

BUTLER AREA SEWER AUTHORITY
WASTEWATER SYSTEM ASSETS

FAIR MARKET VALUE APPRAISAL

AT

JANUARY 19, 2023

Prepared by:



February 2, 2023

Via email to dmckee@basapa.org

Mr. Duane E. McKee
Executive Director
Butler Area Sewer Authority
100 Litman Road
Butler, PA 16001

Dear Mr. McKee:

Fair Market Value Appraisal

In accordance with your request, we have prepared a fair market value appraisal of Butler Area Sewer Authority's wastewater system assets ("Wastewater System") as of January 19, 2023.

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 January 19, 2023, is \$232,429,000 (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 January 19, 2023. 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:

<u>Valuation Approach</u>	<u>Indicated Value</u>
Cost Approach	\$254,729,592
Income Approach	264,469,512
Market Approach	178,105,462

We thank the Butler Area Sewer Authority 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

A handwritten signature in black ink, appearing to read "Harold Walker, III".

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 Butler Area Sewer Authority as of January 19, 2023. 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 wastewater system assets of the Butler Area Sewer Authority is \$232.4 million (\$232,429,000 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 \$178.1 million to \$264.5 million and collectively indicate a fair market value of \$232,429,000.

Description of the Assignment. Gannett Fleming Valuation and Rate Consultants, LLC (“Gannett Fleming”) was retained by the Butler Area Sewer Authority (“BASA”) to estimate the fair market value of the Butler Area Sewer Authority’s wastewater system assets (“Wastewater System”) as of January 19, 2023.

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

¹ The International Glossary of Business Valuation Standards

As stated, the standard of value for this engagement is fair market value.² The premise of value is going concern. The going concern premise of business value assumes that the business will continue running normally using all of 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 the Butler Area Sewer Authority's 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 Sewer System 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.

2 Pratt, Shannon P. "Defining Standards of Value." Valuation 34, no. 2, June 1989.
<http://www.appraisers.org/docs/default-source/college-of-fellows-articles/defining-standards-of-value.pdf> .

Client and Users. The client is the Butler Area Sewer Authority. The intended user of the valuation is Butler Area Sewer Authority, Pennsylvania American Water Company, 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 Wastewater 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 BASA 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. We viewed or observed the Wastewater System's facilities on January 16, 2023. We also relied on the engineering assessment of the Wastewater System's facilities report, "Engineer's Assessment Study For: Butler Area Sewer Authority Sanitary Sewer System" and related files prepared by Herbert, Rowland & Grubic, 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:

Engineer's assessment report "Engineer's Assessment Study For: Butler Area Sewer Authority Sanitary Sewer System" and related files prepared by Herbert, Rowland & Grubic, Inc.;

BASA provided electronic files (PDF and/or Excel);

Wastewater System's Customer data;

Wastewater System's Fee Schedule;

BASA's Consent Order and Agreement;

BASA's Corrective Action Plan and Progress Reports;

BASA's Act 537 Plan;

BASA's Chapter 94 Reports;

Asset Purchase Agreement;

BASA's Audited Financials (2018-2022);

Budget for Wastewater System (2022-2023);

Blue Chip Financial Forecasts;

US Census Bureau, various data files;

Value Line Investment Survey; and

S&P Research Insight.

Description of the City of Butler. The City of Butler is located near the center of Butler County, in western Pennsylvania. The City of Butler lies within Butler Township. The City of Butler is the 37th largest land mass of Butler County's 57 municipalities and was the 4th most populous with 12,885 people (2019) and 6,855 housing units (2018). The City of Butler consists of 2.7 square miles and lies approximately 35 miles north of Pittsburgh, Pennsylvania. According to U.S. Census figures, the City of Butler's population declined -1.9% (negative) from 2010 to 2020, while populations in Pennsylvania and Butler County grew 2.4% and 5.4%, respectively.

Description of the Township of Butler. The Township of Butler is located near the center of Butler County, in western Pennsylvania. The Township of Butler surrounds the City of Butler, and is bordered by Center Township to its north, Summit Township to its east, Penn Township to

its south, and Connequenessing Borough to its west. The Township of Butler is the 29th largest land mass of Butler County's 57 municipalities and was the 2nd most populous with 16,469 people (2019) and 7,877 housing units (2018). The Township of Butler consists of 21.6 square miles and lies approximately 33 miles north of Pittsburgh, Pennsylvania. According to U.S. Census figures, the Township of Butler's population declined -0.1% (negative) from 2010 to 2020, while populations in Pennsylvania and Butler County grew 2.4% and 5.4%, respectively.

Description of the Wastewater System. The BASA is owned by the City of Butler and the Township of Butler. The BASA owns and operates the Wastewater System which consists of a wastewater treatment plant ("WWTP"), 23 continuous duty pump stations, four wet weather diversion pump stations, seven equalization tanks, about eight miles of force mains, 224 miles of gravity mains, approximately 5,881 manholes, 15,505 services, associated infrastructure and appurtenances, and related land and land rights. The Wastewater System has a service area of approximately 32.5 square miles. The Wastewater System collects and treats wastewater from the following municipalities: the City of Butler, Butler Township, Center Township, the Borough of East Butler, Summit Township, Oakland Township, Connequenessing Borough, and Penn Township.

The Wastewater System WWTP is a 10.0 million gallons per day ("MGD") capacity plant. In 2021, the WWTP's average daily flow was 5.7 MGD. The WWTP is a tertiary treatment plant utilizing a two-stage, biological treatment system with high-rate trickling filters and a second-stage activated sludge nitrification process. Unit treatment processes include preliminary treatment, primary settling, trickling filters, aeration, final setting, reactor clarifier settling, and chlorine disinfection. The clarified effluent is dosed with chlorine before entering the two chlorine contact tanks, which provide the required contact time for disinfection. The

disinfected effluent is discharged to Connoquenessing Creek through a 48-inch outfall sewer. The WWTP dewateres sludge on-site using plate and frame filter presses and the dewatered sludge is disposed at a regional landfill. The WWTP operates under NPDES Permit No. PA0026697.

The Wastewater System's 23 pump stations include: Benbrook Pump Station; Brewster and Brewster Booster Pump Station; Bryson Road Pump Station; Center Avenue Pump Station; Cupps Road Pump Station; Deshon Pump Station; Diamond Street Pump Station; Fisher Heights Pump Station; Foxcroft Drive Pump Station; Garden Pump Station; Greenwood Drive Pump Station; Karns Crossing Pump Station; the Links Pump Station; Monroe Street Pump Station; Negley Avenue Pump Station; Northvue Pump Station; Rock Lick Creek Pump Station; Township Line Pump Station; September Drive Pump Station; Sugarcreek Pump Station; Ziegler Avenue Pump Station; Pullman Center Pump Station; and Ball Park Pump Station.

The Wastewater System's four wet weather diversion pump stations include: Ballpark; Connoquenessing; Monroe Street; and Deshon. The Wastewater System's seven flow equalization tanks include three at the Central Storage Facility, two at Monroe Street, and two at Deshon. The Wastewater System's eight miles of force main was installed between 1964 and 2018 with about 1% installed in the 1960s, 11, 57% installed in 1980s, and 23% installed after 2004.

The Wastewater System's 1,180,500 linear feet of gravity sewer collection and intercept mains consist of 6-inch, 8-inch, 10-inch, 12-inch, 15-inch, 16-inch, 18-inch, 24-inch, 27-inch, 30-inch, 36-inch, and 48-inch diameter pipe which was installed between 1928 to 2022. About 5% of the gravity mains were installed in 1928, 5% installed in the 1930s, 4% installed in the 1940s, 8% installed in the 1950s, 11% installed in the 1960s, 19% installed in the 1970s, 30% installed in

the 1980s, 2% installed in the 1990s, 8% installed in the 2000s, 7% installed in the 2010s, and 1% installed in the 2020s. There are 5,881 manholes and 15,505 services laterals in the system.

On March 11, 2019, the BASA submitted a voluntary Corrective Action Plan (“CAP”) with the Pennsylvania Department of Environmental Protection (“DEP”) to address the hydraulic overloads that have been identified in portions of the Wastewater System, which was approved by the DEP on March 26, 2019. The CAP was granted a schedule revision on June 2, 2022. The CAP includes various tasks related to the Fisher Heights Pump Station, Brewster & Brewster Booster Pump Station System, and the Greenwood, Benbrook, and Bryson Pump Station System with work to be completed through May 2025 and August 2026, respectively. As of July 31, 2022, the BASA had successfully complied with the CAP tasks and the CAP implementation schedule. The BASA has also submitted quarterly progress reports to the DEP in a timely manner as required by the CAP.

The BASA utilizes an enterprise fund to account for the Wastewater System’s operations. The BASA is not considered a component unit of either the Township of Butler or the City of Butler. The activities of the BASA are presented as an Enterprise Fund. As an Enterprise Fund, the BASA uses the accrual basis of accounting, whereby revenues are recognized when earned and expenses are recognized when the liability is incurred. For the fiscal year ended July 31, 2022, (shown on Exhibit 1, page 1) the Wastewater System had reported revenues of \$11.151 million and expenses of \$9.976 million. At year end July 31, 2022, the Wastewater System was capitalized with \$33.425 million of fund equity and \$40.625 million of debt. At the same point in time, the Wastewater System had total assets of \$78.839 million, including \$58.390 million of 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 a public service is being provided 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 Exhibit 2, the Wastewater System provides service to 14,699 customers (active), had average daily flows of 5.7 MGD (2021) and serviced approximately 23,211 Equivalent Dwelling Units (“EDU”). EDUs are estimated to increase by 908 EDUs from 2023 through 2026. The Wastewater System provides service to a population of 52,499 people.

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, Butler County’s population grew 5.4% and the Wastewater System service area’s population contracted -1.5% (Exhibit 3, Table 3.2). The Wastewater System service area’s population growth would be ranked 1,178 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 Wastewater System service area’s population growth is projected to be about 71% of the growth rate projected for the total SPC Region during each five-year period from 2020 through 2045. The Wastewater System service area’s projected population growth would place them in the upper 67 percent or 67th percentile of the 586 municipalities analyzed by SPC, with a ranking of 196. Page 3 of Exhibit 3, Table 3.4 shows the Wastewater System service area’s employment growth is projected to be -0.3% (negative), which would rank them 347 and place them in the lower 41 percent, or 41st percentile of the 586 municipalities analyzed by SPC.

Currently, there are approximately 52,499 people (Exhibit 2) in the Wastewater System’s service area. There are 25,116 household units in the Waste System’s service area, and the ratio of people to households is 2.09 persons per household. The Wastewater System’s service area density is 3.6 people per customer based on an estimated service area population of 52,499 and 14,699 customers. The Wastewater System’s service area density similar to the 3.5 per customer density of water and wastewater systems (see Table 2 in this report) indicating similar market

penetration.

HISTORY AND NATURE OF THE BUSINESS

Economic Outlook. The valuation date (January 19, 2023) 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 Wastewater 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 January 19, 2023. In the valuation 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 January 19, 2023. In particular, we focused on the forecasts and economic commentary presented in Blue Chip Financial Forecasts in the January 1, 2023 edition. Some of these economic forecasts are presented in Table 1.

<u>Economic Indicators</u>			
	<u>Latest Qtr</u>	<u>Consensus Forecasts</u>	
	<u>4Q 2022</u>	<u>1Q 2023</u>	<u>2Q 2023</u>
<u>Key Assumptions</u>			
Real GDP	1.0	-0.2	-0.7
GDP Price Index	4.3	3.6	3.0
Consumer Price Index	4.5	3.4	3.1
<u>Interest Rates</u>			
3-mo. Treasury Bills	4.17	4.8	4.9
10 Year Notes	3.82	3.8	3.8
30 Year Notes	3.89	4.0	4.0
Aaa Corporate Bond Yield	5.15	5.1	5.2
Baa Corporate Bond Yield	5.90	6.1	6.3
State & Local Bonds	4.46	4.3	4.4
Home Mortgage Rate	6.69	6.5	6.5

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 2,069 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 11,424 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 (January 19, 2023), 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 water utility and wastewater utility industries. Because many water utility and wastewater 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 water and wastewater systems. Generally, they enter a new market by acquiring one or several water or wastewater 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 water and wastewater 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 and Clean Water Act (“CWA”) requirements³ and to replace the aging infrastructure of many systems, has moved the water and wastewater 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

³ 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.

established in the future, or the cost and effect of existing and potential regulations and legislation upon the water and wastewater systems. However, as a 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 similar to 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 financial information; (2) inclusion in the S&P Capital IQ database; (3) a January 19, 2023 market value of common stock, the product of multiplying the closing stock price by the number of common shares outstanding, greater than \$350 million; (4) a January 19, 2023 total enterprise, the sum of market value, preferred stock and total debt, greater than \$550 million; (5) were not the subject of a known acquisition at January 19, 2023; (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.

