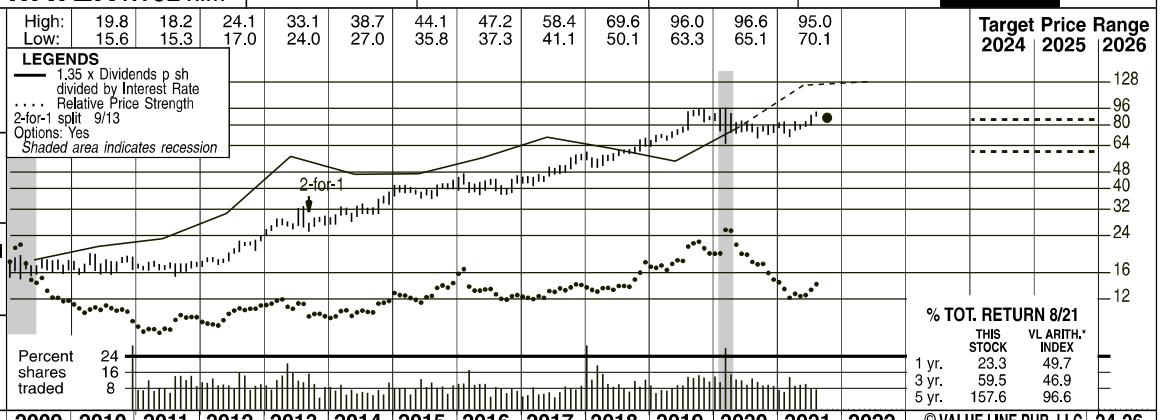
18-Month Target Price Range
Low-High Midpoint (% to Mid)
$75-$118 $97 (10%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	85	(Nil)	2%
Low	60	(-30%)	-6%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	121	120	126
to Sell	142	128	117
Hld's(000)	25483	25737	25636



2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
7.03	7.88	8.75	9.21	9.74	10.71	11.12	12.12	12.19	12.17	12.56	11.92	12.01	11.88	12.86	13.24	*13.55*	*13.75*	Revenues per sh	*17.20*
1.32	1.45	1.65	1.69	1.70	2.11	2.13	2.48	2.65	2.67	2.81	2.70	2.96	2.84	3.26	3.34	*3.50*	*3.75*	"Cash Flow" per sh	*4.80*
.66	.67	.81	.78	.81	1.11	1.12	1.41	1.61	1.57	1.61	1.62	1.88	1.72	2.28	2.33	*2.45*	*2.60*	Earnings per sh [A]	*3.05*
.45	.46	.48	.50	.51	.52	.55	.64	.76	.83	.87	.91	.99	1.06	1.16	1.28	*1.40*	*1.52*	Div'd Decl'd per sh [B■]	*2.00*
2.12	1.95	1.45	2.23	2.09	2.12	2.13	1.77	2.52	1.89	2.39	3.55	3.08	3.44	4.12	3.54	*4.05*	*4.20*	Cap'l Spending per sh	*4.25*
7.86	8.32	8.77	8.97	9.70	10.13	10.84	11.80	12.72	13.24	12.77	13.52	14.45	15.19	16.33	17.39	*17.45*	*20.00*	Book Value per sh [D]	*23.20*
33.60	34.10	34.46	34.60	37.06	37.26	37.70	38.53	38.72	38.29	36.50	36.57	36.68	36.76	36.85	36.89	*37.25*	*37.50*	Common Shs Outst'g [C]	*37.50*
21.9	27.7	24.0	22.6	21.2	15.7	15.4	14.3	17.2	20.1	24.6	25.6	25.7	34.0	34.4	34.3	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*24.0*
1.17	1.50	1.27	1.36	1.41	1.00	.97	.91	.97	1.06	1.24	1.34	1.29	1.84	1.83	1.78			Relative P/E Ratio	*1.35*
3.1%	2.5%	2.5%	2.9%	2.9%	3.0%	3.2%	3.1%	2.7%	2.6%	2.2%	2.2%	2.0%	1.8%	1.5%	1.6%			Avg Ann'l Div'd Yield	*2.8%*
419.3	466.9	472.1	465.8	458.6	436.1	440.6	436.8	473.9	488.2	*510*	*525*	Revenues ($mill)	*645*
42.0	54.1	62.7	61.1	60.5	59.7	69.4	63.9	84.3	86.4	*90.0*	*95.0*	Net Profit ($mill)	*115*
41.7%	39.9%	36.3%	38.4%	38.4%	36.8%	36.0%	22.0%	22.6%	24.6%	*23.5%*	*24.0%*	Income Tax Rate	*23.0%*
2.0%	2.5%	--	--	--	--	--	--	2.5%	--	*1.0%*	*1.0%*	AFUDC % to Net Profit	*1.0%*
45.4%	42.2%	39.8%	39.1%	41.1%	39.4%	38.0%	40.5%	44.4%	47.2%	*45.5%*	*48.5%*	Long-Term Debt Ratio	*53.5%*
54.6%	57.8%	60.2%	60.9%	58.9%	60.6%	62.0%	59.5%	55.6%	52.8%	*54.5%*	*51.5%*	Common Equity Ratio	*46.5%*
749.1	787.0	818.4	832.6	791.5	815.3	854.9	938.4	1082.5	1216.2	*1260*	*1390*	Total Capital ($mill)	*1620*
896.5	917.8	981.5	1003.5	1060.8	1150.9	1205.0	1296.3	1415.7	1512.0	*1600*	*1700*	Net Plant ($mill)	*1925*
7.1%	8.3%	8.9%	8.6%	9.0%	8.6%	9.3%	7.9%	8.9%	8.0%	*8.0%*	*8.0%*	Return on Total Cap'l	*8.5%*
10.3%	11.9%	12.7%	12.0%	13.0%	12.1%	13.1%	11.4%	14.0%	13.5%	*13.5%*	*13.5%*	Return on Shr. Equity	*13.0%*
10.3%	11.9%	12.7%	12.0%	13.0%	12.1%	13.1%	11.4%	14.0%	13.5%	*13.5%*	*13.5%*	Return on Com Equity	*13.0%*
5.3%	6.6%	6.8%	5.7%	6.0%	5.3%	6.2%	4.5%	6.9%	6.1%	*6.0%*	*5.5%*	Retained to Com Eq	*4.5%*
49%	45%	47%	53%	54%	56%	52%	61%	51%	55%	*57%*	*60%*	All Div'ds to Net Prof	*66%*

CAPITAL STRUCTURE as of 6/30/21
Total Debt $412.7 mill. **Due in 5 Yrs** $136.0 mill.
LT Debt $412.3mill. **LT Interest** $24.0 mill. (38% of Cap'l)

Leases, Uncapitalized: Annual rentals $2.6 mill.
Pension Assets-12/20 $213.1 mill. **Oblig.** $272.8 mill.
Pfd Stock None

Common Stock 36,931,771 shs. as of 7/30/21

MARKET CAP: $3.2 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2019	2020	6/30/21
Cash Assets	1.3	36.7	5.4
Accts Receivable	20.9	29.2	28.5
Other	100.3	91.2	33.9
Current Assets	122.5	157.1	136.3
Accts Payable	55.6	63.8	66.0
Debt Due	5.3	.4	.4
Other	55.1	54.4	45.0
Current Liab.	116.0	118.6	111.4

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

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	94.7	106.9	124.2	111.0	436.8
2019	101.7	124.7	134.5	113.0	473.9
2020	109.1	121.3	133.6	124.2	488.2
2021	117.1	128.4	*139*	*125.5*	*510*
2022	*120*	*130*	*145*	*130*	*525*

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	.29	.44	.62	.37	1.72
2019	.35	.72	.76	.45	2.28
2020	.38	.69	.72	.54	2.33
2021	.52	.72	*.75*	*.46*	*2.45*
2022	*.50*	*.75*	*.78*	*.57*	*2.60*

Calendar	QUARTERLY DIVIDENDS PAID [B■] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.242	.242	.255	.255	.99
2018	.255	.255	.275	.275	1.06
2019	.275	.275	.305	.305	1.16
2020	.305	.305	.335	.335	1.28
2021	.335	.335	.365		

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Co., it supplies water to 261,976 customers in 10 California counties. Service areas include the metropolitan areas of Los Angeles and Orange Counties. The company also provides electricity to 24,545 customers in Big Bear Lake and San Bernardino Cnty. Provides water & wastewater services to U.S. military bases through its ASUS subsidiary. Sold Chaparral City Wtr. of AZ. (6/11). Employs 841. BlackRock, Inc. owns 16.4% of out. shares; Vanguard, 12.0%; off. & dir., 1.0% (4/21 Proxy). Chairman: Lloyd Ross. Pres. & CEO: Robert Sprowls. Inc: CA. Address: 630 East Foothill Blvd., San Dimas, CA 91773. Tel.: 909-394-3600. Internet: www.aswater.com.

American States Water has raised its dividend. In the September interim, the quarterly share payout was increased from $0.335 to $0.365. This 9% hike was well above the average growth rate compared to the other water utilities that make up this group.

The company is on track for a decent showing in 2021. Thanks to a better-than-expected first half, we think that earnings per share could well rise 5% this year. This is not bad, considering that utilities often do not perform well when operating in the final year of a three-year-old rate case.

Earnings from 2022 will be heavily influenced by a pending regulatory case. In California, utilities petition state authorities for permission to charge higher fees triennially. American States filed for rate relief for the 2022 to 2024 period several years ago, and a ruling by the California Public Utility Commission should be made early next year. (Any rate hike would be retroactive to January 1st.) Management has been in discussions, and it's possible that a settlement can be reached earlier. In any case, the decision on the previous request for higher rates was relatively constructive.

Inflation may stall some of the expected growth in the nonregulated segment. Through its ASUS subsidiary, the company provides water services to military installations in the United States. The armed forces are in the midst of privatizing these operations, and ASUS has done well winning its fair share of the contracts. In the second quarter, shares earnings were off here about 8% due to a spike in the price of commodities and other costs. Unlike its water operations, profitability in this business is not controlled. Hence, there is greater risk, as well as a chance to make more income from investments. Should inflation not be transitory, it would not be helpful because the company operates on 50-year contracts.

Theses shares are only expected to perform in line with the broader market averages in the year ahead. Looking further out to 2024-2026, AWR total return prospects are well below the *Value Line* median, which is the case for most stocks in this industry.