<u>Acquisition Date Size Statistics</u>				
	<u>Revenues</u> (Mill. \$)	<u>Customers</u>	<u>Population</u>	<u>Customer Density</u>
Butler Area Sewer Authority Wastewater System Assets	<u>\$12.259</u>	<u>14,699</u>	<u>52,499</u>	<u>3.6</u>
<u>Comparable Group</u>				
American States Water Co	\$498.853	287,500	1,000,000	3.5
American Water Works Co Inc	3,930.000	3,530,000	14,000,000	4.0
Artesian Resources -CL A	90.859	100,640	326,700	3.2
California Water Service Gp	790.909	547,600	2,000,000	3.7
Essential Utilities, Inc.	1,878.144	1,820,049	5,000,000	2.7
Middlesex Water Co	143.141	121,300	500,000	4.1
SJW Corp	573.686	398,000	1,526,000	3.8
York Water Co	<u>55.119</u>	<u>73,144</u>	<u>204,000</u>	<u>2.8</u>
Median	<u>\$536.270</u>	<u>342,750</u>	<u>1,263,000</u>	<u>3.5</u>

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, 2019 to 2021. 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. Therefore, 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 2019-2021, the Wastewater System's financial benchmark ratios show (Exhibit 4) higher 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 multiples 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 January 19, 2023, ranged from \$575 million to \$27,309 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 had a market value of \$452 million.

The change in risk adjusted common stock return rate between quartile 2 and quartile 4 (column J) is 180 basis points. The results of the illustration shown on Exhibit 5 suggests the Wastewater System's common equity cost rate could be about 180 basis 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 18, page 2). As shown on Exhibit 18, 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 wastewater system.⁴ The Wastewater System does not have the number of large treatment facilities that the Comparable Group has. The Wastewater System's gross property, plant and equipment is in relatively good condition given its age (Exhibit 6, Table 6.1) with 65% of their gross property, plant and equipment remaining undepreciated while 79% of the Comparable Group's gross property, plant and equipment remained undepreciated.⁵

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 and Wastewater System'), 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 18% (100% - 82%) 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.⁶ This is evidenced by the 18% 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

⁴ A fully integrated wastewater system is characterized as having both collection assets and treatment assets.

⁵ The Wastewater System's gross and net property, plant and equipment is developed on Exhibit 7.

⁶ 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 Comparable Group’s “cost free” capital by reviewing their individual balance sheets (Exhibit 6, page 1, Table 6.2) at year-end 2021.

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, 2018-21, the Wastewater System had annual capital expenditures of about 3% of net plant. Therefore, the Wastewater System historical capital spending was lower than the Comparable Group’s average.

Growth Rate Analyses. Higher growth rates are an indication of less risk. A review of the growth rates in revenue, operating income and operating income plus depreciation, reveal that the Wastewater System’s has been growing less than the Comparable Group (Exhibit 6, page 4, Table 6.4) over the last three years. 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 higher than the Comparable Group’s indicating less risk, while the 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 Wastewater System') and conduct a fair market value appraisal of the Wastewater System's assets as of January 19, 2023 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 profit⁷ are applied to the inventory listing in order to determine the RPCN and to determine the RCN.

⁷ 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.

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.

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 BASA provided us a copy of the Engineer's assessment report ""Engineer's Assessment Study For: Butler Area Sewer Authority Sanitary Sewer System" and related files prepared by Herbert, Rowland & Grubic, Inc. We utilized the Engineering Assessment's asset inventory and calculated the Original Cost and Related Accrued Depreciation of the Wastewater System as of January 19, 2023 ("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 January 19, 2023. 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's asset inventory 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 8.

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 January 19, 2023 was not less than \$143.8 million (\$143,771,330 rounded). The OCNLD Study also determined a theoretical calculated accrued depreciation reserve of the utility plant in service of \$50.4 million (\$50,362,247 rounded) as of January 19,

2023. After factoring in the OCNLD Study's accrued depreciation reserve, the OCNLD of Wastewater System's utility plant in service as of January 19, 2023 was determined to be \$93.4 million ($\$143,771,330 - \$50,362,247 = \$93,409,083$).

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 preliminary transition factors.⁸ The transition factors included both cost changes measured during TOC process and preliminary obsolescence, so all RPCN values were valued on an RCN basis. The result of this analysis is shown in the Replacement Cost and Related Accrued Depreciation of the Wastewater System as of January 19, 2023 ("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 January 19, 2023. 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.⁹ A summarizing analysis of the replacement cost new of the Wastewater System by account and vintage year and related preliminary transition factors is shown on Exhibit 10.¹⁰

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

⁸ 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.

⁹ See the Accrued Depreciation and Obsolescence section of this report for a further discussion.

¹⁰ All land and land rights were valued at original cost.

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 January 19, 2023 was not less than \$572.4 million (\$572,395,516 rounded). The RCNLD Study also determined a theoretical calculated accrued depreciation reserve of the utility plant in service of \$317.7 million (\$317,665,924 rounded) as of January 19, 2023. After factoring in the RCNLD Study's accrued depreciation reserve, the RCNLD of Wastewater System's utility plant in service as of January 19, 2023, was determined to be \$254.7 million ($\$572,395,516 - \$317,665,924 = \$254,729,592$).

The results of the OCNLD and preliminary RCNLD Cost Approaches show a range of value for the Wastewater System of \$93.4 million to \$254.7 million and collectively, indicated value of \$254.7 million (\$254,729,592 rounded) for the Wastewater System based on the results of the preliminary 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 1.72-times (Exhibit 18, page 2) their OCNLD or net property, plant and equipment. Similarly, the Comparable

Group's Enterprise Value is currently 1.37-times (Exhibit 18, 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.¹¹ Subtracting customer contributions ("CIAC") from the Comparable Group's property, plant and equipment (Exhibit 18, page 3) based on differences between investor provided capital and OCN results in CIAC adjusted multiples of 2.01-times OCNLD and 1.60-times OCN for the Comparable Group.

Multiplying the Wastewater System's OCN of \$143.8 million by the Comparable Group's 1.37-times OCN multiple or the 1.60-times contributions adjusted OCN multiple indicates a range of market value of \$197.0 million to \$230.1 million for the Wastewater System, similar to the RCNLD of \$254.7 million. Further, multiplying the Wastewater System's OCNLD of \$93.4 million by the Comparable Group's 1.72-times OCNLD multiple or the 2.01-times contributions adjusted OCNLD multiple indicates a range of market value of \$160.6 million to \$187.7 million for the Wastewater System, below the RCNLD of \$254.7 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 preliminary RCNLD reflect the materials used for construction, age, and the average length of time the depreciable assets are

¹¹ 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.

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.”¹² FO is sometimes evident due to increased operating costs, increased maintenance costs, lost profits and for a wastewater utility, excessive inflow and infiltration (“I&I”). Neither the Engineering Assessment or the Wastewater System’s Chapter 94 Reports noted excessive I&I, capacity-related bypassing, excessive SSOs or surcharging that are not being addressed. 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.”¹³ To evaluate EO we compared our RCNLD value of \$254.7 million to the economic values produced by our Income and Market Approaches, discussed later in this report, and conclude no significant EO is suggested.

Cost Approach Conclusion. On page 4 of Exhibit 9 we reduced our RCN indicated value of \$572.4 million for accrued depreciation in reaching our RCNLD conclusion. The RCNLD’s

12 “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/>

13 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%20i ndustries.](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%20i ndustries.)

accrued depreciation reflects the total loss in value from RCN due to physical deterioration, functional and economic obsolescence. We ascribed \$317.7 million to physical deterioration and found no functional obsolescence or economic obsolescence in reaching our \$254.7 million RCNLD conclusion. The results of the RCNLD method of \$254.7 million (\$254,729,592 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 \$254.7 million for the Wastewater System's based on the RCNLD method.

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 five 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, minus projected changes in net cash working capital,

and minus 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, the market participants are assumed to include IOU and larger regional municipal authorities ("MUNI"). For the Wastewater System, the appropriate discount rate is the current municipal revenue bond yield on January 19, 2023, of 3.97%. The appropriate IOU discount rate is the current net of tax overall cost of capital (weighted average cost of capital) on January 19, 2023, and ranges from 7.85% to 9.75%.¹⁴ 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, 3.97%, because debt is the only major source of capital available to finance an acquisition (Exhibit 23,

¹⁴ 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."

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.¹⁵ 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, 3.97%, 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), 7.85% to 9.75% (Exhibit 23, 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 23.8% debt and 76.2% equity, a market cost of debt of 5.07% and a range of market cost of equity of 9.17% to 11.65%.¹⁶ 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.¹⁷

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

15 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).

16 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>.

17 We did not use the 6.76% 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 6.76% DSIC related cost was determined based the Comparable Group's book value capital structure of 49.1% debt and 50.9% equity, a cost of debt of 5.07% and a DSIC cost of equity of 9.75%. We note the 6.76% Comparable Group's DSIC related net of tax overall cost of capital falls below the 7.85% to 9.75% range of discount rates used in our Income Approach.

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.

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-2023 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, minus projected changes in net cash working

capital, and minus projected capital expenditures. Specifically, our capitalization of earnings method capitalizes Wastewater System's current (budget 2023) Debt Free Net Cash Flow. 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 January 19, 2023, of 3.97% (Exhibit 12, line 24) as the capitalization rate. We also did a second capitalization of earnings calculation based on a 3.87% capitalization rate (Exhibit 12, line 27), or 10-basis points below the current level 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, and prospective rate increase, we believe the 0.1% growth scenario is reasonable for the Water System based on current ownership and operations.

For pro forma 2023, we adjusted the Wastewater System's Debt Free Net Cash Flow (Exhibit 12, page 2, lines 23 and 28) to include the average 2020-2023 capital expenditure 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 3.97% capitalization rate (no growth) indicates a value of \$115.9 million to \$125.2 million on pro forma 2023 results. The capitalization of earnings method using a 3.87% capitalization rate (growth) indicates a value of \$118.9 million to \$128.5 million on pro forma 2023 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 \$128.5 million based on pro forma 2023 results and current operations (without rate increases) 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 3.97% 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 7.85% to 9.75%. 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 0.2% (i.e., discount rate – 0.2% growth = capitalization rate) under MUNI ownership and 0.2% growth (i.e., discount rate – 0.2% growth = capitalization rate) under IOU ownership based on inflation, population growth, and changes in Debt Free Net Cash Flows.

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 18.8-

times and 30.2-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 \$116.5 million to \$120.4 million. The results of the Market Multiple DCF shown on Exhibit 13 show a value of \$133.3 million. Collectively, the DCF method based on the MUNI ownership scenario indicates a value of \$126.9 million for the Wastewater System based on the 0.2% 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 \$75.3 million to \$102.3 million. The results of the Market Multiple DCF shown on Exhibit 14 show a range of value of \$122.9 million to \$161.9 million. Collectively, the DCF method based on the IOU ownership scenario and a 0.2% growth assumption indicates a value of \$112.6 million for the Wastewater System.¹⁸

The DCF method based on the MUNI ownership scenario indicates a value of \$126.9 million and the DCF method based on the IOU ownership scenario indicates a value of \$112.6 million. Collectively, the DCF method indicates a value of \$119.7 million based on OCNLD.

¹⁸ If we used the 6.76% 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 \$123.5 million. Further, the results of the Market Multiple DCF would show a value of \$190.7 million and collectively, the DCF method based on the IOU ownership scenario and a 0.2% growth assumption indicates a value of \$157.8 million for the Wastewater System. The DCF method based on the MUNI ownership scenario indicates a value of \$126.9 million and the DCF method based on the IOU ownership scenario indicates a value of \$157.8 million. Collectively, the DCF method indicates a value of \$142.3 million when DSIC is considered.

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 \$259.0 million to \$266.7 million. The results of the Market Multiple DCF shown on Exhibit 15 show a value of \$279.7 million. Collectively, the DCF method based on the MUNI ownership scenario indicates a value of \$273.2 million for the Wastewater System based on the 0.2% 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 \$176.6 million to \$236.2 million. The results of the Market Multiple DCF shown on Exhibit 16 show a range of value of \$275.3 million to \$359.0 million. Collectively, the DCF method based

on the IOU ownership scenario and a 0.2% growth assumption indicates a value of \$255.8 million for the Wastewater System.¹⁹

The DCF method based on the MUNI ownership scenario indicates a value of \$273.2 million and the DCF method based on the IOU ownership scenario indicates a value of \$255.8 million. Collectively, the DCF method indicates a value of \$264.5 million (\$264,469,512 rounded) as summarized on Exhibit 17.

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

19 If we used the 6.76% 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 \$282.8 million. Further, the results of the Market Multiple DCF would show a value of \$420.7 million and collectively, the DCF method based on the IOU ownership scenario and a 0.2% growth assumption indicates a value of \$353.3 million for the Wastewater System. The DCF method based on the MUNI ownership scenario indicates a value of \$273.2 million and the DCF method based on the IOU ownership scenario using DSIC indicates a value of \$353.3 million. Collectively, the DCF method indicates a value of \$313.3 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 18. For the Comparable Group, the Market Multiples were calculated as of January 19, 2023, based on the latest twelve months of financial data available at the appraisal date.

We used the Comparable Group’s Enterprise Value on January 19, 2023, 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% ($1 \div 16.14 = 6.20\%$). 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 5% more risky than the Comparable Group and produces an 95% (100% - 5%) base risk adjustment to the Comparable Group's Market Multiples. We applied the 95% base risk adjustment to all financial multiples. For example, the Comparable Group's ICAP multiple was multiplied by 95% 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 18, 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 18, 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 18. The adjustments to the Comparable Group's Market Multiples are: 95% of ICAP (more risk/less growth); 111% of GPPE (more risk/lower growth and contributions); 111% of NPPE (more risk/lower growth and contributions); 95% of Revenue (more risk/lower growth); 95% of EBIT; 95% EBITDA (more risk/lower growth); 114% of Customers (growth, earning rate, and contributions); and 114% Population (growth, earning rate, and contributions).

Page 1 of Exhibit 18 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.²⁰ 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 18, page 1). The results of the market multiples method (Exhibit 18, page 1) show a range of value for the Wastewater System of \$180.0 million to \$182.8 million and collectively, indicate value of \$181.4 million (\$181,409,984 rounded).

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 exists. Additionally, not all transactions are comparable since some purchase prices may only involve the acquisition of the

²⁰ The Revenue, EBIT and EBITDA for the Wastewater System also do not include a fair rate of return.

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 (January 19, 2023). 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.²¹ In Figure 1, the Comparable Group's market multiples of NPPE and ICAP were indexed to January 19, 2023 valuation multiples so that the January 19, 2023 valuation multiples have an index value of 100.

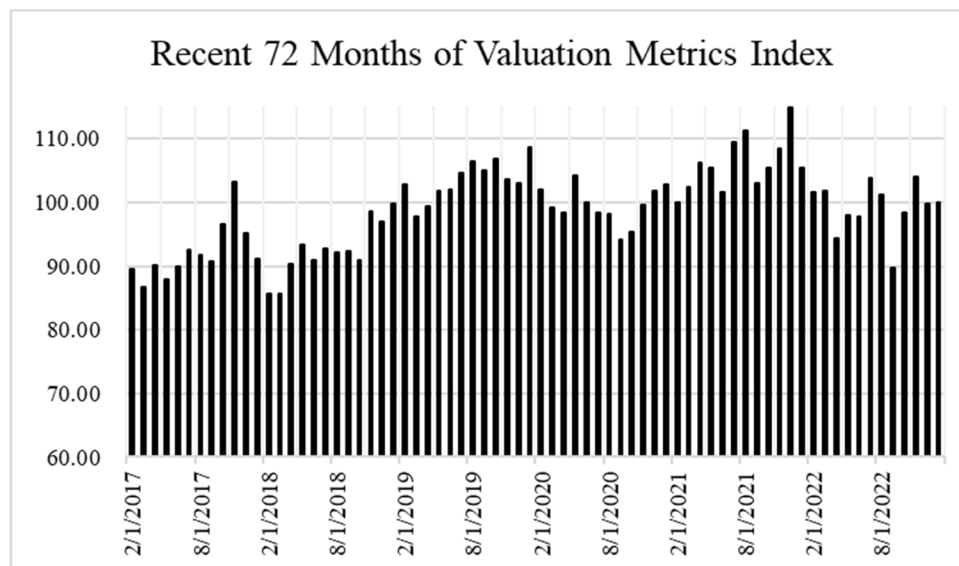


Figure 1

The index of the Comparable Group's appraisal date (January 19, 2023) valuation multiples is 10% above 2022's lowest levels and 5% below 2022's highest levels and 10% above 2021's

²¹ 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.

lowest levels and 15% below 2021's highest levels. The index of the Comparable Group's January 19, 2023 valuation multiples is 10% above 2020's lowest levels and 9% below 2020's highest levels, is 10% above 2019's lowest levels and 7% below 2019's highest levels, is 14% above 2018's lowest levels and 1% above 2018's highest levels, and is 14% above 2017's lowest levels and 3% below 2017's highest multiples index levels.

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 19.

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 19, 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. 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 19. 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 19, 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 19.

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. This process is accomplished by multiplying the Wastewater System’s financial and operating data by the selling utilities’ transactions multiples (Exhibit 19, pages 2 and 3).

The results of the selected transactions method (Exhibit 19, page 1) show a range of value for the Wastewater System of \$132.9 million to \$199.2 million when all transactions are considered and a range of value of \$175.2 million to \$180.2 million when fully integrated assets (excluding wholesale) are solely considered. We determined an indicated value of \$177.7 million for the Wastewater System using the selected transactions method by considering the results of all transactions, \$166.1 million, and the results of the fully integrated assets (excluding wholesale) of \$177.7 million (Exhibit 19, page 1).

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, completing its acquisition of the New England Service Company, Inc. (“NESC”) through a stock

purchase (stock swap).²² Again in 2022, two IOUs were involved in another transaction which involved Aquarion Company, parent of Aquarion Water Company, announcing its acquisition of The Torrington Water Company, Inc. (“TORW”) through a stock purchase (stock swap). Connecticut Water, NESC and TORW 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 (Exhibit 20, page 1) which we relied on as checks. In these selected transactions, the significant selected transactions multiples of the selling utilities, Connecticut Water, NESC, and TORW 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 20, page 2) show a range of value for the Wastewater System of \$140.3 million when the reported significant selected transactions multiples are considered and a value of \$187.6 million when the reported significant selected transactions multiples have been adjusted for “cost free” capital. The results of the NESC selected transactions (Exhibit 20, page 3) show a range of value for the Wastewater System of \$109.1 million when the reported significant selected transactions multiples are considered and a value of \$161.5 million when the reported significant selected transactions multiples have been adjusted for “cost free” capital. The TORW selected transactions (Exhibit 20, page 4) show a range of value for the Wastewater System of \$164.2 million when the reported significant selected transactions multiples are considered and

22 NESC was the sole stockholder of four regulated water companies operating in three separate states.

a value of \$243.8 million when the reported significant selected transactions multiples have been adjusted for “cost free” capital.

Collectively, the Wall Street selected transactions indicate values of \$161.5 million to \$243.8 million, which are similar to the values found by the market multiples method of \$181.4 million and the selected transaction method of \$177.7 million.²³

The Market Approach is summarized on Exhibit 21. The results of the market multiples method (Exhibit 18) indicate value of \$181.4 million. The results of the selected transactions method (Exhibit 19) indicate value of \$177.7 million. Based on the aforesaid results, the Market Approach to valuation indicates a value of \$179.6 million (\$179,562,829 rounded) for the Wastewater System based on the results of the market multiples method and the selected transactions method (Exhibit 21).

Conclusion. We summarize our findings for the Wastewater System on Exhibit 22. 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

²³ We note Connecticut Water, NECS and TORW were fully integrated companies, as is Wastewater System. Additionally, they 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.

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. Based on these facts, our conclusion regarding the fair market value is \$232.4 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 22. The results of our analyses, shown on Exhibit 22, indicate a range of value for the Wastewater System of \$178.1 million to \$264.5 million and collectively indicate a fair market value of \$232,429,000 for the Wastewater System.

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 Butler Area Sewer Authority. The intended user of the valuation is Butler Area Sewer Authority (“BASA”), Pennsylvania American Water Company, 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.**

The BASA is owned by the City of Butler and the Township of Butler. The BASA owns and operates the Wastewater System which consists of a wastewater treatment plant (“WWTP”), 23 continuous duty pump stations, four wet weather diversion pump stations, seven equalization tanks, about eight miles of force mains, 224 miles of gravity mains, approximately 5,881 manholes, 15,505 services, associated infrastructure and appurtenances, and related land and land rights. The Wastewater System has a service area of approximately 32.5 square miles. The Wastewater System collects and treats wastewater from the following municipalities: the City of Butler, Butler Township, Center Township, the Borough of East Butler, Summit Township, Oakland Township, Connequenessing Borough, and Penn Township.

The Wastewater System WWTP is a 10.0 million gallons per day (“MGD”) capacity plant. In 2021, the WWTP’s average daily flow was 5.7 MGD. The WWTP is a tertiary treatment plant utilizing a two-stage, biological treatment system with high-rate trickling filters and a second-stage activated sludge nitrification process. Unit treatment processes include preliminary treatment, primary settling, trickling filters, aeration, final setting, reactor clarifier settling, and chlorine disinfection. The clarified effluent is dosed with chlorine before entering the two chlorine contact tanks, which provide the required contact time for disinfection. The disinfected effluent is discharged to Connequenessing Creek through a 48-inch outfall sewer. The WWTP dewateres sludge on-site using plate and frame filter presses and the dewatered sludge is disposed at a regional landfill. The WWTP operates under NPDES Permit No. PA0026697.

* - On August 11, 2022, the Appraisal Foundation’s Appraisal Standards Board (ASB) announced that the current edition of the Uniform Standards of Professional Appraisal Practice (USPAP) would be extended by another year. The 2020-2021 USPAP will now be effective until December 31, 2023.

Compliance with Uniform Standards of Professional

Appraisal Practice (USPAP) 2020-2021*

Fulfillment of Requirements for a Personal Property Appraisal and Report

The Wastewater System's 23 pump stations include: Benbrook Pump Station; Brewster and Brewster Booster Pump Station; Bryson Road Pump Station; Center Avenue Pump Station; Cupps Road Pump Station; Deshon Pump Station; Diamond Street Pump Station; Fisher Heights Pump Station; Foxcroft Drive Pump Station; Garden Pump Station; Greenwood Drive Pump Station; Karns Crossing Pump Station; the Links Pump Station; Monroe Street Pump Station; Negley Avenue Pump Station; Northvue Pump Station; Rock Lick Creek Pump Station; Township Line Pump Station; September Drive Pump Station; Sugarcreek Pump Station; Ziegler Avenue Pump Station; Pullman Center Pump Station; and Ball Park Pump Station.

The Wastewater System's four wet weather diversion pump stations include: Ballpark; Connoquenessing; Monroe Street; and Deshon. The Wastewater System's seven flow equalization tanks include three at the Central Storage Facility, two at Monroe Street, and two at Deshon. The Wastewater System's eight miles of force main was installed between 1964 and 2018 with about 1% installed in the 1960s, 11, 57% installed in 1980s, and 23% installed after 2004.

The Wastewater System's 1,180,500 linear feet of gravity sewer collection and intercept mains consist of 6-inch, 8-inch, 10-inch, 12-inch, 15-inch, 16-inch, 18-inch, 24-inch, 27-inch, 30-inch, 36-inch, and 48-inch diameter pipe which was installed between 1928 to 2022. About 5% of the gravity mains were installed in 1928, 5% installed in the 1930s, 4% installed in the 1940s, 8% installed in the 1950s, 11% installed in the 1960s, 19% installed in the 1970s, 30% installed in the 1980s, 2% installed in the 1990s, 8% installed in the 2000s, 7% installed in the 2010s, and 1% installed in the 2020s. There are 5,881 manholes and 15,505 services laterals in the system.

The property is an operating wastewater utility, the economics of which were analyzed from audited and budgeted financial statements which were incorporated into the income approach to value in this appraisal.

The Wastewater System's land and land rights include land used for the operation of their system, associated infrastructure and appurtenances, 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.

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Fulfillment of Requirements for a Personal Property Appraisal and Report

- **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

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

The effective date of the appraisal is as of January 19, 2023, and the appraisal report date is February 2, 2023.

- **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 (“Gannett Fleming”) was retained by the Butler Area Sewer Authority (“BASA”) to estimate the fair market value of the Butler Area Sewer Authority’s wastewater system assets (“Wastewater System”) as of January 19, 2023.

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.

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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 BASA 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.

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 asset inventory developed by Herbert, Rowland & Grubic, 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

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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

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 calculate 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.

- **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.

* - On August 11, 2022, the Appraisal Foundation's Appraisal Standards Board (ASB) announced that the current edition of the Uniform Standards of Professional Appraisal Practice (USPAP) would be extended by another year. The 2020-2021 USPAP will now be effective until December 31, 2023.