James A. Flood *October 8, 2021*

(A) Primary earnings. Excludes nonrecurring gains/(losses): '05, 13¢; '06, 3¢; '08, (14¢); '10, (23¢); '11, 10¢. Next earnings report due early November.
(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for split.
(D) Includes intangibles. As of 6/30/20; $1.1 million/$0.03 a share.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	85
Earnings Predictability	90

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AMERICAN WATER NYSE-AWK

RECENT PRICE 170.71 | P/E RATIO 39.5 (Trailing: 41.3 Median: 24.0) | RELATIVE P/E RATIO 2.09 | DIV'D YLD 1.4% | VALUE LINE

TIMELINESS 3 Lowered 6/25/21
SAFETY 3 New 7/25/08
TECHNICAL 2 Raised 10/8/21
BETA .90 (1.00 = Market)

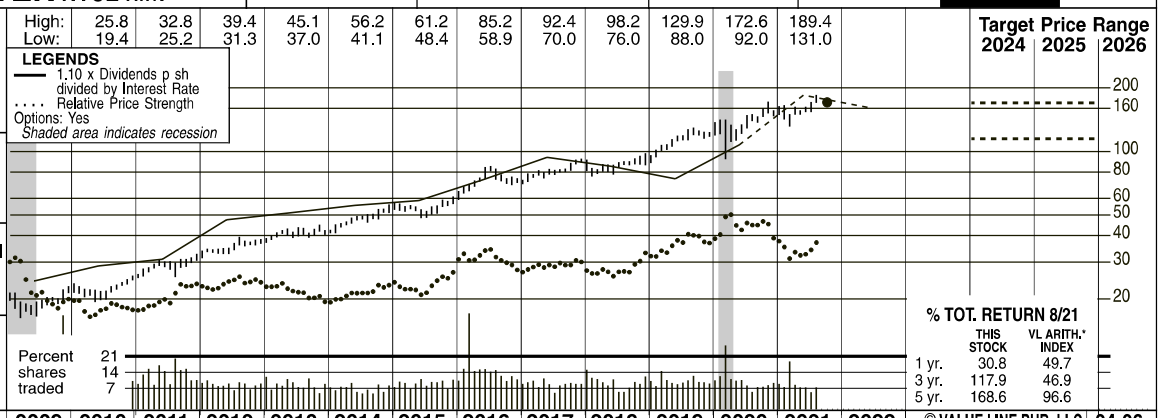
18-Month Target Price Range
Low-High Midpoint (% to Mid)
$120-$279 $200 (15%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	170	(Nil)	2%
Low	115	(-35%)	-7%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	449	434	444
to Sell	344	388	377
Hld's(000)	148917	148561	150291



2005	2006E	2007E	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
--	13.08	13.84	14.61	13.98	15.49	15.18	16.25	16.28	16.78	17.72	18.54	18.81	19.04	19.97	20.83	*22.10*	*23.30*	Revenues per sh	*25.80*
--	.65	d.47	2.87	2.89	3.56	3.73	4.27	4.36	4.75	5.13	5.26	5.14	6.15	6.65	7.24	*7.70*	*8.25*	"Cash Flow" per sh	*9.70*
--	d.97	d2.14	1.10	1.25	1.53	1.72	2.11	2.06	2.39	2.64	2.62	2.38	3.15	3.43	3.91	*4.25*	*4.60*	Earnings per sh A	*5.50*
--	--	--	.40	.82	.86	.90	1.21	.84	1.21	1.33	1.47	1.62	1.78	1.96	2.15	*2.36*	*2.57*	Div'd Decl'd per sh B■	*3.10*
--	4.31	4.74	6.31	4.50	4.38	5.27	5.25	5.50	5.33	6.51	7.36	8.04	8.78	9.15	10.05	*10.60*	*12.60*	Cap'l Spending per sh	*11.75*
--	23.86	28.39	25.64	22.91	23.59	24.11	25.11	26.52	27.39	28.25	29.24	30.13	32.42	33.83	35.58	*37.95*	*40.20*	Book Value per sh D	*50.00*
--	160.00	160.00	160.00	174.63	175.00	175.66	176.99	178.25	179.46	178.28	178.10	178.44	180.68	180.81	181.30	*181.50*	*182.00*	Common Shs Outst'g C	*190.00*
--	--	--	18.9	15.6	14.6	16.8	16.7	19.9	20.0	20.5	27.7	33.8	27.3	32.9	35.3	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*26.0*
--	--	--	1.14	1.04	.93	1.05	1.06	1.12	1.05	1.03	1.45	1.70	1.47	1.75	1.83			Relative P/E Ratio	*1.45*
--	--	--	1.9%	4.2%	3.8%	3.1%	3.4%	2.0%	2.5%	2.5%	2.0%	2.0%	2.1%	1.7%	1.6%			Avg Ann'l Div'd Yield	*2.2%*
						2666.2	2876.9	2901.9	3011.3	3159.0	3302.0	3357.0	3440.0	3610.0	3777.0	*4025*	*4240*	Revenues ($mill)	*4900*
						304.9	374.3	369.3	429.8	476.0	468.0	426.0	567.0	621.0	709.0	*770*	*835*	Net Profit ($mill)	*1045*
						39.5%	40.7%	39.1%	39.4%	39.1%	39.2%	53.3%	28.2%	25.5%	23.3%	*19.5%*	*23.5%*	Income Tax Rate	*24.0%*
						--	6.2%	5.1%	--	--	--	--	--	5.1%	4.0%	*4.5%*	*5.0%*	AFUDC % to Net Profit	*5.0%*
						55.7%	53.9%	52.4%	52.4%	53.7%	52.4%	54.7%	56.3%	58.5%	59.1%	*59.0%*	*61.5%*	Long-Term Debt Ratio	*61.0%*
						44.2%	46.1%	47.6%	47.4%	46.2%	47.5%	45.3%	43.6%	41.4%	40.9%	*41.0%*	*39.5%*	Common Equity Ratio	*39.0%*
						9580.3	9635.5	9940.7	10364	10911	10967	11875	13433	14760	15787	*16900*	*18700*	Total Capital ($mill)	*20000*
						11021	11739	12391	12900	13933	14992	16246	17409	18232	19710	*20750*	*22150*	Net Plant ($mill)	*24500*
						4.8%	5.4%	5.1%	5.5%	5.7%	5.6%	4.9%	5.4%	5.4%	5.7%	*5.5%*	*5.5%*	Return on Total Cap'l	*6.0%*
						7.2%	8.4%	7.8%	8.7%	9.4%	9.0%	7.9%	9.7%	10.1%	11.0%	*11.0%*	*11.5%*	Return on Shr. Equity	*11.0%*
						7.2%	8.4%	7.8%	8.7%	9.4%	9.0%	7.9%	9.7%	10.1%	11.0%	*11.0%*	*11.5%*	Return on Com Equity	*11.0%*
						3.5%	3.6%	4.7%	4.3%	4.7%	4.0%	2.5%	4.2%	4.4%	5.0%	*5.0%*	*5.5%*	Retained to Com Eq	*4.5%*
						52%	57%	40%	50%	50%	56%	68%	56%	57%	55%	*56%*	*56%*	All Div'ds to Net Prof	*56%*

CAPITAL STRUCTURE as of 6/30/21
Total Debt $10998 mil. **Due in 5 Yrs** $2867 mil.
LT Debt $10343 mil. **LT Interest** $384 mil. (61% of Cap'l)

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

Common Stock 181,495,720 shares as of 7/27/21

MARKET CAP: $31.0 billion (Large Cap)

CURRENT POSITION ($MILL.)	2019	2020	6/30/21
Cash Assets	91	576	104
Accts Receivable	294	321	311
Other	900	1009	1155
Current Assets	1285	1906	1570
Accts Payable	203	189	146
Debt Due	814	1611	655
Other	1028	1081	909
Current Liab.	2045	2881	1710

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

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	761	853	976	850	3440
2019	813	882	1013	902	3610
2020	844	931	1079	923	3777
2021	888	999	*1160*	*975*	*4025*
2022	*935*	*1055*	*1200*	*1050*	*4240*

Calendar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	.59	.91	1.03	.62	3.15
2019	.62	.94	1.33	.54	3.43
2020	.68	.97	1.46	.80	3.91
2021	.73	1.14	*1.53*	*.85*	*4.25*
2022	*.80*	*1.15*	*1.70*	*.95*	*4.60*

Calendar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.375	.415	.415	.415	1.62
2018	.415	.455	.455	.455	1.78
2019	.455	.50	.50	.50	1.96
2020	.50	.55	.55	.55	2.15
2021	.55	.6025	.6025		

BUSINESS: American Water Works Company, Inc. is the largest investor-owned water and wastewater utility in the U.S., providing services to approximately 15 million people in 46 states. Nonregulated business assists municipalities and military bases with the maintenance and upkeep as well. Regulated operations made up 86% of 2020 revenues. New Jersey is its largest market accounting for 24.5% of regulated revenues; Pennsylvania, 22.5%; Missouri, 10.6%. Has 6,800 employees. The Vanguard Grp, owns 11.7% of outstanding shares; BlackRock, Inc., 8.1%; officers & directors, less than 1.0%. (3/21 Proxy). President & CEO: Susan N. Story. Chairman: George MacKenzie. Address: 1 Water Street, Camden, NJ 08102. Tel.: 856-346-8200. Internet: www.amwater.com.

American Water Works' earning prospects are among the best in the water utility industry. The company got off to a strong start in 2021, as share earnings were up 13% in the first half. For the full year, our share-net estimate remains at $4.25, which would represent a 9% gain over 2020's record showing. We think this will be followed in 2022 by an 8% increase to $4.60 a share. What's more, the bottom line ought to grow 7%-10% through mid-decade.

The company's strategy is very straightforward. By far, it is the largest publicly traded water utility in the United States. Thus, it has the financial wherewithal and widespread distribution to better take advantage of a very inefficient fractured industry. American Water is able to buy a number of small municipally owned water districts each year and absorb them into its operations. Moreover, because there are such redundancies in this group, substantial cost savings are able to be realized. American is also able to expand its plant base, upon which is earns a return.

The building budget is massive. The country's water pipelines, valves, and treatment plants are outdated and in urgent need of replacement and repair. With it sprawling operations, American Water plans on spending almost $2 billion this year alone. The level of annual outlays ought to remain elevated, as the company believes that once this decade is completed, its capital expenditures budget will have been between $22 billion-$25 billion.

Regulatory treatment remains a key factor in the company's performance. As a regulated utility, American Water and its subsidiaries must file rate cases in the states where they operate. In the past, most authorities have had a constructive relationship with water companies because there is general agreement that underinvestment in the past was the reason for the poor state of the country's water infrastructure. Should the relationship become more adversarial, earnings growth would be hurt.

These shares do not stand out at this juncture. In addition to a 3 (Average) Timeliness rank, AWK's long-term total return potential is subpar.