Compliance with Uniform Standards of Professional

Appraisal Practice (USPAP) 2020-2021*

Fulfillment of Requirements for a Personal Property Appraisal and Report

- **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 BASA's Wastewater System land and land rights include land used for wastewater sewage collection, transmission, and treatment, including a wastewater treatment plant, 23 continuous duty pump stations, four wet weather diversion pump stations, seven equalization tanks, about eight miles of force mains, 224 miles of gravity mains, approximately 5,881 manholes, 15,505 services, associated infrastructure and appurtenances and multiple easements and rights-of-way necessary to operate the Wastewater System.

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

- **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.

* - On August 11, 2022, the Appraisal Foundation's Appraisal Standards Board (ASB) announced that the current edition of the Uniform Standards of Professional Appraisal Practice (USPAP) would be extended by another year. The 2020-2021 USPAP will now be effective until December 31, 2023.

Compliance with Uniform Standards of Professional

Appraisal Practice (USPAP) 2020-2021*

Fulfillment of Requirements for a Personal Property Appraisal and Report

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

See attached for signed certification.

* - On August 11, 2022, the Appraisal Foundation's Appraisal Standards Board (ASB) announced that the current edition of the Uniform Standards of Professional Appraisal Practice (USPAP) would be extended by another year. The 2020-2021 USPAP will now be effective until December 31, 2023.

APPRAISAL CERTIFICATION

Butler, Pennsylvania

Butler Area Sewer Authority

Wastewater System Assets

Fair Market Value Appraisal Report

As of January 19, 2023

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 Butler Area Sewer Authority's wastewater system prior to this 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

Butler, Pennsylvania

Butler Area Sewer Authority

Wastewater System Assets

Fair Market Value Appraisal Report

As of January 19, 2023

- The signers of this report Johanna J. Liller, Construction 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 Gregory R. Herbert, Rate Analyst at Rate Studies at Gannett Fleming Valuation and Rate Consultants, LLC.

Gannett Fleming Valuation and Rate Consultants, LLC

By,



HAROLD WALKER, III

Manager, Financial Studies

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" (CRRRA) 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 twenty 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, waste water, 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. 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. 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.

EXHIBITS

Butler Area Sewer Authority Wastewater System Assets
Selected Audited Financial Information

	12-Months Ended July 31:			
	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
Gross property, plant & equipment	136,613,934	136,544,364	137,216,175	138,491,270
Accumulated depreciation	70,040,920	73,373,637	76,775,843	80,100,935
Net property, plant & equipment	66,573,014	63,170,727	60,440,332	58,390,335
Assets	85,720,326	82,585,301	80,697,530	78,839,031
Debt Current	2,377,762	2,429,201	2,395,854	2,472,724
Debt	44,634,012	42,502,694	40,699,025	38,152,019
Equity	33,742,437	33,012,765	32,747,593	33,425,221
Total Capital	80,754,211	77,944,660	75,842,472	74,049,964
OPERATING REVENUES				
Charges for services	10,176,980	10,373,400	10,692,751	10,890,555
Other operating income	128,446	203,150	144,273	260,786
TOTAL OPERATING REVENUES	10,305,426	10,576,550	10,837,024	11,151,341
OPERATING EXPENSES				
Expenses	6,889,717	6,478,400	6,140,125	6,250,851
Depreciation	3,476,093	3,695,178	3,685,849	3,725,042
TOTAL OPERATING EXPENSES	10,365,810	10,173,578	9,825,974	9,975,893
CAPX	4,024,985	296,183	958,729	1,675,045
Interest	1,255,034	1,330,851	590,453	988,593
Principal	2,311,533	2,152,762	2,754,201	2,395,854

Source of Information: Audited Financial Statements (2019-2022)

Butler Area Sewer Authority Wastewater System Assets
Selected Audited Financial Information

	12-Months Ended July 31:			
	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Gross property, plant & equipment	133,258,279	136,613,934	136,544,364	137,216,175
Accumulated depreciation	67,513,233	70,040,920	73,373,637	76,775,843
Net property, plant & equipment	65,745,046	66,573,014	63,170,727	60,440,332
Assets	88,555,752	85,720,326	82,585,301	80,697,530
Debt Current	2,311,533	2,377,762	2,429,201	2,395,854
Debt	47,006,816	44,634,012	42,502,694	40,699,025
Equity	34,370,613	33,742,437	33,012,765	32,747,593
Total Capital	83,688,962	80,754,211	77,944,660	75,842,472
OPERATING REVENUES				
Charges for services	10,271,600	10,176,980	10,373,400	10,692,751
Other operating income	144,851	128,446	203,150	144,273
TOTAL OPERATING REVENUES	10,416,451	10,305,426	10,576,550	10,837,024
OPERATING EXPENSES				
Expenses	6,558,515	6,889,717	6,478,400	6,140,125
Depreciation	3,293,913	3,476,093	3,695,178	3,685,849
TOTAL OPERATING EXPENSES	9,852,428	10,365,810	10,173,578	9,825,974
CAPX	3,773,677	4,024,985	296,183	958,729
Interest	1,489,949	1,255,034	1,330,851	590,453
Principal	2,084,251	2,311,533	2,152,762	2,754,201

Source of Information: Audited Financial Statements (2018-2021)

Butler Area Sewer Authority Wastewater System Assets
Population, Housing Units, Customer Count, EDUs and
Sewage Flows

	<u>BASA</u> <u>2022</u>	<u>Population</u> <u>To Customers</u>
Population	52,499	<u>3.6</u>
Housing Units	<u>25,116</u>	
Average Size	<u>2.09</u>	

	<u>Current</u>	<u>EDU per</u> <u>Customer</u>
<u>Customers</u>		
Residential	13,617	
Commercial	915	
Industrial	31	
Public	<u>136</u>	
Total	<u>14,699</u>	

Total EDUs	<u>23,211</u>	<u>1.6</u>

	<u>Projected EDU</u>				
	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>
New EDU	227	227	227	227	227

Annual Daily Average Sewage Flow (MGD)

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Flows	6.838	8.272	7.232	6.506	5.698

Population and Housing Units

Municipality	Total Population	Population in Households	Total Housing Units	Vacancy Rate	Population per Housing Unit
City of Butler	13,556	13,256	7,160	13.4%	1.89
Butler Township	17,250	16,852	8,121	6.6%	2.12
Center Township	7,984	7,967	3,846	6.1%	2.08
Summit Township	4,501	4,349	2,001	6.9%	2.25
East Butler Borough	764	764	332	3.0%	2.30
Oakland Township	2,784	2,779	1,220	6.7%	2.28
Connequenessing Borough	669	669	331	14.5%	2.02
Penn Township	<u>4,991</u>	<u>4,957</u>	<u>2,105</u>	<u>7.6%</u>	<u>2.37</u>
BASA Totals	<u>52,499</u>	<u>51,593</u>	<u>25,116</u>	<u>4.2%</u>	<u>2.09</u>

TABLE 3.1 US Population Census Counts, 2010 & 2020			
State	Population		Percentage Change
	2010	2020	
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	1,368,301	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		Percentage Change	Municipal Growth Rank
	2010	2020		
Pennsylvania	12,702,379	13,002,700	2.4%	-
Butler County	183,862	193,763	5.4%	-
Butler City	13,757	13,502	-1.9%	1,229 out of 2,572
Butler Township	17,248	17,230	-0.1%	996 out of 2,572
Center Township	7,898	7,899	0.0%	981 out of 2,572
Connoquenessing Boroug	528	668	26.5%	28 out of 2,572
East Butler Borough	732	764	4.4%	495 out of 2,572
Oakland Township	2,987	2,769	-7.3%	1,960 out of 2,572
Penn Township	5,071	4,990	-1.6%	1,201 out of 2,572
Summit Township	4,884	4,504	-7.8%	2,005 out of 2,572
System Total	53,105	52,326	-1.5%	1,178 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%
Butler City	12,951	12,692	12,851	13,184	13,544	13,818	-2.0%	1.3%	2.6%	2.7%	2.7%	6.7%
Butler Township	16,673	16,508	16,865	17,342	17,748	18,044	-1.0%	2.2%	2.8%	2.3%	2.3%	8.2%
Center Township	7,662	7,569	7,720	7,928	8,104	8,226	-1.2%	2.0%	2.7%	2.2%	2.2%	7.4%
Connoquenessing Borough	514	506	516	528	538	545	-1.6%	2.0%	2.3%	1.9%	1.3%	6.0%
East Butler Borough	689	686	703	723	740	752	-0.4%	2.5%	2.8%	2.4%	2.4%	9.1%
Oakland Township	2,879	2,839	2,889	2,962	3,021	3,060	-1.4%	1.8%	2.5%	2.0%	2.0%	6.3%
Penn Township	4,956	4,947	5,092	5,275	5,432	5,554	-0.2%	2.9%	3.6%	3.0%	3.0%	12.1%
Summit Township	4,769	4,770	4,912	5,092	5,253	5,383	0.0%	3.0%	3.7%	3.2%	3.2%	12.9%
System Total	51,093	50,517	51,548	53,034	54,380	55,382	-1.1%	2.0%	2.9%	2.5%	2.5%	8.4%

Source: Southwestern Pennsylvania 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%
Butler City	1,642	1,602	1,555	1,551	1,562	1,573	-2.4%	-2.9%	-0.3%	0.7%	0.7%	-4.2%
Butler Township	4,072	3,974	3,878	3,877	3,920	3,961	-2.4%	-2.4%	0.0%	1.1%	1.1%	-2.7%
Center Township	1,342	1,310	1,305	1,344	1,390	1,427	-2.4%	-0.4%	3.0%	3.4%	3.4%	6.3%
Connoquenessing Borough	-	-	-	-	-	-	NA	NA	NA	NA	NA	NA
East Butler Borough	19	20	19	20	21	21	5.3%	-5.0%	5.3%	5.0%	5.0%	10.5%
Oakland Township	52	50	52	56	60	63	-3.8%	4.0%	7.7%	7.1%	7.1%	21.2%
Penn Township	328	323	325	335	348	359	-1.5%	0.6%	3.1%	3.9%	3.9%	9.5%
Summit Township	156	154	158	165	174	183	-1.3%	2.6%	4.4%	5.5%	5.5%	17.3%
System Total	7,611	7,433	7,292	7,348	7,475	7,587	-2.3%	-1.9%	0.8%	1.7%	1.7%	-0.3%

Source: Southwestern Pennsylvania Commission, June 2019.

Comparison of Credit Market Financial Risk Metrics
For Butler Area Sewer Authority Wastewater System Assets
And the Comparable Group
2019 - 2021 (1)

	Butler Area Sewer Authority Wastewater System Assets			Comparable Group		
	2021	2020	2019	2021	2020	2019
Debt Service Coverage	1.4	1.2	1.0	2.3	2.4	2.0
Pre-Tax Interest Coverage - Including AFC(2)(x)	1.7	0.3	0.0	4.4	3.7	3.6
Post-Tax Interest Coverage - Including AFC(2)(x)	1.7	0.3	0.0	3.7	3.2	2.9
GCF / Interest Coverage(3)(x)	8.0	3.1	2.7	5.9	5.2	4.7
GCF / Tot. Debt(4)(%)	9.5	6.2	4.6	18.2	15.9	15.8
GCF / Construction(5)(%)	428.3	934.3	53.7	73.2	72.2	63.0

- 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: 2019-21 Annual Reports
S&P Capital IQ
EXHIBIT 1

Butler Area Sewer Authority Wastewater System Assets
 Illustrating the Impact of Size on Risk and Return
Through Common Stock Returns

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

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>I</u>	<u>J</u>
	Market	Average	Standard	Change in	Largest	Quartile	Comparison	Beta	Beta Adjusted	
<u>Market</u>	<u>Quartile</u>	<u>Quartile</u>	<u>Deviation</u>	<u>Quartile</u>	<u>Market Value</u>	<u>Beta</u>	<u>Group</u>	<u>Ratio</u>	<u>Quartile</u>	<u>Change in</u>
<u>Quartile</u>	<u>Name</u>	<u>1926-20</u>	<u>of</u>	<u>Premium</u>	<u>in the Quartile</u>		<u>Beta</u>		<u>Size</u>	<u>Quartile</u>
		<u>(%)</u>	<u>Return</u>	<u>(%)</u>	<u>(Mill \$)</u>				<u>Premium</u>	<u>Premium</u>
									<u>(%)</u>	<u>(%)</u>
(Largest Stocks)										
1	Large-Cap	0.00	19.9	--	1,966,079	1.00	0.75	75%	0.00	
2	Mid-Cap	2.48	24.3	2.48	13,179	1.13	0.75	66%	1.65	1.65
3	Low-Cap	3.95	28.5	1.47	2,446	1.23	0.75	61%	2.41	0.76
4	Mico-Cap	6.21	38.5	2.26	452	1.35	0.75	56%	3.45	1.04
(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

	1/19/2023	Market	
	Market	Quartile	Market
	<u>Value</u>	<u>Name</u>	<u>Quartile</u>
	<u>(Mill \$)</u>		
<u>Comparable Group</u>			
American States Water Co	3,433	Mid-Cap	2
American Water Works Co Inc	27,309	Large-Cap	1
Artesian Resources -Cl A	575	Low-Cap	3
California Water Service Gp	3,335	Mid-Cap	2
Essential Utilities, Inc.	12,197	Mid-Cap	2
Middlesex Water Co	1,408	Low-Cap	3
SJW Corp	2,322	Low-Cap	3
York Water Co	663	Low-Cap	3
Median	2,829	Mid-Cap	2

Butler Area Sewer Authority 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 \$)			
Butler Area Sewer Authority Wastewater System Assets *	\$143.771	\$93.409	65%
<u>Comparable Group</u>			
American States Water Company	\$2,340.189	\$1,736.437	74%
American Water Works Company, Ir	29,152.000	22,726.000	78%
Artesian Resources Corporation	830.607	660.160	79%
California Water Service Group	4,422.312	2,987.612	68%
Essential Utilities, Inc.	13,511.141	10,918.773	81%
Middlesex Water Company	1,130.147	914.945	81%
SJW Group	3,857.583	2,634.038	68%
The York Water Company	523.869	418.560	80%
Median			79%
* - Developed on Exhibit 7.			

TABLE 6.2 Property Plant & Equipment Analysis for Contributions

(As of 9/30/2022)				
	Net Property, Plant & Equipment	Investor's Capital	Percentage of Property, Plant & Equipment Net of Contributions	2021 Percentage of Known "Cost Free" Capital
(Millions of \$)				
<u>Comparable Group</u>				
American States Water Co	\$1,736.437	\$1,403.833	81%	22%
American Water Works Co Inc	22,726.000	19,681.000	87%	20%
Artesian Resources -CL A	660.160	373.901	57%	40%
California Water Service Gp	2,987.612	2,408.066	81%	27%
Essential Utilities, Inc.	10,918.773	11,936.944	109%	21%
Middlesex Water Co	914.945	754.035	82%	26%
SJW Corp	2,634.038	2,706.605	103%	26%
York Water Co	418.560	329.581	79%	27%
Median			82%	26%

Butler Area Sewer Authority Wastewater System Assets
Property Plant & Equipment Analysis
Capital Expenditures Analysis
Growth Rate Analyses
Profit Margin Analyses

TABLE 6.3 Capital Expenditures Analysis

	PP&E-Total Net				Capital Expenditures			
	2021	2020	2019	2018	2021	2020	2019	2018
	(Millions of \$)				(Millions of \$)			
Butler Area Sewer Authority Wastewater System Assets	\$60.440	\$63.171	\$66.573	\$65.745	\$0.959	\$0.296	\$4.025	\$3.774
<u>Comparable Group</u>								
American States Water Co	\$1,645.218	\$1,557.936	\$1,458.595	\$1,304.683	\$144.515	\$130.423	\$151.940	\$126.561
American Water Works Co Inc	21,176.000	19,805.000	18,335.000	17,409.000	1,764.000	1,822.000	1,654.000	1,586.000
Artesian Resources -CL A	594.633	563.817	535.013	502.527	40.814	34.277	40.677	49.053
California Water Service Gp	2,849.059	2,654.027	2,409.873	2,220.873	293.194	298.651	273.770	271.707
Essential Utilities, Inc.	10,300.796	9,573.211	6,358.657	5,930.326	1,020.519	835.642	550.273	495.737
Middlesex Water Co	881.299	813.014	722.044	628.476	79.378	105.619	89.125	72.094
SJW Corp	2,518.530	2,356.988	2,230.343	1,365.771	233.933	195.323	164.325	135.973
York Water Co	383.626	344.365	313.993	299.871	46.400	33.299	20.537	16.882
	Capital Expenditures / PP&E-Total Net							
	2021	2020	2019	2018				
Butler Area Sewer Authority Wastewater System Assets	2%	0%	6%	6%				
<u>Comparable Group</u>								
American States Water Co	9%	8%	10%	10%				
American Water Works Co Inc	8%	9%	9%	9%				
Artesian Resources -CL A	7%	6%	8%	10%				
California Water Service Gp	10%	11%	11%	12%				
Essential Utilities, Inc.	10%	9%	9%	8%				
Middlesex Water Co	9%	13%	12%	11%				
SJW Corp	9%	8%	7%	10%				
York Water Co	12%	10%	7%	6%				
Median	9%	9%	9%	10%				

Butler Area Sewer Authority Wastewater System Assets
Property Plant & Equipment Analysis
Capital Expenditures Analysis
Growth Rate Analyses
Profit Margin Analyses

Revenues			
2021	2020	2019	2018

(Millions of \$)

EBITDA			
2021	2020	2019	2018

(Millions of \$)

Butler Area Sewer Authority
Wastewater System Assets

\$10.837 \$10.577 \$10.305 \$10.416 \$4.697 \$4.098 \$3.416 \$3.858

Comparable Group

American States Water Co	\$498.853	\$488.243	\$473.869	\$436.816	\$185.064	\$171.044	\$164.085	\$144.803
American Water Works Co Inc	3,930.000	3,777.000	3,610.000	3,440.000	1,306.476	1,154.957	1,102.741	917.849
Artesian Resources -CL A	90.859	88.141	83.595	80.411	433.284	387.423	380.137	340.460
California Water Service Gp	790.909	794.307	714.557	698.196	30.401	25.800	26.382	25.061
Essential Utilities, Inc.	1,878.144	1,462.698	889.692	838.091	147.867	140.577	127.710	122.709
Middlesex Water Co	143.141	141.592	134.598	138.077	38.056	33.947	35.841	28.720
SJW Corp	573.686	564.526	420.482	397.699	86.302	83.532	68.003	63.335
York Water Co	55.119	53.852	51.578	48.437	25.743	24.780	24.359	21.800

EBIT			
2021	2020	2019	2018

(Millions of \$)

Butler Area Sewer Authority
Wastewater System Assets

\$1.011 \$0.403 (\$0.060) \$0.564

Comparable Group

American States Water Co	\$145.090	\$133.840	\$128.372	\$104.140
American Water Works Co Inc	1,274.000	1,297.000	1,230.000	1,159.000
Artesian Resources -CL A	28.031	27.979	25.106	23.946
California Water Service Gp	139.248	143.065	109.924	119.686
Essential Utilities, Inc.	615.095	456.424	357.241	329.531
Middlesex Water Co	35.241	37.699	34.318	37.766
SJW Corp	107.206	117.296	70.089	89.694
York Water Co	22.182	23.069	22.335	21.232

Butler Area Sewer Authority Wastewater System Assets
Property Plant & Equipment Analysis
Capital Expenditures Analysis
Growth Rate Analyses
Profit Margin Analyses

TABLE 6.4 Growth Rate Analyses

	Revenue Growth			EBITDA Growth		
	2021	2020	2019	2021	2020	2019
Butler Area Sewer Authority Wastewater System Assets	2.5%	2.6%	-1.1%	14.6%	20.0%	-11.5%
<u>Comparable Group</u>						
American States Water Co	2.2%	3.0%	8.5%	8.2%	4.2%	13.3%
American Water Works Co Inc	4.1%	4.6%	4.9%	13.1%	4.7%	20.1%
Artesian Resources -CL A	3.1%	5.4%	4.0%	11.8%	1.9%	11.7%
California Water Service Gp	-0.4%	11.2%	2.3%	17.8%	-2.2%	5.3%
Essential Utilities, Inc.	28.4%	64.4%	6.2%	5.2%	10.1%	4.1%
Middlesex Water Co	1.1%	5.2%	-2.5%	12.1%	-5.3%	24.8%
SJW Corp	1.6%	34.3%	5.7%	3.3%	22.8%	7.4%
York Water Co	2.4%	4.4%	6.5%	3.9%	1.7%	11.7%
Median	2.3%	5.3%	5.3%	10.0%	3.1%	11.7%
	EBIT Growth					
	2021	2020	2019			
Butler Area Sewer Authority Wastewater System Assets	150.9%	-771.7%	-110.6%			
<u>Comparable Group</u>						
American States Water Co	8.4%	4.3%	23.3%			
American Water Works Co Inc	-1.8%	5.4%	6.1%			
Artesian Resources -CL A	0.2%	11.4%	4.8%			
California Water Service Gp	-2.7%	30.1%	-8.2%			
Essential Utilities, Inc.	34.8%	27.8%	8.4%			
Middlesex Water Co	-6.5%	9.9%	-9.1%			
SJW Corp	-8.6%	67.4%	-21.9%			
York Water Co	-3.8%	3.3%	5.2%			
Median	-2.3%	10.7%	5.0%			

Butler Area Sewer Authority 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		
	2021	2020	2019
Butler Area Sewer Authority Wastewater System Assets	43.3%	38.7%	33.1%
<u>Comparable Group</u>			
American States Water Co	37.1%	35.0%	34.6%
American Water Works Co Inc	33.2%	30.6%	30.5%
Artesian Resources -CL A	476.9%	439.5%	454.7%
California Water Service Gp	3.8%	3.2%	3.7%
Essential Utilities, Inc.	7.9%	9.6%	14.4%
Middlesex Water Co	26.6%	24.0%	26.6%
SJW Corp	15.0%	14.8%	16.2%
York Water Co	46.7%	46.0%	47.2%
Median	29.9%	27.3%	28.6%
	EBIT / Revenue - Margin		
	2021	2020	2019
Butler Area Sewer Authority Wastewater System Assets	9.3%	3.8%	-0.6%
<u>Comparable Group</u>			
American States Water Co	29.1%	27.4%	27.1%
American Water Works Co Inc	32.4%	34.3%	34.1%
Artesian Resources -CL A	30.9%	31.7%	30.0%
California Water Service Gp	17.6%	18.0%	15.4%
Essential Utilities, Inc.	32.8%	31.2%	40.2%
Middlesex Water Co	24.6%	26.6%	25.5%
SJW Corp	18.7%	20.8%	16.7%
York Water Co	40.2%	42.8%	43.3%
Median	30.0%	29.3%	28.6%

Source: S&P Capital IQ
EXHIBIT 1

**BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS**

**SUMMARY OF ORIGINAL COST AND ACCRUED DEPRECIATION
OF WASTEWATER SYSTEM AS OF JANUARY 19, 2023**

ACCOUNT	DESCRIPTION	ORIGINAL COST	ACCRUED DEPRECIATION
(1)	(2)	(3)	(4)
353.00	LAND AND LAND RIGHTS	592,540.92	
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	29,543,057.09	4,196,580
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	19,347,446.15	7,381,375
355.00	POWER GENERATION EQUIPMENT	1,703,692.16	743,169
360.10	FORCE MAINS	4,551,561.31	1,359,641
361.10	GRAVITY MAINS	42,602,048.00	17,921,924
361.12	MANHOLES	7,927,848.70	3,859,382
363.20	SERVICES TO CUSTOMERS	8,568,747.97	4,002,410
364.30	METERS	300,000.00	179,200
371.30	PUMPING EQUIPMENT	6,954,252.18	3,391,997
371.40	GRINDER PUMP EQUIPMENT	38,624.00	6,131
380.00	TREATMENT AND DISPOSAL EQUIPMENT	18,483,489.84	5,586,844
382.00	OUTFALL SEWERS	25,662.14	17,091
390.00	OFFICE FURNITURE AND EQUIPMENT	12,178.00	1,654
390.70	COMPUTERS AND PRINTERS	87,162.00	70,653
391.70	TRANSPORTATION EQUIPMENT	784,172.00	407,230
395.70	POWER OPERATED EQUIPMENT	1,134,169.60	489,405
396.00	COMMUNICATION EQUIPMENT	1,111,618.35	744,501
397.70	MISCELLANEOUS EQUIPMENT	3,059.83	3,060
	TOTAL COMPANY	143,771,330.24	50,362,247