James A. Flood *October 8, 2021*

(A) Diluted earnings. Excludes nonrecur. losses: '08, $4.62; '09, $2.63; '11, $0.07. Disc. oper.: '06, ($0.04); '11, $0.03; '12, ($0.10); '13,($0.01). GAAP used as of 2014. Next earnings report due early November. (B) Dividends paid in March, June, September, and December. ■ Div. reinvestment available. (C) In millions. (D) Includes intangibles. On 6/30/21: $1.561 billion, $8.60/share. (E) Pro forma numbers for '06 & '07.

Company's Financial Strength	B++
Stock's Price Stability	80
Price Growth Persistence	100
Earnings Predictability	90

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CALIFORNIA WATER NYSE-CWT

RECENT PRICE 58.99 | P/E RATIO 26.7 (Trailing: 20.1 Median: 24.0) | RELATIVE P/E RATIO 1.41 | DIV'D YLD 1.6% | VALUE LINE

TIMELINESS 2 Raised 10/1/21
SAFETY 3 Lowered 7/27/07
TECHNICAL 2 Raised 9/24/21
BETA .70 (1.00 = Market)

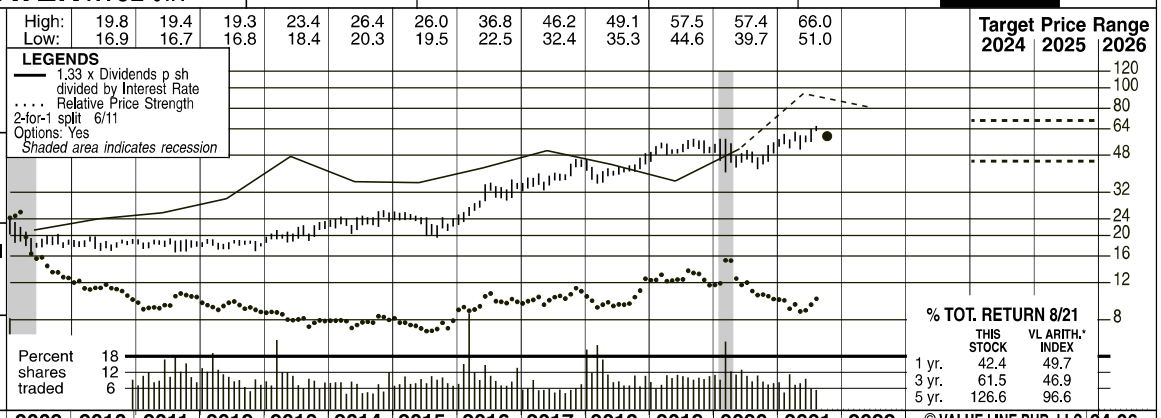
18-Month Target Price Range
Low-High Midpoint (% to Mid)
$49-$81 $65 (10%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	70	(+20%)	6%
Low	45	(-25%)	-4%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	122	112	113
to Sell	91	104	99
Hld's(000)	37534	38005	39103



2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
8.72	8.10	8.88	9.90	10.82	11.05	12.00	13.34	12.23	12.50	12.29	12.70	13.89	14.53	14.72	15.78	*15.85*	*16.35*	Revenues per sh	*16.70*
1.52	1.36	1.56	1.86	1.93	1.93	2.07	2.32	2.21	2.47	2.22	2.34	3.00	3.11	3.14	3.88	*3.60*	*3.75*	"Cash Flow" per sh	*3.85*
.74	.67	.75	.95	.98	.91	.86	1.02	1.02	1.19	.94	1.01	1.40	1.36	1.31	1.97	*2.05*	*2.20*	Earnings per sh [A]	*2.35*
.57	.58	.58	.59	.59	.60	.62	.63	.64	.65	.67	.69	.72	.75	.79	.85	*.92*	*.98*	Div'd Decl'd per sh [B] ■	*1.15*
2.01	2.14	1.84	2.41	2.66	2.97	2.83	3.04	2.58	2.76	3.69	4.77	5.40	5.65	5.64	5.93	*5.25*	*5.50*	Cap'l Spending per sh	*5.85*
7.90	9.07	9.25	9.72	10.13	10.45	10.76	11.28	12.54	13.11	13.41	13.75	14.44	15.19	16.07	18.30	*19.90*	*19.70*	Book Value per sh [C]	*20.30*
36.78	41.31	41.33	41.45	41.53	41.67	41.82	41.98	47.74	47.81	47.88	47.97	48.01	48.07	48.53	50.33	*51.50*	*52.00*	Common Shs Outst'g [D]	*53.00*
24.9	29.2	26.1	19.8	19.7	20.3	21.3	17.9	20.1	19.7	24.8	29.6	26.9	30.3	39.3	24.9	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*24.0*
1.33	1.58	1.39	1.19	1.31	1.29	1.34	1.14	1.13	1.04	1.25	1.55	1.35	1.64	2.09	1.29			Relative P/E Ratio	*1.30*
3.1%	2.9%	3.0%	3.1%	3.1%	3.2%	3.4%	3.5%	3.1%	2.8%	2.9%	2.3%	1.9%	1.8%	1.5%	1.7%			Avg Ann'l Div'd Yield	*2.0%*
501.8	560.0	584.1	597.5	588.4	609.4	666.9	698.2	714.6	794.3	*815*	*850*	Revenues ($mill) [E]	*885*
36.1	42.6	47.3	56.7	45.0	48.7	67.2	65.6	63.1	96.8	*105*	*115*	Net Profit ($mill)	*124*
40.5%	37.5%	30.3%	33.0%	36.0%	35.5%	30.1%	24.5%	19.1%	11.1%	*21.0%*	*21.0%*	Income Tax Rate	*21.0%*
7.6%	8.0%	4.3%	2.7%	4.3%	6.1%	3.5%	3.1%	5.8%	3.3%	*5.0%*	*5.0%*	AFUDC % to Net Profit	*5.0%*
51.7%	47.8%	41.6%	40.1%	44.4%	44.6%	42.7%	49.3%	50.2%	45.9%	*49.5%*	*45.5%*	Long-Term Debt Ratio	*41.0%*
48.3%	52.2%	58.4%	59.9%	55.6%	55.4%	57.3%	50.7%	49.8%	54.1%	*50.5%*	*54.5%*	Common Equity Ratio	*59.0%*
931.5	908.2	1024.9	1045.9	1154.4	1191.2	1209.3	1440.2	1566.7	1702.4	*2025*	*1875*	Total Capital ($mill)	*1825*
1381.1	1457.1	1515.8	1590.4	1701.8	1859.3	2048.0	2232.7	2406.4	2650.6	*2775*	*2800*	Net Plant ($mill)	*2925*
5.5%	6.3%	6.0%	6.3%	5.2%	5.5%	7.1%	5.9%	5.5%	7.0%	*6.0%*	*7.0%*	Return on Total Cap'l	*7.5%*
8.0%	9.0%	7.9%	9.1%	7.0%	7.4%	9.7%	9.0%	8.1%	10.5%	*10.5%*	*11.0%*	Return on Shr. Equity	*11.5%*
8.0%	9.0%	7.9%	9.1%	7.0%	7.4%	9.7%	9.0%	8.1%	10.5%	*10.5%*	*11.0%*	Return on Com Equity	*11.5%*
2.3%	3.4%	3.4%	4.1%	2.0%	2.4%	4.7%	4.0%	3.2%	6.0%	*5.5%*	*6.0%*	Retained to Com Eq	*6.0%*
71%	62%	56%	55%	71%	68%	51%	55%	60%	43%	*45%*	*45%*	All Div'ds to Net Prof	*49%*

CAPITAL STRUCTURE as of 6/30/21
Total Debt $1210.1 mill. **Due in 5 Yrs** $357.0 mill.
LT Debt $1059.9 mill. **LT Interest** $40.0 mill.
(Total interest coverage: 6.2x) (51% of Cap'l)

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

Pfd Stock None

Common Stock 51,535,000 shs.

MARKET CAP: $3.0 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2019	2020	6/30/21
Cash Assets	42.7	44.6	66.5
Other	142.0	221.4	239.1
Current Assets	184.7	266.0	305.6
Accts Payable	108.5	131.7	133.0
Debt Due	197.0	375.1	150.2
Other	53.2	81.9	79.2
Current Liab.	358.7	588.7	362.4

BUSINESS: California Water Service Group provides regulated and nonregulated water service to 492,600 customers in 100 communities in the state of California. Accounts for about 94% of total customers. Also operates in Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired Rio Grande Corp; West Hawaii Utilities (9/08). Revenue breakdown, '20: residential, 70%; business, 18%; industrial, 4%; public authorities, 5%; other 3%. Off. and dir. own 1% of common stock (4/21 proxy). Has 1,184 employees. Pres. and CEO: Martin A. Kropelnicki. Inc.: DE. Addr.: 1720 North First St., San Jose, CA 95112-4598. Tel.: 408-367-8200. Internet: www.calwatergroup.com.

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	3.5%	4.0%	*2.0%*
"Cash Flow"	6.0%	8.0%	*2.0%*
Earnings	5.0%	8.0%	*7.0%*
Dividends	3.0%	4.0%	*6.5%*
Book Value	5.0%	5.0%	*3.5%*

Calendar	QUARTERLY REVENUES ($ mill.)[E] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	134.6	174.9	221.3	167.4	698.2
2019	126.1	179.0	232.6	176.9	714.6
2020	125.6	175.5	304.1	189.1	794.3
2021	147.7	213.1	*250*	*204.2*	*815*
2022	*160*	*220*	*260*	*210*	*850*

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	d.02	.31	.75	.32	1.36
2019	d.16	.35	.88	.24	1.31
2020	d.42	.11	1.94	.31	1.97
2021	d.06	.75	*.95*	*.41*	*2.05*
2022	*.10*	*.65*	*1.00*	*.45*	*2.20*

Calendar	QUARTERLY DIVIDENDS PAID [B] ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.18	.18	.18	.18	.72
2018	.1875	.1875	.1875	.1875	.75
2019	.1975	.1975	.1975	.1975	.79
2020	.2125	.2125	.2125	.2125	.85
2021	.230	.230	.230		

California Water's second-quarter results markedly exceeded expectations. The stronger-than-anticipated showing can be largely attributed to the company's December, 2020 general rate case approval (as noted in our previous report). Specifically, cumulative rate increases and the continuation of various regulatory benefits helped bolster California Water's June-period operating results. Revenues of $213 million improved 21% year over year, easily outpacing our $200 million projection. Likewise, earnings of $0.75 per share smashed consensus estimates, jumping more than six times the previous-year tally. Positives from the abovementioned rate case vastly outweighed a modest uptick in administrative expenses. All told, we are adding $15 million and $0.35 to our current-year top- and bottom-line estimates, to $815 million and $2.05 per share, respectively.