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

SUMMARY OF ANALYSIS OF ORIGINAL COST
OF WASTEWATER SYSTEM AS OF JANUARY 19, 2023

ACCOUNT	DESCRIPTION	ORIGINAL COST
(1)	(2)	(3)
353.00	LAND AND LAND RIGHTS	592,540.92
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	29,543,057.09
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	19,347,446.15
355.00	POWER GENERATION EQUIPMENT	1,703,692.16
360.10	FORCE MAINS	4,551,561.31
361.10	GRAVITY MAINS	42,602,048.00
361.12	MANHOLES	7,927,848.70
363.20	SERVICES TO CUSTOMERS	8,568,747.97
364.30	METERS	300,000.00
371.30	PUMPING EQUIPMENT	6,954,252.18
371.40	GRINDER PUMP EQUIPMENT	38,624.00
380.00	TREATMENT AND DISPOSAL EQUIPMENT	18,483,489.84
382.00	OUTFALL SEWERS	25,662.14
390.00	OFFICE FURNITURE AND EQUIPMENT	12,178.00
390.70	COMPUTERS AND PRINTERS	87,162.00
391.70	TRANSPORTATION EQUIPMENT	784,172.00
395.70	POWER OPERATED EQUIPMENT	1,134,169.60
396.00	COMMUNICATION EQUIPMENT	1,111,618.35
397.70	MISCELLANEOUS EQUIPMENT	3,059.83
	TOTAL COMPANY	143,771,330.24

**BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS**

**SUMMARY OF SERVICE LIFE ESTIMATES AND CALCULATED ACCRUED
DEPRECIATION RELATED TO ORIGINAL COST AS OF JANUARY 19, 2023**

ACCOUNT	DESCRIPTION	SURVIVOR CURVE	ORIGINAL COST	ACCRUED DEPRECIATION
(1)	(2)	(3)	(4)	(5)
353.00	LAND AND LAND RIGHTS	NONDEPRECIABLE	592,540.92	
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	65-R3	29,543,057.09	4,196,580
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	70-R2.5	19,347,446.15	7,381,375
355.00	POWER GENERATION EQUIPMENT	30-S2	1,703,692.16	743,169
360.10	FORCE MAINS	70-R2.5	4,551,561.31	1,359,641
361.10	GRAVITY MAINS	65-R2.5	42,602,048.00	17,921,924
361.12	MANHOLES	60-R3	7,927,848.70	3,859,382
363.20	SERVICES TO CUSTOMERS	55-R2.5	8,568,747.97	4,002,410
364.30	METERS	30-L3	300,000.00	179,200
371.30	PUMPING EQUIPMENT	40-R1.5	6,954,252.18	3,391,997
371.40	GRINDER PUMP EQUIPMENT	10-R1.5	38,624.00	6,131
380.00	TREATMENT AND DISPOSAL EQUIPMENT	45-S0.5	18,483,489.84	5,586,844
382.00	OUTFALL SEWERS	70-R2.5	25,662.14	17,091
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	12,178.00	1,654
390.70	COMPUTERS AND PRINTERS	5-SQ	87,162.00	70,653
391.70	TRANSPORTATION EQUIPMENT	11-S1.5	784,172.00	407,230
395.70	POWER OPERATED EQUIPMENT	15-L2.5	1,134,169.60	489,405
396.00	COMMUNICATION EQUIPMENT	15-SQ	1,111,618.35	744,501
397.70	MISCELLANEOUS EQUIPMENT	15-SQ	3,059.83	3,060
	TOTAL COMPANY		143,771,330.24	50,362,247

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 353.00 LAND AND LAND RIGHTS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
NONDEPRECIABLE							
1970	2.00						
1972	1.00						
1974	1.00						
1977	94,003.50						
1978	60,157.42						
1979	5,822.00						
1980	1,982.00						
1981	11.00						
1982	2.00						
1983	1.00						
1984	2.00						
1988	37,220.00						
1996	1.00						
1999	2.00						
2000	4.00						
2001	15,002.00						
2002	6.00						
2003	1.00						
2004	15,010.00						
2005	2.00						
2006	1.00						
2008	9.00						
2009	308,557.00						
2010	27,618.00						
2011	2.00						
2013	14,620.00						
2014	10,000.00						
2015	2,500.00						
2016	1.00						
	592,540.92						
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - PUMPING

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 65-R3							
NET SALVAGE PERCENT.. 0							
1969	14,751.42	65.00	1.54	227.17	19.43	0.7011	10,342
1972	3,829.13	65.00	1.54	58.97	21.37	0.6712	2,570
1992	339,486.90	65.00	1.54	5,228.10	36.60	0.4369	148,329
1999	82,172.10	65.00	1.54	1,265.45	42.68	0.3434	28,216
2005	46,874.02	65.00	1.54	721.86	48.14	0.2594	12,158
2010	413,427.90	65.00	1.54	6,366.79	52.83	0.1872	77,406
2012	85,918.80	65.00	1.54	1,323.15	54.74	0.1579	13,562
2013	19,981,305.32	65.00	1.54	307,712.10	55.69	0.1432	2,861,922
2014	7,334,929.35	65.00	1.54	112,957.91	56.66	0.1283	941,145
2016	527,211.50	65.00	1.54	8,119.06	58.59	0.0986	51,994
2018	713,150.65	65.00	1.54	10,982.52	60.54	0.0686	48,936
	29,543,057.09			454,963.08			4,196,580
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.54							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TREATMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL RATE	ACCRUAL--AMOUNT	EXP.	--ACCRUED FACTOR	DEPREC.--AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 70-R2.5							
NET SALVAGE PERCENT.. 0							
1964	231,540.50	70.00	1.43	3,311.03	22.78	0.6746	156,190
1965	856,105.48	70.00	1.43	12,242.31	23.38	0.6660	570,166
1966	68,822.22	70.00	1.43	984.16	23.99	0.6573	45,236
1982	10,764,000.37	70.00	1.43	153,925.21	34.97	0.5004	5,386,629
1993	318,021.19	70.00	1.43	4,547.70	43.62	0.3769	119,849
1994	158,949.55	70.00	1.43	2,272.98	44.45	0.3650	58,017
1995	66,113.50	70.00	1.43	945.42	45.28	0.3531	23,347
1999	428,950.00	70.00	1.43	6,133.98	48.66	0.3049	130,770
2003	445,625.00	70.00	1.43	6,372.44	52.12	0.2554	113,826
2007	124,400.25	70.00	1.43	1,778.92	55.66	0.2049	25,485
2011	2,146,884.83	70.00	1.43	30,700.45	59.27	0.1533	329,096
2012	624,318.68	70.00	1.43	8,927.76	60.18	0.1403	87,586
2013	1,864,142.52	70.00	1.43	26,657.24	61.09	0.1273	237,287
2015	604,397.45	70.00	1.43	8,642.88	62.94	0.1009	60,960
2016	119,387.28	70.00	1.43	1,707.24	63.86	0.0877	10,471
2017	142,304.45	70.00	1.43	2,034.95	64.79	0.0744	10,592
2019	317,761.10	70.00	1.43	4,543.98	66.66	0.0477	15,160
2020	8,152.35	70.00	1.43	116.58	67.60	0.0343	280
2022	57,569.43	70.00	1.43	823.24	69.48	0.0074	428
19,347,446.15				276,668.47	7,381,375		
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 355.00 POWER GENERATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 30-S2							
NET SALVAGE PERCENT.. 0							
1999	25,733.55	30.00	3.33	856.93	10.55	0.6483	16,684
2000	81,604.00	30.00	3.33	2,717.41	11.09	0.6303	51,437
2001	590,906.80	30.00	3.33	19,677.20	11.65	0.6117	361,440
2005	54,510.00	30.00	3.33	1,815.18	14.18	0.5273	28,745
2009	8,853.85	30.00	3.33	294.83	17.18	0.4273	3,784
2010	19,550.00	30.00	3.33	651.02	18.01	0.3997	7,814
2013	760,948.96	30.00	3.33	25,339.60	20.65	0.3117	237,165
2014	48,300.00	30.00	3.33	1,608.39	21.58	0.2807	13,556
2016	82,235.00	30.00	3.33	2,738.43	23.49	0.2170	17,845
2018	31,050.00	30.00	3.33	1,033.96	25.46	0.1513	4,699

1,703,692.16	56,732.95	743,169

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 3.33

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 360.10 FORCE MAINS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 70-R2.5							
NET SALVAGE PERCENT.. 0							
1964	4,600.00	70.00	1.43	65.78	22.78	0.6746	3,103
1969	9,998.04	70.00	1.43	142.97	25.87	0.6304	6,303
1972	35,042.92	70.00	1.43	501.11	27.85	0.6021	21,101
1979	467,472.84	70.00	1.43	6,684.86	32.75	0.5321	248,761
1980	1,451,956.04	70.00	1.43	20,762.97	33.48	0.5217	757,500
2005	68,212.54	70.00	1.43	975.44	53.88	0.2303	15,709
2010	35,546.50	70.00	1.43	508.31	58.36	0.1663	5,911
2013	2,234,372.95	70.00	1.43	31,951.53	61.09	0.1273	284,413
2016	71,505.28	70.00	1.43	1,022.53	63.86	0.0877	6,272
2018	172,854.20	70.00	1.43	2,471.82	65.72	0.0611	10,568
	4,551,561.31			65,087.32			1,359,641

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 361.10 GRAVITY MAINS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 65-R2.5							
NET SALVAGE PERCENT.. 0							
1928	283,550.85	65.00	1.54	4,366.68	6.47	0.9005	255,326
1935	285,218.80	65.00	1.54	4,392.37	8.10	0.8754	249,675
1945	325,249.51	65.00	1.54	5,008.84	10.78	0.8342	271,307
1954	323,682.66	65.00	1.54	4,984.71	13.99	0.7848	254,016
1955	972,412.62	65.00	1.54	14,975.15	14.40	0.7785	756,984
1960	1,587,884.77	65.00	1.54	24,453.43	16.70	0.7431	1,179,925
1963	306,916.46	65.00	1.54	4,726.51	18.23	0.7195	220,839
1964	612,699.85	65.00	1.54	9,435.58	18.77	0.7112	435,771
1965	54,857.94	65.00	1.54	844.81	19.32	0.7028	38,553
1967	122,416.26	65.00	1.54	1,885.21	20.46	0.6852	83,883
1970	517,711.54	65.00	1.54	7,972.76	22.25	0.6577	340,494
1972	88,357.41	65.00	1.54	1,360.70	23.50	0.6385	56,413
1973	25,454.53	65.00	1.54	392.00	24.14	0.6286	16,001
1974	1,247.68	65.00	1.54	19.21	24.79	0.6186	772
1979	6,661,252.66	65.00	1.54	102,583.29	28.19	0.5663	3,772,334
1980	11,994,705.75	65.00	1.54	184,718.47	28.89	0.5555	6,663,539
1985	27,013.45	65.00	1.54	416.01	32.55	0.4992	13,486
1986	47,181.07	65.00	1.54	726.59	33.30	0.4877	23,010
1991	65,902.10	65.00	1.54	1,014.89	37.19	0.4279	28,196
1993	488,416.73	65.00	1.54	7,521.62	38.79	0.4032	196,944
1994	266,676.09	65.00	1.54	4,106.81	39.60	0.3908	104,209
1997	116,490.75	65.00	1.54	1,793.96	42.07	0.3528	41,094
1999	45,037.00	65.00	1.54	693.57	43.75	0.3269	14,723
2000	185,892.25	65.00	1.54	2,862.74	44.60	0.3139	58,342
2001	23,530.20	65.00	1.54	362.37	45.45	0.3008	7,077
2002	491,938.59	65.00	1.54	7,575.85	46.31	0.2875	141,452
2003	59,419.00	65.00	1.54	915.05	47.18	0.2742	16,290
2004	237,996.55	65.00	1.54	3,665.15	48.05	0.2608	62,062
2005	78,705.00	65.00	1.54	1,212.06	48.93	0.2472	19,458
2006	217,154.06	65.00	1.54	3,344.17	49.81	0.2337	50,747
2007	5,723,811.50	65.00	1.54	88,146.70	50.69	0.2202	1,260,097
2008	104,520.92	65.00	1.54	1,609.62	51.58	0.2065	21,579
2009	208,400.76	65.00	1.54	3,209.37	52.48	0.1926	40,142
2010	206,952.74	65.00	1.54	3,187.07	53.38	0.1788	36,997
2011	15,443.00	65.00	1.54	237.82	54.28	0.1649	2,547
2012	3,818,149.37	65.00	1.54	58,799.50	55.19	0.1509	576,235
2013	355,256.00	65.00	1.54	5,470.94	56.11	0.1368	48,588
2014	3,796,883.03	65.00	1.54	58,472.00	57.02	0.1228	466,143
2015	17,292.00	65.00	1.54	266.30	57.94	0.1086	1,878
2016	493,027.23	65.00	1.54	7,592.62	58.87	0.0943	46,497
2018	413,059.17	65.00	1.54	6,361.11	60.72	0.0659	27,200