The West Coast utility recently received the nod to acquire the water and wastewater systems of Preserve community in Millerton. The planned community consists of 1,400 mixed-use units, including residential, commercial, parks, and offices. California Water will begin operating and servicing the community upon official occupancy, which is slated for early next year.

Business prospects are bright 3- to 5-years out. First, economic conditions are apt to improve over the coming years, which ought to support residential and commercial water consumption. Second, the ball has just started rolling on the company's strategic capital investment initiatives (service pipeline and wastewater treatment facility upgrades). To this point, further rate case filings are likely to follow, suggesting higher rates for customers will eventually be on tap as well.

Momentum investors are best suited here, at the moment. California Water is favorably ranked (Timeliness: 2) for relative year-ahead price performance. But at the recent quotation, the stock does not particularly stand out for the pull to mid-decade, as total return potential is below the *Value Line* median. In sum, patient subscribers looking to add a noncyclical utility to their portfolios should probably turn the page, for now.

Nicholas P. Patrikis *October 8, 2021*

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

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	70
Earnings Predictability	60

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ESSENTIAL UTIL. NYSE-WTRG

RECENT PRICE 46.48 | P/E RATIO 28.2 (Trailing: 28.0 Median: 23.0) | RELATIVE P/E RATIO 1.49 | DIV'D YLD 2.3% | VALUE LINE

TIMELINESS 3 Lowered 7/30/21
SAFETY 3 Lowered 1/8/21
TECHNICAL 3 Raised 9/3/21
BETA 1.00 (1.00 = Market)

18-Month Target Price Range
Low-High Midpoint (% to Mid)
$37-$87 $62 (35%)

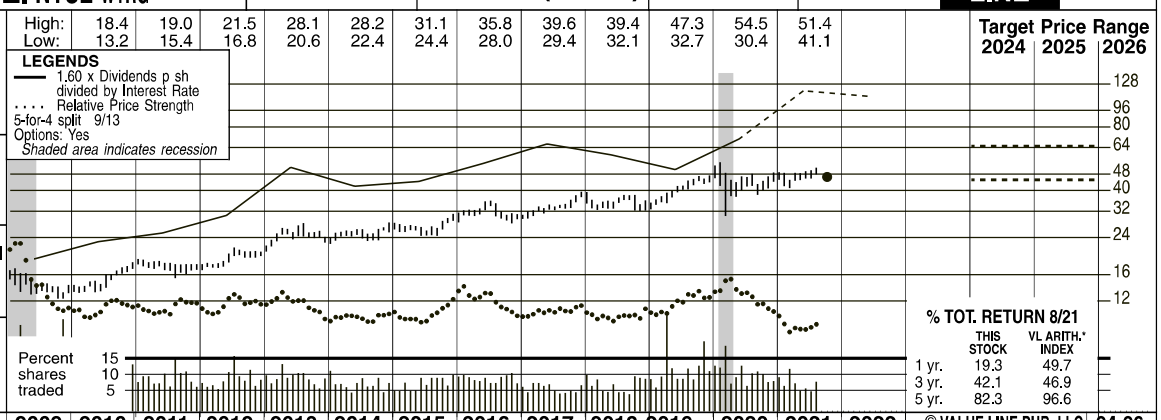
2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	65	(+40%)	11%
Low	45	(-5%)	2%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	264	258	244
to Sell	221	238	231
Hld's(000)	169334	176001	171680

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
High:	18.4	19.0	21.5	28.1	28.2	31.1	35.8	39.6	39.4	47.3	54.5	51.4								
Low:	13.2	15.4	16.8	20.6	22.4	24.4	28.0	29.4	32.1	32.7	30.4	41.1								
	3.08	3.23	3.61	3.71	3.93	4.21	4.10	4.32	4.32	4.37	4.61	4.62	4.56	4.71	4.03	5.96	*7.45*	*8.00*	Revenues per sh	*8.70*
	.97	1.01	1.10	1.14	1.29	1.42	1.45	1.51	1.82	1.89	1.87	2.07	2.12	1.90	1.73	2.21	*2.55*	*2.80*	"Cash Flow" per sh	*3.05*
	.57	.56	.57	.58	.62	.72	.83	.87	1.16	1.20	1.14	1.32	1.35	1.08	1.04	1.12	*1.70*	*1.80*	Earnings per sh [A]	*2.00*
	.32	.35	.38	.41	.44	.47	.50	.54	.58	.63	.69	.74	.79	.85	.91	.97	*1.04*	*1.12*	Div'd Decl'd per sh [B■]	*1.40*
	1.47	1.64	1.43	1.58	1.66	1.89	1.90	1.98	1.73	1.84	2.07	2.16	2.69	2.78	2.49	3.41	*4.00*	*4.00*	Cap'l Spending per sh	*3.75*
	5.04	5.57	5.85	6.26	6.50	6.81	7.21	7.90	8.63	9.27	9.78	10.43	11.02	11.28	17.58	19.09	*20.90*	*21.80*	Book Value per sh	*24.15*
	161.21	165.41	166.75	169.21	170.61	172.46	173.60	175.43	177.93	178.59	176.54	177.39	177.71	178.09	220.76	245.39	*253.00*	*254.50*	Common Shs Outst'g [C]	*270.00*
	31.8	34.7	32.0	24.9	23.1	21.1	21.3	21.9	21.2	20.8	23.5	23.9	24.7	32.6	39.1	39.6	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*27.0*
	1.69	1.87	1.70	1.50	1.54	1.34	1.34	1.39	1.19	1.09	1.18	1.25	1.24	1.76	2.08	2.06			Relative P/E Ratio	*1.50*
	1.8%	1.8%	2.1%	2.8%	3.1%	3.1%	2.8%	2.8%	2.4%	2.5%	2.6%	2.3%	2.4%	2.4%	2.2%	2.2%			Avg Ann'l Div'd Yield	*2.8%*
	712.0	757.8	768.6	779.9	814.2	819.9	809.5	838.1	889.7	1462.7	*1890*	*2040*	Revenues ($mill)	*2350*						
	144.8	153.1	205.0	213.9	201.8	234.2	239.7	192.0	224.5	284.8	*420*	*455*	Net Profit ($mill)	*540*						
	32.9%	39.0%	10.0%	10.5%	6.9%	8.2%	6.6%	--	6.6%	6.6%	*5.0%*	*6.0%*	Income Tax Rate	*7.0%*						
	--	--	1.1%	2.4%	3.1%	3.8%	6.3%	6.8%	7.2%	4.5%	*7.0%*	*7.5%*	AFUDC % to Net Profit	*6.0%*						
	52.7%	52.7%	48.9%	48.5%	50.3%	48.4%	50.6%	54.4%	43.1%	54.0%	*54.0%*	*56.0%*	Long-Term Debt Ratio	*55.0%*						
	47.3%	47.3%	51.1%	51.5%	49.7%	51.6%	49.4%	45.6%	56.9%	46.0%	*46.0%*	*44.0%*	Common Equity Ratio	*45.0%*						
	2646.8	2929.7	3003.6	3216.0	3469.5	3587.7	3965.4	4407.8	6824.2	10192	*11325*	*12400*	Total Capital ($mill)	*14500*						
	3612.9	3936.2	4167.3	4402.0	4688.9	5001.6	5399.9	5930.3	6345.8	9512.9	*10175*	*10875*	Net Plant ($mill)	*12300*						
	6.9%	6.6%	8.0%	7.8%	6.9%	7.6%	7.1%	5.5%	4.2%	3.7%	*4.5%*	*5.0%*	Return on Total Cap'l	*5.5%*						
	11.6%	11.0%	13.4%	12.9%	11.7%	12.7%	12.2%	9.6%	5.8%	6.1%	*8.0%*	*8.5%*	Return on Shr. Equity	*8.5%*						
	11.6%	11.0%	13.4%	12.9%	11.7%	12.7%	12.2%	9.6%	5.8%	6.1%	*8.0%*	*8.5%*	Return on Com Equity	*8.5%*						
	4.6%	4.3%	6.7%	6.1%	4.7%	5.6%	5.1%	2.1%	.9%	1.1%	*3.0%*	*3.0%*	Retained to Com Eq	*3.0%*						
	60%	61%	50%	52%	60%	56%	59%	79%	84%	82%	*63%*	*62%*	All Div'ds to Net Prof	*70%*						



CAPITAL STRUCTURE as of 6/30/21
Total Debt $5799.7 mill. **Due in 5 Yrs** $1102 mill.
LT Debt $5648.2 mill. **LT Interest** $203.0 mill.
(42% of Cap'l)

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

Pfd Stock None
Common Stock 245,757,399 shares
as of 7/23/21

MARKET CAP: $11.4 billion (Large Cap)

CURRENT POSITION ($MILL.)	2019	2020	6/30/21
Cash Assets	1868.9	4.8	8.4
Receivables	67.1	154.8	129.2
Inventory (AvgCst)	18.4	58.4	63.4
Other	58.3	162.2	103.7
Current Assets	2012.7	380.2	304.7
Accts Payable	74.9	177.5	131.8
Debt Due	130.8	162.6	151.5
Other	113.1	263.8	185.9
Current Liab.	318.8	603.9	469.2

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

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	194.3	211.9	226.2	205.7	838.1
2019	201.1	218.9	243.6	226.1	889.7
2020	255.6	384.5	348.6	474.0	1462.7
2021	583.6	397.0	*389.4*	*520*	*1890*
2022	*600*	*435*	*435*	*570*	*2040*

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	.29	.37	.44	d.02	1.08
2019	.09	.25	.38	.28	1.04
2020	.21	.29	.22	.40	1.12
2021	.72	.32	*.23*	*.43*	*1.70*
2022	*.67*	*.33*	*.35*	*.45*	*1.80*

Calendar	QUARTERLY DIVIDENDS PAID [B■] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.1913	.1913	.2047	.2047	.79
2018	.2047	.2047	.219	.219	.85
2019	.219	.219	.2343	.2343	.91
2020	.2343	.2343	.2507	.2507	.97
2021	.2507	.2507	.2682		

BUSINESS: Essential Utilities, Inc. became the new name for Aqua America on Feb. 3, 2020, to reflect the acquisition of Peoples, a natural gas utility, which occurred in 3/20. In 2020, Aqua Amer. provided water and wastewater services to about 5 million people in PA, OH, TX, IL, NC, NJ, IN, VA NS WS. Employed 3,180 Acquired AquaSource, 7/13; North Maine Utilities, 7/15; and others. Water respn. for 65% of revenues in 2020; residential, 39%; commercial, 10%; industrial, wastewater & other, 16%. Gas 35%. Off. & dir. own less than 1% of the common stock; Vanguard, 10.1%; BlackRock, 10.0%; Canadian Pension Plan about 8.8% (5/21 proxy). Pres. & CEO: Christopher Franklin. Inc.: PA Addr.: 762 W Lancaster Ave., Bryn Mawr, PA 19010. Tel.: 610-525-1400. Int.: www.essential.co.