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 361.10 GRAVITY MAINS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 65-R2.5							
NET SALVAGE PERCENT.. 0							
2019	100,917.30	65.00	1.54	1,554.13	61.66	0.0514	5,185
2020	177,015.00	65.00	1.54	2,726.03	62.60	0.0369	6,535
2021	285,463.75	65.00	1.54	4,396.14	63.54	0.0225	6,412
2022	370,884.10	65.00	1.54	5,711.62	64.48	0.0080	2,967
	42,602,048.00			656,071.53			17,921,924
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.54							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 361.12 MANHOLES

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 60-R3							
NET SALVAGE PERCENT.. 0							
1928	38,503.43	60.00	1.67	643.01	1.62	0.9730	37,464
1935	38,722.04	60.00	1.67	646.66	3.38	0.9437	36,541
1945	44,187.27	60.00	1.67	737.93	5.96	0.9007	39,798
1954	44,236.63	60.00	1.67	738.75	8.65	0.8558	37,859
1955	131,934.18	60.00	1.67	2,203.30	9.00	0.8500	112,144
1960	215,308.91	60.00	1.67	3,595.66	10.96	0.8173	175,978
1963	35,750.00	60.00	1.67	597.02	12.32	0.7947	28,409
1964	102,376.91	60.00	1.67	1,709.69	12.80	0.7867	80,537
1965	8,311.71	60.00	1.67	138.81	13.30	0.7783	6,469
1967	12,803.91	60.00	1.67	213.83	14.35	0.7608	9,742
1970	102,548.30	60.00	1.67	1,712.56	16.04	0.7327	75,134
1972	2,604.00	60.00	1.67	43.49	17.24	0.7127	1,856
1973	5,537.23	60.00	1.67	92.47	17.86	0.7023	3,889
1979	1,421,677.74	60.00	1.67	23,742.02	21.86	0.6357	903,718
1980	2,570,294.08	60.00	1.67	42,923.91	22.56	0.6240	1,603,864
1985	27,226.40	60.00	1.67	454.68	26.26	0.5623	15,310
1986	7,170.00	60.00	1.67	119.74	27.02	0.5497	3,941
1991	12,303.50	60.00	1.67	205.47	31.00	0.4833	5,947
1993	98,092.05	60.00	1.67	1,638.14	32.65	0.4558	44,713
1994	43,750.85	60.00	1.67	730.64	33.49	0.4418	19,330
1997	27,370.00	60.00	1.67	457.08	36.05	0.3992	10,925
1999	12,500.00	60.00	1.67	208.75	37.79	0.3702	4,627
2000	38,819.55	60.00	1.67	648.29	38.67	0.3555	13,800
2001	26,950.00	60.00	1.67	450.06	39.56	0.3407	9,181
2002	88,777.00	60.00	1.67	1,482.58	40.46	0.3257	28,912
2003	429,053.95	60.00	1.67	7,165.20	41.36	0.3107	133,294
2004	616,604.42	60.00	1.67	10,297.29	42.27	0.2955	182,207
2005	35,525.74	60.00	1.67	593.28	43.19	0.2802	9,953
2006	54,048.80	60.00	1.67	902.61	44.11	0.2648	14,314
2007	3,000.00	60.00	1.67	50.10	45.04	0.2493	748
2008	78,982.00	60.00	1.67	1,319.00	45.97	0.2338	18,468
2009	11,703.23	60.00	1.67	195.44	46.91	0.2182	2,553
2010	57,235.80	60.00	1.67	955.84	47.85	0.2025	11,590
2011	343,147.20	60.00	1.67	5,730.56	48.80	0.1867	64,055
2012	469,904.94	60.00	1.67	7,847.41	49.75	0.1708	80,274
2014	12,000.00	60.00	1.67	200.40	51.67	0.1388	1,666
2015	37,496.39	60.00	1.67	626.19	52.63	0.1228	4,606
2016	108,609.03	60.00	1.67	1,813.77	53.60	0.1067	11,585
2018	54,752.50	60.00	1.67	914.37	55.54	0.0743	4,070
2019	54,750.00	60.00	1.67	914.32	56.51	0.0582	3,185

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 361.12 MANHOLES

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 60-R3							
NET SALVAGE PERCENT.. 0							
2020	17,752.46	60.00	1.67	296.47	57.49	0.0418	743
2021	152,310.59	60.00	1.67	2,543.59	58.47	0.0255	3,884
2022	233,215.96	60.00	1.67	3,894.71	59.46	0.0090	2,099
	7,927,848.70			132,395.09			3,859,382
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.67							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 363.20 SERVICES TO CUSTOMERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 55-R2.5							
NET SALVAGE PERCENT.. 0							
1930	60,346.72	55.00	1.82	1,098.31	2.53	0.9540	57,571
1935	60,695.79	55.00	1.82	1,104.66	3.81	0.9307	56,491
1945	69,237.41	55.00	1.82	1,260.12	6.04	0.8902	61,634
1954	29,940.65	55.00	1.82	544.92	8.27	0.8496	25,439
1955	206,871.30	55.00	1.82	3,765.06	8.56	0.8444	174,674
1960	337,708.91	55.00	1.82	6,146.30	10.12	0.8160	275,570
1965	7,993.15	55.00	1.82	145.48	12.02	0.7815	6,246
1967	2,146.91	55.00	1.82	39.07	12.89	0.7656	1,644
1969	55,000.00	55.00	1.82	1,001.00	13.82	0.7487	41,180
1970	83,821.10	55.00	1.82	1,525.54	14.31	0.7398	62,013
1972	1,040.00	55.00	1.82	18.93	15.34	0.7211	750
1973	3,471.43	55.00	1.82	63.18	15.88	0.7113	2,469
1979	19,569.05	55.00	1.82	356.16	19.39	0.6475	12,670
1980	3,957,907.21	55.00	1.82	72,033.91	20.03	0.6358	2,516,517
1985	623.80	55.00	1.82	11.35	23.36	0.5753	359
1986	3,335.00	55.00	1.82	60.70	24.06	0.5626	1,876
1991	5,412.00	55.00	1.82	98.50	27.71	0.4962	2,685
1993	59,421.17	55.00	1.82	1,081.47	29.23	0.4686	27,842
1994	76,270.62	55.00	1.82	1,388.13	30.01	0.4544	34,654
1997	9,434.38	55.00	1.82	171.71	32.38	0.4113	3,880
1999	13,748.00	55.00	1.82	250.21	34.00	0.3818	5,249
2000	57,542.40	55.00	1.82	1,047.27	34.83	0.3667	21,103
2001	36,330.40	55.00	1.82	661.21	35.66	0.3516	12,775
2002	313,816.32	55.00	1.82	5,711.46	36.49	0.3366	105,615
2003	59,030.20	55.00	1.82	1,074.35	37.34	0.3211	18,954
2004	45,161.85	55.00	1.82	821.95	38.19	0.3056	13,803
2005	30,026.25	55.00	1.82	546.48	39.05	0.2900	8,708
2006	33,887.80	55.00	1.82	616.76	39.91	0.2744	9,297
2007	99,550.00	55.00	1.82	1,811.81	40.79	0.2584	25,720
2008	34,752.00	55.00	1.82	632.49	41.66	0.2426	8,429
2009	56,492.50	55.00	1.82	1,028.16	42.55	0.2264	12,788
2010	26,607.10	55.00	1.82	484.25	43.44	0.2102	5,592
2011	69,556.00	55.00	1.82	1,265.92	44.33	0.1940	13,494
2012	1,678,880.86	55.00	1.82	30,555.63	45.23	0.1776	298,236
2014	361,618.00	55.00	1.82	6,581.45	47.05	0.1446	52,272
2016	53,547.71	55.00	1.82	974.57	48.88	0.1113	5,958
2018	19,717.50	55.00	1.82	358.86	50.73	0.0776	1,531
2019	124,932.50	55.00	1.82	2,273.77	51.66	0.0607	7,587

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 363.20 SERVICES TO CUSTOMERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 55-R2.5							
NET SALVAGE PERCENT.. 0							
2020	36,520.00	55.00	1.82	664.66	52.60	0.0436	1,594
2021	238,252.48	55.00	1.82	4,336.20	53.54	0.0266	6,326
2022	128,531.50	55.00	1.82	2,339.27	54.48	0.0095	1,215
	8,568,747.97			155,951.23			4,002,410
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.82							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 364.30 METERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 30-L3							
NET SALVAGE PERCENT.. 0							
1999	250,000.00	30.00	3.33	8,325.00	10.56	0.6480	162,000
2012	50,000.00	30.00	3.33	1,665.00	19.68	0.3440	17,200
	300,000.00			9,990.00			179,200
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 3.33							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 371.30 PUMPING EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 40-R1.5							
NET SALVAGE PERCENT.. 0							
1964	237,021.33	40.00	2.50	5,925.53	6.09	0.8478	200,935
1969	600.49	40.00	2.50	15.01	7.61	0.8098	486
1972	23,244.69	40.00	2.50	581.12	8.60	0.7850	18,247
1979	248,506.95	40.00	2.50	6,212.67	11.27	0.7183	178,490
1980	1,658,239.95	40.00	2.50	41,456.00	11.70	0.7075	1,173,205
1981	1,802,742.53	40.00	2.50	45,068.56	12.15	0.6963	1,255,159
1999	29,611.35	40.00	2.50	740.28	22.27	0.4433	13,125
2004	11,585.10	40.00	2.50	289.63	25.71	0.3573	4,139
2005	41,250.02	40.00	2.50	1,031.25	26.43	0.3393	13,994
2009	82,190.00	40.00	2.50	2,054.75	29.35	0.2663	21,883
2010	102,350.00	40.00	2.50	2,558.75	30.10	0.2475	25,332
2011	299,133.39	40.00	2.50	7,478.33	30.85	0.2288	68,427
2013	1,893,561.53	40.00	2.50	47,339.04	32.38	0.1905	360,723
2015	36,474.55	40.00	2.50	911.86	33.93	0.1518	5,535
2016	203,895.00	40.00	2.50	5,097.38	34.72	0.1320	26,914
2018	241,716.20	40.00	2.50	6,042.90	36.30	0.0925	22,359
2019	42,129.10	40.00	2.50	1,053.23	37.11	0.0723	3,044
	6,954,252.18			173,856.29			3,391,997

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.50

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 371.40 GRINDER PUMP EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 10-R1.5							
NET SALVAGE PERCENT.. 0							
2019	4,828.00	10.00	10.00	482.80	7.22	0.2780	1,342
2020	7,242.00	10.00	10.00	724.20	7.97	0.2030	1,470
2021	26,554.00	10.00	10.00	2,655.40	8.75	0.1250	3,319
	38,624.00			3,862.40			6,131
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 10.00							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 380.00 TREATMENT AND DISPOSAL EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 45-S0.5							
NET SALVAGE PERCENT.. 0							
1966	79,060.20	45.00	2.22	1,755.14	11.59	0.7424	58,697
1982	5,289,358.26	45.00	2.22	117,423.75	18.11	0.5976	3,160,709
1991	164,744.00	45.00	2.22	3,657.32	22.45	0.5011	82,555
1992	105,397.00	45.00	2.22	2,339.81	22.97	0.4896	51,598
1993	1,564,790.95	45.00	2.22	34,738.36	23.50	0.4778	747,626
1998	358,366.45	45.00	2.22	7,955.74	26.30	0.4156	148,923
1999	194,925.00	45.00	2.22	4,327.34	26.89	0.4024	78,446
2000	365,592.13	45.00	2.22	8,116.15	27.49	0.3891	142,256
2005	6,018.00	45.00	2.22	133.60	30.69	0.3180	1,914
2011	761,737.70	45.00	2.22	16,910.58	34.98	0.2227	169,616
2014	2,635,000.00	45.00	2.22	58,497.00	37.34	0.1702	448,530
2016	24,150.00	45.00	2.22	536.13	39.00	0.1333	3,220
2018	16,100.00	45.00	2.22	357.42	40.73	0.0949	1,528
2019	6,360,680.00	45.00	2.22	141,207.10	41.63	0.0749	476,351
2020	192,835.45	45.00	2.22	4,280.95	42.55	0.0544	10,498
2022	364,734.70	45.00	2.22	8,097.11	44.46	0.0120	4,377
18,483,489.84				410,333.50	5,586,844		
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.22							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 382.00 OUTFALL SEWERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 70-R2.5							
NET SALVAGE PERCENT.. 0							
1965	25,662.14	70.00	1.43	366.97	23.38	0.6660	17,091
	25,662.14			366.97			17,091
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. 20-SQUARE							
NET SALVAGE PERCENT.. 0							
2019	8,298.00	20.00	5.00	414.90	16.45	0.1775	1,473
2021	1,500.00	20.00	5.00	75.00	18.45	0.0775	116
2022	2,380.00	20.00	5.00	119.00	19.45	0.0275	65
	12,178.00			608.90			1,654
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 5.00							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 390.70 COMPUTERS AND PRINTERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. 5-SQUARE							
NET SALVAGE PERCENT.. 0							
2011	21,241.00	5.00				1.0000	21,241
2013	11,865.00	5.00				1.0000	11,865
2015	6,536.00	5.00				1.0000	6,536
2016	829.00	5.00				1.0000	829
2017	5,160.00	5.00				1.0000	5,160
2018	18,779.00	5.00	20.00	3,755.80	0.45	0.9100	17,089
2019	1,054.00	5.00	20.00	210.80	1.45	0.7100	748
2020	4,235.00	5.00	20.00	847.00	2.45	0.5100	2,160
2021	15,520.00	5.00	20.00	3,104.00	3.45	0.3100	4,811
2022	1,943.00	5.00	20.00	388.60	4.45	0.1100	214