Shares of Essential Water have not performed well of late. Since our July report, the price of the stock is up less than 1%. This compares unfavorably to the equities of other water utilities and the S&P 500 Index. Indeed, WTRG has trailed all but one equity in the group.

A major rate case has been filed in Pennsylvania. In late August, the company petitioned state regulators to recover the $1.1 billion (an average of $2,235 per customer), it has invested since its last filing. These funds were spent on replacing more than 400 miles of pipes and upgrading treatment plants. Historically, the regulatory commission has reached constructive decisions, as it's a recognized fact that like most other members in the industry, Essential's water infrastructure is badly in need of repair. If the full request is permitted, the average residential monthly bill would rise from $55.51 to $73.95. So, even though previous rulings have been positive, regulatory commissions are under pressure to keep rates low. Due to the necessity of these outlays, and knowing that the company must continue making large expenditures, we think state authorities will be fair.

Second-quarter earnings were better than expected. The June period was the first three-month income report in which Essential's numbers could be compared on an apple-to-apple basis to the previous year. (Recall that the company is the result of a large acquisition of the natural gas utility Peoples in mid-March of 2020.) Share net of $0.32 was 23% higher than we had forecast. This came despite weak demand for gas resulting from warmer-than-anticipated temperatures. We now expect the company to post earnings per share of $1.70, slightly above management's $1.64 to $1.69 range. In 2022, a more moderate advance of about 6% seems to be in the cards.

This neutrally ranked stock does not stand out for near- or long-term total return potential. However, its prospects are still better than most in the industry, and its dividend was recently raised a healthy 7%. Investors should also bear in mind that WTRG is no longer a pure water utility play, as its gas operations are now substantial.

James A. Flood *October 8, 2021*

(A) Diluted egs. Excl. nonrec. gains: '12, 18¢. Excl. gain from disc. operations: '12, 7¢; '13, 9¢; '14, 11¢. Quarterly EPS do not add in '19 due to a large change in the number of shares outstanding in the Dec. period. Next earnings report early November. (B) Dividends historically paid in early March, June, Sept., & Dec. ■ Div'd. reinvestment plan available (5% discount). (C) In millions, adjusted for stock splits. (D) Includes intangibles: 6/30/21, $2.341 bill./$9.53 a share.

Company's Financial Strength	B+
Stock's Price Stability	85
Price Growth Persistence	90
Earnings Predictability	60

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MIDDLESEX WATER NDQ-MSEX

RECENT PRICE 104.47 | P/E RATIO 43.9 (Trailing: 47.5 Median: 23.0) | RELATIVE P/E RATIO 2.32 | DIV'D YLD 1.1% | VALUE LINE

TIMELINESS 3 Lowered 6/4/21
SAFETY 2 New 10/21/11
TECHNICAL 3 Raised 10/1/21
BETA .70 (1.00 = Market)

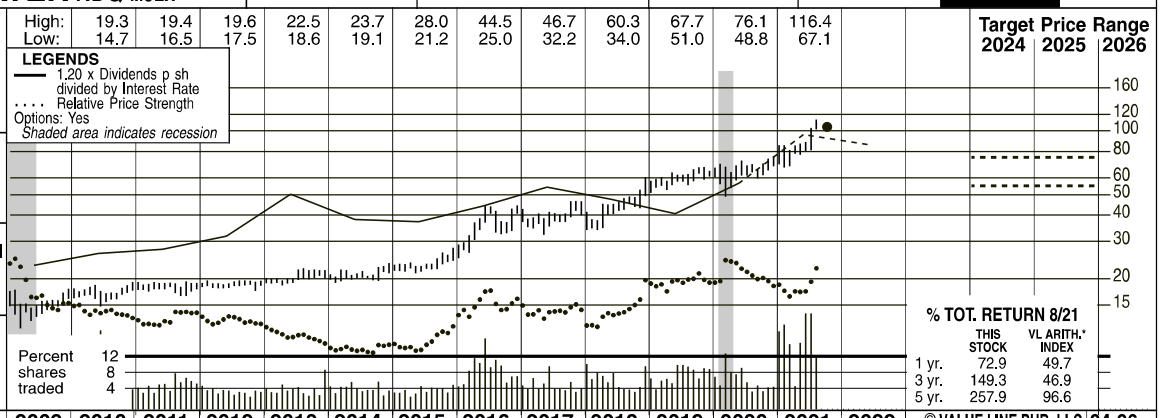
18-Month Target Price Range
Low-High Midpoint (% to Mid)
$65-$132 $99 (-5%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	75	(-30%)	-6%
Low	55	(-45%)	-13%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	67	64	71
to Sell	49	67	65
Hld's(000)	10675	10712	10852



2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
6.44	6.16	6.50	6.79	6.75	6.60	6.50	6.98	7.19	7.26	7.77	8.16	8.00	8.42	7.72	8.10	*8.45*	*8.70*	Revenues per sh	*9.15*
1.33	1.33	1.49	1.53	1.40	1.55	1.46	1.56	1.72	1.84	1.97	2.17	2.24	2.89	2.90	3.25	*3.20*	*3.35*	"Cash Flow" per sh	*3.75*
.71	.82	.87	.89	.72	.96	.84	.90	1.03	1.13	1.22	1.38	1.38	1.96	2.01	2.18	*2.30*	*2.40*	Earnings per sh [A]	*2.75*
.67	.68	.69	.70	.71	.72	.73	.74	.75	.76	.78	.81	.86	.91	.98	1.04	*1.10*	*1.15*	Div'd Decl'd per sh [B]■	*1.35*
2.18	2.31	1.66	2.12	1.49	1.90	1.50	1.36	1.26	1.40	1.59	2.91	3.08	4.40	5.11	6.04	*5.50*	*5.50*	Cap'l Spending per sh	*6.25*
8.26	9.52	10.05	10.03	10.33	11.13	11.27	11.48	11.82	12.24	12.74	13.40	14.02	15.17	18.57	19.81	*19.45*	*19.60*	Book Value per sh	*20.85*
11.58	13.17	13.25	13.40	13.52	15.57	15.70	15.82	15.96	16.12	16.23	16.30	16.35	16.40	17.43	17.47	*17.75*	*17.85*	Common Shs Outst'g [C]	*18.00*
27.4	22.7	21.6	19.8	21.0	17.8	21.7	20.8	19.7	18.5	19.1	25.6	28.4	22.2	29.7	30.1	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*24.0*
1.46	1.23	1.15	1.19	1.40	1.13	1.36	1.32	1.11	.97	.96	1.34	1.43	1.20	1.58	1.56			Relative P/E Ratio	*1.30*
3.5%	3.7%	3.7%	4.0%	4.7%	4.2%	4.0%	4.0%	3.7%	3.7%	3.3%	2.3%	2.2%	2.1%	1.6%	1.6%			Avg Ann'l Div'd Yield	*2.1%*
102.1	110.4	114.8	117.1	126.0	132.9	130.8	138.1	134.6	141.6	*150*	*155*	Revenues ($mill)	*165*
13.4	14.4	16.6	18.4	20.0	22.7	22.8	32.5	33.9	38.4	*41.0*	*43.0*	Net Profit ($mill)	*49.5*
32.7%	33.9%	34.1%	35.0%	34.5%	34.0%	32.7%	2.8%	2.8%	2.8%	*21.0%*	*21.0%*	Income Tax Rate	*21.0%*
6.1%	3.4%	1.9%	1.7%	1.9%	2.7%	3.1%	1.4%	3.4%	3.9%	*2.5%*	*2.5%*	AFUDC % to Net Profit	*2.5%*
42.3%	41.5%	40.4%	40.5%	39.4%	37.9%	37.5%	37.8%	41.5%	44.0%	*42.5%*	*41.5%*	Long-Term Debt Ratio	*40.0%*
56.6%	57.4%	58.7%	58.8%	59.8%	61.5%	61.8%	61.6%	58.2%	55.7%	*57.0%*	*58.0%*	Common Equity Ratio	*60.0%*
312.5	316.5	321.4	335.8	345.4	355.4	370.7	404.1	556.7	621.5	*610*	*600*	Total Capital ($mill)	*630*
422.2	435.2	446.5	465.4	481.9	517.8	557.2	618.5	705.7	796.6	*800*	*815*	Net Plant ($mill)	*835*
5.2%	5.4%	5.9%	6.3%	6.6%	7.1%	6.9%	8.9%	6.7%	6.8%	*7.0%*	*7.5%*	Return on Total Cap'l	*8.5%*
7.5%	7.8%	8.7%	9.2%	9.6%	10.3%	9.8%	12.9%	10.4%	11.0%	*12.0%*	*12.0%*	Return on Shr. Equity	*13.0%*
7.5%	7.8%	8.7%	9.3%	9.6%	10.3%	9.9%	13.0%	10.4%	11.1%	*12.0%*	*12.5%*	Return on Com Equity	*13.0%*
1.0%	1.4%	2.4%	3.1%	3.5%	4.3%	3.8%	7.0%	5.4%	5.8%	*6.0%*	*6.5%*	Retained to Com Eq	*6.5%*
87%	83%	73%	67%	63%	58%	62%	46%	48%	48%	*48%*	*48%*	All Div'ds to Net Prof	*49%*

CAPITAL STRUCTURE as of 6/30/21
Total Debt $279.7 mill. **Due in 5 Yrs** $43.7 mill.
LT Debt $272.5 mill. **LT Interest** $7.5 mill.
(Total interest coverage: 7.8x)
(44% of Cap'l)

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

Common Stock 17,490,561 shs.
as of 7/30/20

MARKET CAP: $1.8 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2019	2020	6/30/21
Cash Assets	2.2	4.5	6.0
Other	26.9	29.6	31.2
Current Assets	29.1	34.1	37.2
Accts Payable	23.3	30.4	23.1
Debt Due	27.2	9.3	7.2
Other	14.5	17.1	50.4
Current Liab.	65.0	56.8	80.7

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	2.0%	2.0%	*2.0%*
"Cash Flow"	7.5%	10.5%	*3.5%*
Earnings	9.0%	12.5%	*5.0%*
Dividends	3.0%	5.0%	*5.5%*
Book Value	5.5%	8.0%	*2.5%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	31.2	34.9	38.7	33.3	138.1
2019	30.7	33.4	37.8	32.7	134.6
2020	31.8	35.3	39.9	34.6	141.6
2021	32.5	36.7	*43.0*	*37.8*	*150*
2022	*34.0*	*38.0*	*45.0*	*38.0*	*155*

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	.27	.52	.74	.43	1.96
2019	.39	.49	.66	.46	2.01
2020	.44	.55	.72	.47	2.18
2021	.39	.62	*.75*	*.54*	*2.30*
2022	*.47*	*.58*	*.80*	*.55*	*2.40*

Calendar	QUARTERLY DIVIDENDS PAID [B]■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.21125	.21125	.21125	.22375	.86
2018	.22375	.22375	.22375	.24	.91
2019	.24	.24	.24	.2562	.98
2020	.2562	.2562	.2562	.2725	1.04
2021	.2725	.2725	.2725		

BUSINESS: Middlesex Water Company engages in the ownership and operation of regulated water utility systems in New Jersey, Delaware, and Pennsylvania. It also operates water and wastewater systems under contract on behalf of municipal and private clients in NJ and DE. Its Middlesex System provides water services to 61,000 retail customers, primarily in Middlesex County, New Jersey. In 2020, the Middlesex System accounted for 59% of operating revenues. At 12/31/20, the company had 348 employees. Incorporated: NJ. President, CEO, and Chairman: Dennis W. Doll. Officers & directors own 2.0% of the com. stock; BlackRock Inst. Trust Co., 7.8% (4/21 proxy). Add.: 485 C Route 1 South, Suite 400, Iselin, NJ 08830. Tel.: 732-634-1500. Int.: www.middlesexwater.com.

Shares of Middlesex Water established a fresh all-time high price during the month of September. In fact, since our previous report, the stock has surged more than 20% in value and, year to date, has logged about a 30% gain. Underpinning recent investor support for the water utility, in our view, is a combination of strong second-quarter financial results (discussed below) and a broadly increasing adoption of a flight-to-safety investment approach.

We are lifting our 2021 bottom-line estimate. For the June period, Middlesex delivered revenues of $36.7 million, which was roughly on par with consensus expectations. The figure improved about 4% year over year, helped along by higher water consumption and an expanding customer base in its Delaware systems. Meanwhile, net income jumped 13% from the previous-year tally, to $0.62 per share. On balance, we are adding $0.10 to our current-year forecast, to $2.30 per share.

The company has agreed to an asset divestment. Specifically, Middlesex inked a deal to sell its wholly-owned wastewater subsidiary Tidewater Environmental Services to Artesian Wastewater Management for $6.4 million in cash. The unit services approximately 3,600 customers in the Delaware area. The transaction, which is slated for completion within the fourth quarter, is subject to approval by the Delaware Public Service Commission and other customary closing conditions.

Business prospects three to five years out are solid. Our outlook for modest annual revenue and earnings expansion has not wavered. Middlesex's operations, which are largely uncorrelated to economic conditions, ought to perform decently over the pull to mid-decade.

We think the recently elevated quotation presents an opportunity for current shareholders to book some profits. Good-quality Middlesex shares are merely an Average (3) selection for relative year-ahead price performance. Moreover, the stock is trading at an extremely lofty price-to-earnings multiple. Patient subscribers should turn the page, too, as nearly all of the growth we envision out to 2024-2026 appears to already be baked into the recent price.

Nicholas P. Patrikis *October 8, 2021*

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

Company's Financial Strength	B++
Stock's Price Stability	85
Price Growth Persistence	70
Earnings Predictability	85

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SJW GROUP NYSE-SJW

RECENT PRICE 65.82 | P/E RATIO 28.7 (Trailing: 30.6 Median: 21.0) | RELATIVE P/E RATIO 1.52 | DIV'D YLD 2.1% | VALUE LINE

TIMELINESS 4 Lowered 8/13/21
SAFETY 3 New 4/22/11
TECHNICAL 3 Lowered 10/1/21
BETA .80 (1.00 = Market)

18-Month Target Price Range
Low-High Midpoint (% to Mid)
$52-$113 $83 (25%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	100	(+50%)	13%
Low	65	(Nil)	2%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	80	87	81
to Sell	68	73	64
Hld's(000)	19850	20963	21472

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
High:	28.2	26.8	26.9	30.1	33.7	35.7	56.9	69.3	68.4	74.5	75.0	71.7						
Low:	21.6	20.9	22.6	24.5	25.5	27.5	28.6	45.4	51.3	53.9	45.6	58.0						

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

Target Price Range 2024 2025 2026

% TOT. RETURN 8/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	13.1	49.7
3 yr.	26.3	46.9
5 yr.	77.4	96.6

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9.86	10.35	11.25	12.12	11.68	11.62	12.85	14.01	13.73	15.76	14.97	16.61	18.97	14.00	14.78	19.77	*19.65*	*20.50*	Revenues per sh	*22.15*
2.21	2.38	2.30	2.44	2.21	2.38	2.80	2.97	2.90	4.42	3.86	4.76	5.24	3.29	3.67	5.28	*3.85*	*4.30*	"Cash Flow" per sh	*5.30*
1.12	1.19	1.04	1.08	.81	.84	1.11	1.18	1.12	2.54	1.85	2.57	2.86	1.82	1.35	2.14	*2.20*	*2.65*	Earnings per sh [A]	*3.65*
.53	.57	.61	.65	.66	.68	.69	.71	.73	.75	.78	.81	1.04	1.12	1.20	1.28	*1.36*	*1.44*	Div'd Decl'd per sh [B]■	*1.72*
2.83	3.87	6.62	3.79	3.17	5.65	3.75	5.67	4.68	5.02	5.24	6.95	7.26	5.08	6.25	7.44	*6.75*	*7.00*	Cap'l Spending per sh	*7.50*
10.72	12.48	12.90	13.99	13.66	13.75	14.20	14.71	15.92	17.75	18.83	20.61	22.57	31.31	31.27	32.12	*35.00*	*36.65*	Book Value per sh	*40.85*
18.27	18.28	18.36	18.18	18.50	18.55	18.59	18.67	20.17	20.29	20.38	20.46	20.52	28.40	28.46	28.56	*30.00*	*30.00*	Common Shs Outst'g [C]	*30.00*
19.7	23.5	33.4	26.2	28.7	29.1	21.2	20.4	24.3	11.2	16.6	15.7	18.8	32.7	47.8	30.0	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*23.0*
1.05	1.27	1.77	1.58	1.91	1.85	1.33	1.30	1.37	.59	.84	.82	.95	1.77	2.55	1.56			Relative P/E Ratio	*1.30*
2.4%	2.0%	1.7%	2.3%	2.8%	2.8%	2.9%	3.0%	2.7%	2.6%	2.5%	2.0%	1.9%	1.9%	1.9%	2.0%			Avg Ann'l Div'd Yield	*2.1%*
239.0	261.5	276.9	319.7	305.1	339.7	389.2	397.7	420.5	564.5	*590*	*615*	Revenues ($mill)	*665*
20.9	22.3	23.5	51.8	37.9	52.8	59.2	38.8	38.7	61.5	*66.0*	*80.0*	Net Profit ($mill)	*110*
41.1%	41.1%	38.7%	32.5%	38.1%	38.8%	36.7%	20.6%	25.3%	12.0%	*21.0%*	*21.5%*	Income Tax Rate	*21.0%*
--	--	--	--	--	--	--	--	2.0%	1.5%	*1.5%*	*1.5%*	AFUDC % to Net Profit	*1.5%*
56.6%	55.0%	51.1%	51.6%	49.8%	50.7%	48.2%	32.7%	59.1%	58.4%	*53.5%*	*51.0%*	Long-Term Debt Ratio	*38.0%*
43.4%	45.0%	48.9%	48.4%	50.2%	49.3%	51.8%	67.3%	40.9%	41.6%	*46.5%*	*49.0%*	Common Equity Ratio	*62.0%*
607.9	610.2	656.2	744.5	764.6	855.0	894.3	1320.7	2173.6	2204.7	*2250*	*2250*	Total Capital ($mill)	*1975*
756.2	831.6	898.7	963.0	1036.8	1146.4	1239.3	1328.8	2206.5	2334.9	*2450*	*2565*	Net Plant ($mill)	*2775*
4.9%	5.0%	5.0%	8.3%	6.3%	7.4%	7.9%	3.9%	2.5%	4.0%	*3.5%*	*4.0%*	Return on Total Cap'l	*6.0%*
7.9%	8.1%	7.3%	14.4%	9.9%	12.5%	12.8%	4.4%	4.3%	6.7%	*6.5%*	*7.0%*	Return on Shr. Equity	*9.0%*
7.9%	8.1%	7.3%	14.4%	9.9%	12.5%	12.8%	4.4%	4.3%	6.7%	*6.5%*	*7.0%*	Return on Com Equity	*9.0%*
3.1%	3.3%	2.8%	10.2%	5.7%	8.6%	8.2%	1.8%	.5%	2.7%	*2.5%*	*3.5%*	Retained to Com Eq	*4.5%*
61%	59%	62%	29%	42%	31%	36%	60%	88%	59%	*62%*	*54%*	All Div'ds to Net Prof	*47%*

CAPITAL STRUCTURE as of 6/30/21
Total Debt $1398.9 mill. **Due in 5 Yrs** $22.4 mill.
LT Debt $1372.1 mill. **LT Interest** $50.0 mill.
(LT Interest Coverage: 4.1x)
(58% of Cap'l)

Pension Assets-12/20 $278.1 mill.
Oblig. $386.1 mill.
Pfd Stock None.
Common Stock 29,804,927 shs.

MARKET CAP: $2.0 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2019	2020	6/30/21
Cash Assets	17.9	9.3	28.1
Accts Receivable	36.3	58.1	54.9
Other	67.8	59.9	63.9
Current Assets	122.0	127.3	146.9
Accts Payable	34.9	34.2	39.5
Debt Due	22.3	76.2	26.8
Other	177.4	240.4	208.1
Current Liab.	234.6	350.8	274.4

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	3.0%	2.0%	*5.5%*
"Cash Flow"	5.5%	2.0%	*4.5%*
Earnings	7.0%	-.5%	*13.0%*
Dividends	6.0%	10.0%	*6.0%*
Book Value	8.5%	12.5%	*4.5%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	75.0	99.1	124.9	98.7	397.7
2019	77.7	103.0	114.0	126.0	420.5
2020	115.8	147.2	165.9	135.6	564.5
2021	114.8	152.2	*175*	*148.0*	*590*
2022	*125*	*155*	*185*	*150*	*615*

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	.06	.62	.76	.38	1.82
2019	.21	.47	.33	.34	1.35
2020	.08	.69	.91	.46	2.14
2021	.09	.69	*.90*	*.52*	*2.20*
2022	*.18*	*.77*	*1.00*	*.70*	*2.65*

Calendar	QUARTERLY DIVIDENDS PAID [BD]■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.2175	.2175	.2175	.3875	1.04
2018	.28	.28	.28	.28	1.12
2019	.30	.30	.30	.30	1.20
2020	.32	.32	.32	.32	1.28
2021	.34	.34	.34		

BUSINESS: SJW Group engages in the production, purchase, storage, purification, distribution, and retail sale of water. It provides water service to approximately 231,000 connections with a total population of roughly one million people in the San Jose area and 16,000 connections that reach about 49,000 residents in the region between San Antonio and Austin, Texas. The company merged with Connecticut Water (10/19) which provides service to approx. 138,000 connections with a total population of 450,000 people. Has 361 employees. Officers and directors own 8.3% of outstanding shares (3/21 proxy). Chairman & CEO: Eric Thornburg. Incorporated: California. Address: 110 West Taylor Street, San Jose, CA 95110. Telephone: (408) 279-7800. Internet: www.sjwater.com.

SJW Group reported better-than-expected second-quarter financial results. The East and West coasts water utility generated revenues of $152 million in the June period. The figure came in marginally above our $150 million call, thanks to cumulative water rate increases and higher customer usage. More impressively, SJW posted net income of $0.69 per share, matching the previous-year tally, while handily topping consensus estimates. Operating margins are indeed on the mend, but it is worth noting that roughly $0.09 can be attributed to a one-time gain from holdback funds received from the sale of equity interests in 2017.

We are upping our current-year top- and bottom-line projections. Our 2021 revenue estimate is moving higher by $5 million, to $590 million, while our earnings-per-share forecast is being raised by $0.15, to $2.20. Over the back half of this year, SJW's operations stand to benefit from a further rebound in economic activity, resulting in increased water consumption across both residential and commercial arenas.

Share-net growth ought to accelerate next year and beyond. For 2022, we look for earnings to expand 20%, year over year, to $2.65 per share. Moreover, the company has filed a relatively new rate case with the California Public Utilities Commission seeking approval to boost revenues up to $90 million, a $435 million capital budget to invest in water delivery infrastructure and upgrades, along with nearly $20 million in memorandum account recovery. All in all, the filing, which would be effective through 2024, should allow SJW to periodically increase customer rates over the next few years, thereby supporting top- and bottom-line growth.

The stock has fallen out of favor on our Timeliness ranking scale. Shares of SJW have been downgraded one notch, to 4 (Below Average) and, thus, are slated to lag the broader market over the coming six to 12 months. Moreover, at recent levels, total return potential over the 2024-2026 time frame is unenticing. Although long-term business prospects are favorable, we advise interested subscribers to remain on the sidelines until a better entry point is available.

Nicholas P. Patrikis *October 8, 2021*

(A) Diluted earnings. Excludes nonrecurring losses: '05, $1.09; '06, $16.36; '08, $1.22; '10, $0.46. GAAP accounting as of 2013. Next earnings report due early November. Quarterly egs. may not add due to rounding.
(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions.
(D) Paid special dividend of $0.17 per share on 11/17.
(E) Suspended due to recent CTWS merger.

Company's Financial Strength	B+
Stock's Price Stability	80
Price Growth Persistence	80
Earnings Predictability	50

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YORK WATER NDQ-YORW

RECENT PRICE 44.52 | P/E RATIO 32.5 (Trailing: 35.1 Median: 28.0) | RELATIVE P/E RATIO 1.72 | DIV'D YLD 1.7% | VALUE LINE

TIMELINESS 3 Lowered 1/15/21
SAFETY 3 Lowered 7/17/15
TECHNICAL 3 Raised 10/1/21
BETA .85 (1.00 = Market)

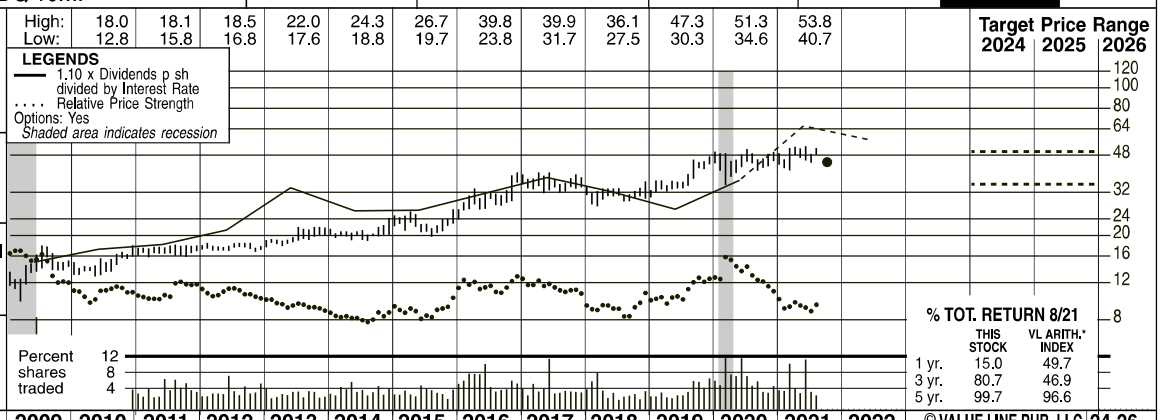
18-Month Target Price Range
Low-High Midpoint (% to Mid)
$34-$73 $54 (20%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	50	(+10%)	5%
Low	35	(-20%)	-4%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	56	38	51
to Sell	46	56	43
Hld's(000)	5341	5518	5416



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
High:	18.0	18.1	18.5	22.0	24.3	26.7	39.8	39.9	36.1	47.3	51.3	53.8								
Low:	12.8	15.8	16.8	17.6	18.8	19.7	23.8	31.7	27.5	30.3	34.6	40.7								
	2.58	2.56	2.79	2.89	2.95	3.07	3.18	3.21	3.27	3.58	3.68	3.70	3.77	3.74	3.96	4.12	*4.25*	*4.50*	Revenues per sh	*5.10*
	.79	.77	.86	.88	.95	1.07	1.09	1.12	1.19	1.36	1.45	1.42	1.53	1.58	1.70	1.90	*1.95*	*2.10*	"Cash Flow" per sh	*2.45*
	.56	.58	.57	.57	.64	.71	.71	.72	.75	.89	.97	.92	1.01	1.04	1.11	1.27	*1.35*	*1.40*	Earnings per sh A	*1.65*
	.42	.45	.48	.49	.51	.52	.53	.54	.55	.57	.60	.63	.65	.67	.70	.73	*.78*	*.83*	Div'd Decl'd per sh B	*1.00*
	1.69	1.85	1.69	2.17	1.18	.83	.74	.94	.76	1.10	1.11	1.03	1.95	--	.16	.09	*1.35*	*1.45*	Cap'l Spending per sh	*1.85*
	4.85	5.84	5.97	6.14	6.92	7.19	7.45	7.73	7.98	8.15	8.51	8.88	9.28	9.75	10.31	10.97	*11.55*	*12.00*	Book Value per sh	*12.90*
	10.40	11.20	11.27	11.37	12.56	12.69	12.79	12.92	12.98	12.83	12.81	12.85	12.87	12.94	13.02	13.06	*13.00*	*12.90*	Common Shs Outst'g C	*12.80*
	26.3	31.2	30.3	24.6	21.9	20.7	23.9	24.4	26.3	23.1	23.5	32.8	34.6	30.3	33.8	35.7	*Bold figures are*		Avg Ann'l P/E Ratio	*25.0*
	1.40	1.68	1.61	1.48	1.46	1.32	1.50	1.55	1.48	1.22	1.18	1.72	1.74	1.64	1.80	1.83	*Value Line*		Relative P/E Ratio	*1.40*
	2.9%	2.5%	2.8%	3.5%	3.6%	3.5%	3.1%	3.1%	2.8%	2.8%	2.6%	2.1%	1.9%	2.1%	1.9%	1.6%	*estimates*		Avg Ann'l Div'd Yield	*2.4%*
							40.6	41.4	42.4	45.9	47.1	47.6	48.6	48.4	51.6	53.9	*55.0*	*57.0*	Revenues ($mill)	*65.0*
							9.1	9.3	9.7	11.5	12.5	11.8	13.0	13.4	14.4	16.6	*17.5*	*18.0*	Net Profit ($mill)	*21.0*
							35.3%	37.6%	37.6%	29.8%	27.5%	31.3%	25.9%	15.7%	13.5%	10.8%	*21.0%*	*21.0%*	Income Tax Rate	*21.0%*
							1.1%	1.1%	.8%	1.8%	1.6%	1.9%	6.7%	1.7%	2.5%	3.2%	*1.5%*	*1.5%*	AFUDC % to Net Profit	*1.5%*
							47.1%	46.0%	45.1%	44.8%	44.4%	42.6%	43.0%	42.5%	41.3%	46.3%	*44.5%*	*42.5%*	Long-Term Debt Ratio	*37.5%*
							52.9%	54.0%	54.9%	55.2%	55.6%	57.4%	57.0%	57.5%	58.7%	53.7%	*55.5%*	*57.5%*	Common Equity Ratio	*62.5%*
							180.2	184.8	188.4	189.4	196.3	198.7	209.5	219.5	228.7	266.8	*270*	*270*	Total Capital ($mill)	*265*
							233.0	240.3	244.2	253.2	261.4	270.9	288.8	299.2	313.2	343.6	*355*	*370*	Net Plant ($mill)	*405*
							6.4%	6.4%	6.5%	7.4%	7.6%	7.2%	7.5%	7.3%	7.4%	7.1%	*7.5%*	*7.5%*	Return on Total Cap'l	*9.0%*
							9.5%	9.3%	9.3%	11.0%	11.5%	10.4%	10.9%	10.6%	10.7%	11.6%	*11.5%*	*11.5%*	Return on Shr. Equity	*13.0%*
							9.5%	9.3%	9.3%	11.0%	11.5%	10.4%	10.9%	10.6%	10.7%	11.6%	*11.5%*	*11.5%*	Return on Com Equity	*13.0%*
							2.5%	2.4%	2.4%	3.9%	4.4%	3.4%	4.0%	3.8%	4.0%	5.0%	*5.0%*	*4.5%*	Retained to Com Eq	*5.0%*
							73%	74%	74%	64%	62%	67%	63%	64%	62%	57%	*58%*	*59%*	All Div'ds to Net Prof	*61%*

CAPITAL STRUCTURE as of 6/30/21
Total Debt $127.0 mill. **Due in 5 Yrs** $42.5 mill.
LT Debt $127.0 mill. **LT Interest** $5.5 mill.
(46% of Cap'l)
Pension Assets12/20 $56.3 mill.
Oblig. $54.1 mill.

Pfd Stock None

Common Stock 13,090,055 shs.

MARKET CAP: $575 million (Small Cap)

CURRENT POSITION ($MILL.)	2019	2020	6/30/21
Cash Assets	--	5.0	--
Accounts Receivable	4.4	5.2	4.2
Inventory (Avg. Cost)	1.0	1.0	1.0
Other	4.0	5.1	5.7
Current Assets	9.4	16.3	10.9
Accts Payable	3.4	6.5	8.4
Debt Due	6.5	--	--
Other	5.3	5.5	5.5
Current Liab.	15.2	12.0	13.9

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

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	11.6	12.0	12.7	12.1	48.4
2019	11.8	13.0	13.7	13.1	51.6
2020	12.9	13.3	14.3	13.4	53.9
2021	13.1	13.8	*14.5*	*13.6*	*55.0*
2022	*13.7*	*14.3*	*15.0*	*14.0*	*57.0*

Calendar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	.20	.26	.29	.29	1.04
2019	.22	.28	.35	.26	1.11
2020	.31	.32	.36	.28	1.27
2021	.28	.35	*.37*	*.35*	*1.35*
2022	*.30*	*.36*	*.38*	*.36*	*1.40*

Calendar	QUARTERLY DIVIDENDS PAID B Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.1602	.1602	.1602	.1666	.647
2018	.1666	.1666	.1666	.1733	.673
2019	.1733	.1733	.1733	.1802	.70
2020	.1802	.1802	.1802	.1874	.73
2021	.1874	.1874	.1874		

BUSINESS: The York Water Company is the oldest investor-owned regulated water utility in the United States. It has operated continuously since 1816. As of December 31, 2020, the company's average daily availability was 35.6 million gallons and its service territory had an estimated population of 202,000. Has more than 72,600 customers. Residential customers accounted for 66% of 2020 revenues; commercial and industrial (26%); other (8%). It also provides sewer billing services. Incorporated: PA. York had 108 full-time employees at 12/31/20. President/Chief Executive Officer: J.T. Hand. Officers/directors own 1.3% of the common stock (3/21 proxy). Address: 130 East Market Street, York, Pennsylvania 17401. Telephone: (717) 845-3601. Internet: www.yorkwater.com.

York Water delivered good share-profit growth in the June interim. As expected, the regulated water utility posted net income of $0.35 per share for the second quarter, representing sequential and annual improvements of 25% and 9%, respectively. The bottom-line advance was aided partly by lower income taxes stemming from wider deductions under IRS tangible property rules. Meanwhile, revenues of $13.8 million rose nicely compared to the previous-year tally, thanks to a growing customer base and increased billings/collections. For this year, revenues of $55 million (up $0.5 million from our previous estimate) are likely on tap. At the same time, we are leaving unchanged our 2021 EPS call, at $1.35. Looking at 2022, our model suggests that revenues will improve by $2 million, to $57 million, and earnings ought to jump a nickel, to $1.40 per share.

The stock price has bounced around over the past three months. In fact, the equity was trading near all-time high territory in early September before sliding back into the mid-$40-per-share vicinity. Year to date, the stock is largely flat, despite some uncharacteristically choppy price movements.

Long term, we think York Water is well positioned for sustainable, albeit modest top- and bottom-line growth. Our relatively rosy thesis has a few legs to stand on, including prospects for a healthier economic backdrop (higher water consumption), further expansion in its customer base, as well as the likelihood for additional rate hikes (granted periodically by state regulators to help York replenish and maintain a strong capital spending budget). To this point, robust investment in clean water infrastructure and delivery and pumping system upgrades is probably in the cards.

But investment appeal is limited at this juncture. Based on our Timeliness ranking scale, shares of York Water are merely an Average (3) selection for relative year-ahead price performance. In addition, at the recent quotation, total return potential over the three- to five-year pull is nothing to write home about. Overall, we recommend subscribers turn the page, for now.

Nicholas P. Patrikis *October 8, 2021*

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

Company's Financial Strength	B+
Stock's Price Stability	80
Price Growth Persistence	75
Earnings Predictability	100

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	Company Name	AMERICAN STATES WATER COMPANY	AMERICAN WATER WORKS COMPANY, INC.	ARTESIAN RESOURCES CORPORATION	CALIFORNIA WATER SERVICE GROUP	ESSENTIAL UTILITIES, INC.	MIDDLESEX WATER COMPANY	SJW GROUP	THE YORK WATER COMPANY
2015	Sales-Net[y15]	458.641	3159	77.024	588.368	814.204	126.025	305.082	47.089
2016	Sales-Net[y16]	436.087	3302	79.089	609.37	819.875	132.906	339.706	47.584
2017	Sales-Net[y17]	440.603	3357	82.235	676.113	809.525	130.775	389.225	48.589
2018	Sales-Net[y18]	436.816	3440	80.411	698.196	838.091	138.077	397.699	48.437
2019	Sales-Net[y19]	473.869	3610	83.595	714.557	889.692	134.598	420.482	51.578
2020	Sales-Net[y20]	488.243	3777	88.141	794.307	1462.698	141.592	564.526	53.852
2015	Cash & Short Term Investment[y15]	4.364	45	0.209	8.837	3.229	3.469	5.239	2.879
2016	Cash & Short Term Investment[y16]	0.436	75	0.226	25.492	3.763	3.879	6.349	4.209
2017	Cash & Short Term Investment[y17]	0.214	55	0.952	94.776	4.204	4.937	7.799	0.002
2018	Cash & Short Term Investment[y18]	7.141	130	0.293	47.176	3.627	3.705	420.722	0.002
2019	Cash & Short Term Investment[y19]	1.334	60	0.596	42.653	1868.922	2.23	12.944	0.002
2020	Cash & Short Term Investment[y20]	36.737	547	0.028	44.555	4.827	4.491	5.269	0.002
2015	Current Assets-Total[y15]	132.697	657	14.444	127.578	128.37	24.41	73.376	11.577
2016	Current Assets-Total[y16]	166.875	784	14.635	142.069	128.65	26.716	99.611	12.62
2017	Current Assets-Total[y17]	155.463	720	18.985	227.873	131.246	29.247	66.858	8.611
2018	Current Assets-Total[y18]	131.468	781	16.118	188.702	147.172	30.815	502.722	9.011
2019	Current Assets-Total[y19]	122.456	1285	14.207	184.712	2015.127	29.133	122.046	9.384
2020	Current Assets-Total[y20]	157.115	1906	17.619	266.016	380.22	34.123	127.331	16.29
2015	Debt in Current Liabilities[y15]	28.312	682	12.322	39.658	52.314	8.739	38.091	0.044
2016	Debt in Current Liabilities[y16]	90.33	1423	8.478	123.308	169.822	18.159	14.325	0.044
2017	Debt in Current Liabilities[y17]	59.324	1230	11.258	291.02	139.048	34.865	25	1.044
2018	Debt in Current Liabilities[y18]	40.32	1049	17.784	170.011	228.723	55.843	100	1.03
2019	Debt in Current Liabilities[y19]	7.193	814	9.24	198.42	142.941	27.178	139.481	6.5
2020	Debt in Current Liabilities[y20]	2.371	1624	28.695	376.884	214.22	9.955	251.335	0
2015	Current Liabilities-Total[y15]	123.507	1533	22.403	147.898	193.199	28.319	79.623	6.197
2016	Current Liabilities-Total[y16]	177.944	2392	19.328	250.23	301.536	47.056	63.573	8.184
2017	Current Liabilities-Total[y17]	156.662	2325	28.461	490.959	284.488	64.537	85.052	9.145
2018	Current Liabilities-Total[y18]	146.585	2094	37.731	321.166	398.977	94.363	163.985	10.841
2019	Current Liabilities-Total[y19]	115.998	2045	25.599	358.721	323.461	64.981	234.567	15.156
2020	Current Liabilities-Total[y20]	118.572	2881	43.724	588.706	603.873	56.848	350.795	11.993
2015	noncash wkcap	33.138	-239	4.154	10.501	-15.744	1.361	26.605	2.545
2016	noncash wkcap	78.825	-260	3.559	-10.345	-6.827	-6.06	44.014	0.271
2017	noncash wkcap	57.911	-430	0.83	-66.842	-18.398	-25.877	74.914	9.653
2018	noncash wkcap	18.062	-394	-4.122	-9.629	-26.709	-11.41	18.015	-0.802
2019	noncash wkcap	12.317	-6	-2.748	-18.242	-34.315	-10.9	14.016	0.726
2020	noncash wkcap	4.177	102	2.562	9.639	-14.26	-17.261	22.602	4.295
2016	Change Non cashWrk Cap	45.687	-21	-0.595	-20.846	8.917	-7.421	17.409	-2.274
2017	Change Non cashWrk Cap	-20.914	-170	-2.729	-56.497	-11.571	-19.817	30.9	9.382
2018	Change Non cashWrk Cap	-39.849	36	-4.952	57.213	-8.311	14.467	-56.899	-10.455
2019	Change Non cashWrk Cap	-5.745	388	1.374	-8.613	-7.606	0.51	-3.999	1.528
2020	Change Non cashWrk Cap	-8.14	108	5.31	27.881	20.055	-6.361	8.586	3.569
2016		10.48%	-0.64%	-0.75%	-3.42%	1.09%	-5.58%	5.12%	-4.78%
2017	WK cap/sale	-4.75%	-5.06%	-3.32%	-8.36%	-1.43%	-15.15%	7.94%	19.31%
2018	WK cap/sale	-9.12%	1.05%	-6.16%	8.19%	-0.99%	10.48%	-14.31%	-21.58%
2019	WK cap/sale	-1.21%	10.75%	1.64%	-1.21%	-0.85%	0.38%	-0.95%	2.96%
2020	WK cap/sale	-1.67%	2.86%	6.02%	3.51%	1.37%	-4.49%	1.52%	6.63%
	Average	-1.25%	1.79%	-0.51%	-0.26%	-0.16%	-2.87%	-0.13%	0.51%
							Median		-0.21%

The following sources of information were reviewed but are not included in the workpapers as they are included separately in the section 1329 filing and are considered included by this reference:

"City of Beaver Falls, Beaver County, Pennsylvania, Engineers Assessment of Wastewater System Assets," dated June 9, 2022, and related files prepared by Gannett Fleming, Inc.,;

Wastewater System's Fee Schedule;

Wastewater System's 537 Plan;

Wastewater System's Chapter 94 Reports;

Wastewater System's Permits;

DEP's Inspection and Discharge Monitoring Reports;

Wastewater System's Sewage Service and Treatment Agreements;

Asset Purchase Agreement;

City of Beaver Falls' Corrective Action Plans; and

City of Beaver Falls' Sewer Ordinances.