87,162.00 8,306.20 70,653

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 9.53

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 391.70 TRANSPORTATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 11-S1.5							
NET SALVAGE PERCENT.. 0							
2009	21,780.00	11.00	9.09	1,979.80	2.26	0.7946	17,305
2011	355,292.00	11.00	9.09	32,296.04	2.95	0.7318	260,010
2012	88,064.00	11.00	9.09	8,005.02	3.34	0.6964	61,324
2014	25,851.00	11.00	9.09	2,349.86	4.27	0.6118	15,816
2017	31,358.00	11.00	9.09	2,850.44	6.09	0.4464	13,997
2018	43,015.00	11.00	9.09	3,910.06	6.83	0.3791	16,307
2019	35,000.00	11.00	9.09	3,181.50	7.65	0.3046	10,659
2020	33,881.00	11.00	9.09	3,079.78	8.53	0.2246	7,608
2022	80,281.00	11.00	9.09	7,297.54	10.45	0.0500	4,014
2023	69,650.00	11.00	9.09	6,331.18	10.97	0.0027	190

784,172.00	71,281.22	407,230

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 9.09

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 395.70 POWER OPERATED EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 15-L2.5							
NET SALVAGE PERCENT.. 0							
1992	27,892.00	15.00	6.67	1,860.40	2.07	0.8620	24,043
1993	79,275.00	15.00	6.67	5,287.64	2.21	0.8527	67,595
1997	183,665.00	15.00	6.67	12,250.46	2.88	0.8080	148,401
2000	70,959.00	15.00	6.67	4,732.97	3.51	0.7660	54,355
2001	11,397.00	15.00	6.67	760.18	3.74	0.7507	8,555
2011	55,592.00	15.00	6.67	3,707.99	6.01	0.5993	33,318
2012	95,512.00	15.00	6.67	6,370.65	6.41	0.5727	54,697
2014	25,114.00	15.00	6.67	1,675.10	7.49	0.5007	12,574
2015	56,800.00	15.00	6.67	3,788.56	8.17	0.4553	25,863
2018	31,137.00	15.00	6.67	2,076.84	10.63	0.2913	9,071
2019	8,789.00	15.00	6.67	586.23	11.54	0.2307	2,027
2021	476,106.00	15.00	6.67	31,756.27	13.46	0.1027	48,882
2023	11,931.60	15.00	6.67	795.84	14.97	0.0020	24
	1,134,169.60			75,649.13			489,405
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.67							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. 15-SQUARE							
NET SALVAGE PERCENT.. 0							
2005	398,545.15	15.00				1.0000	398,545
2015	518,728.20	15.00	6.67	34,599.17	7.45	0.5033	261,091
2016	194,345.00	15.00	6.67	12,962.81	8.45	0.4367	84,865
	1,111,618.35			47,561.98			744,501
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 4.28							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 397.70 MISCELLANEOUS EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO ORIGINAL COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. 15-SQUARE							
NET SALVAGE PERCENT.. 0							
1991	3,059.83	15.00				1.0000	3,060
	3,059.83						3,060
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

SUMMARY OF REPLACEMENT COST AND ACCRUED DEPRECIATION
OF WASTEWATER SYSTEM AS OF JANUARY 19, 2023

ACCOUNT (1)	DESCRIPTION (2)	REPLACEMENT COST (3)	ACCRUED DEPRECIATION (4)
353.00	LAND AND LAND RIGHTS	592,540.92	
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	44,042,722.20	6,585,283
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	80,342,697.49	39,312,492
355.00	POWER GENERATION EQUIPMENT	4,514,851.99	2,143,912
360.10	FORCE MAINS	14,253,299.77	6,025,352
361.10	GRAVITY MAINS	244,392,637.53	151,610,020
361.12	MANHOLES	43,027,596.06	28,475,745
363.20	SERVICES TO CUSTOMERS	46,529,950.51	32,604,888
364.30	METERS	1,151,900.27	713,304
371.30	PUMPING EQUIPMENT	41,243,899.57	26,673,109
371.40	GRINDER PUMP EQUIPMENT	47,374.15	7,619
380.00	TREATMENT AND DISPOSAL EQUIPMENT	48,099,920.55	21,114,835
382.00	OUTFALL SEWERS	354,068.17	235,809
390.00	OFFICE FURNITURE AND EQUIPMENT	15,067.39	2,123
390.70	COMPUTERS AND PRINTERS	80,228.60	63,749
391.70	TRANSPORTATION EQUIPMENT	903,266.31	486,952
395.70	POWER OPERATED EQUIPMENT	1,657,374.84	839,781
396.00	COMMUNICATION EQUIPMENT	1,137,964.69	762,796
397.70	MISCELLANEOUS EQUIPMENT	8,154.53	8,155
	TOTAL COMPANY	572,395,515.54	317,665,924

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

SUMMARY OF ANALYSIS OF REPLACEMENT COST
OF WASTEWATER SYSTEM AS OF JANUARY 19, 2023

ACCOUNT	DESCRIPTION	REPLACEMENT COST
(1)	(2)	(3)
353.00	LAND AND LAND RIGHTS	592,540.92
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	44,042,722.20
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	80,342,697.49
355.00	POWER GENERATION EQUIPMENT	4,514,851.99
360.10	FORCE MAINS	14,253,299.77
361.10	GRAVITY MAINS	244,392,637.53
361.12	MANHOLES	43,027,596.06
363.20	SERVICES TO CUSTOMERS	46,529,950.51
364.30	METERS	1,151,900.27
371.30	PUMPING EQUIPMENT	41,243,899.57
371.40	GRINDER PUMP EQUIPMENT	47,374.15
380.00	TREATMENT AND DISPOSAL EQUIPMENT	48,099,920.55
382.00	OUTFALL SEWERS	354,068.17
390.00	OFFICE FURNITURE AND EQUIPMENT	15,067.39
390.70	COMPUTERS AND PRINTERS	80,228.60
391.70	TRANSPORTATION EQUIPMENT	903,266.31
395.70	POWER OPERATED EQUIPMENT	1,657,374.84
396.00	COMMUNICATION EQUIPMENT	1,137,964.69
397.70	MISCELLANEOUS EQUIPMENT	8,154.53
	TOTAL COMPANY	572,395,515.54

**BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS**

**SUMMARY OF SERVICE LIFE ESTIMATES AND CALCULATED ACCRUED
DEPRECIATION RELATED TO REPLACEMENT COST AS OF JANUARY 19, 2023**

ACCOUNT	DESCRIPTION	SURVIVOR CURVE	REPLACEMENT COST	ACCRUED DEPRECIATION
(1)	(2)	(3)	(4)	(5)
353.00	LAND AND LAND RIGHTS	NONDEPRECIABLE	592,540.92	
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	65-R3	44,042,722.20	6,585,283
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	70-R2.5	80,342,697.49	39,312,492
355.00	POWER GENERATION EQUIPMENT	30-S2	4,514,851.99	2,143,912
360.10	FORCE MAINS	70-R2.5	14,253,299.77	6,025,352
361.10	GRAVITY MAINS	65-R2.5	244,392,637.53	151,610,020
361.12	MANHOLES	60-R3	43,027,596.06	28,475,745
363.20	SERVICES TO CUSTOMERS	55-R2.5	46,529,950.51	32,604,888
364.30	METERS	30-L3	1,151,900.27	713,304
371.30	PUMPING EQUIPMENT	40-R1.5	41,243,899.57	26,673,109
371.40	GRINDER PUMP EQUIPMENT	10-R1.5	47,374.15	7,619
380.00	TREATMENT AND DISPOSAL EQUIPMENT	45-S0.5	48,099,920.55	21,114,835
382.00	OUTFALL SEWERS	70-R2.5	354,068.17	235,809
390.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	15,067.39	2,123
390.70	COMPUTERS AND PRINTERS	5-SQ	80,228.60	63,749
391.70	TRANSPORTATION EQUIPMENT	11-S1.5	903,266.31	486,952
395.70	POWER OPERATED EQUIPMENT	15-L2.5	1,657,374.84	839,781
396.00	COMMUNICATION EQUIPMENT	15-SQ	1,137,964.69	762,796
397.70	MISCELLANEOUS EQUIPMENT	15-SQ	8,154.53	8,155
TOTAL COMPANY			572,395,515.54	317,665,924

BUTLER AREA SEWER AUTHORITY

BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

SUMMARY OF REPLACEMENT COST NEW AND REPLACEMENT COST NEW LESS DEPRECIATION

OF WASTEWATER SYSTEM AS OF JANUARY 19, 2023

DESCRIPTION		REPLACEMENT
(1)		COST
		(2)
1.	REPLACEMENT COST NEW	\$ 572,395,516
2.	LESS: ACCRUED DEPRECIATION	- 317,665,924
3.	PRELIMINARY RCNLD	\$ 254,729,592
4.	CONCLUSION RCNLD	\$ 254,729,592

**BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS**

**SUMMARY OF REPLACEMENT COST AND TRANSITION FACTORS BY ACCOUNT AND VINTAGE YEAR
OF WASTEWATER SYSTEM AS OF JANUARY 19, 2023**

ACCOUNT (1)	DESCRIPTION (2)	VINTAGE YEAR (3)	BASE COST (4)	TRANSITION FACTOR (5)	FACTOR REFERENCE (6)	REPLACEMENT COST (7)
353.00	LAND AND LAND RIGHTS	1970	2.00	1.00000	(1)	2.00
353.00	LAND AND LAND RIGHTS	1972	1.00	1.00000	(1)	1.00
353.00	LAND AND LAND RIGHTS	1974	1.00	1.00000	(1)	1.00
353.00	LAND AND LAND RIGHTS	1977	94,003.50	1.00000	(1)	94,003.50
353.00	LAND AND LAND RIGHTS	1978	60,157.42	1.00000	(1)	60,157.42
353.00	LAND AND LAND RIGHTS	1979	5,822.00	1.00000	(1)	5,822.00
353.00	LAND AND LAND RIGHTS	1980	1,982.00	1.00000	(1)	1,982.00
353.00	LAND AND LAND RIGHTS	1981	11.00	1.00000	(1)	11.00
353.00	LAND AND LAND RIGHTS	1982	2.00	1.00000	(1)	2.00
353.00	LAND AND LAND RIGHTS	1983	1.00	1.00000	(1)	1.00
353.00	LAND AND LAND RIGHTS	1984	2.00	1.00000	(1)	2.00
353.00	LAND AND LAND RIGHTS	1988	37,220.00	1.00000	(1)	37,220.00
353.00	LAND AND LAND RIGHTS	1996	1.00	1.00000	(1)	1.00
353.00	LAND AND LAND RIGHTS	1999	2.00	1.00000	(1)	2.00
353.00	LAND AND LAND RIGHTS	2000	4.00	1.00000	(1)	4.00
353.00	LAND AND LAND RIGHTS	2001	15,002.00	1.00000	(1)	15,002.00
353.00	LAND AND LAND RIGHTS	2002	6.00	1.00000	(1)	6.00
353.00	LAND AND LAND RIGHTS	2003	1.00	1.00000	(1)	1.00
353.00	LAND AND LAND RIGHTS	2004	15,010.00	1.00000	(1)	15,010.00
353.00	LAND AND LAND RIGHTS	2005	2.00	1.00000	(1)	2.00
353.00	LAND AND LAND RIGHTS	2006	1.00	1.00000	(1)	1.00
353.00	LAND AND LAND RIGHTS	2008	9.00	1.00000	(1)	9.00
353.00	LAND AND LAND RIGHTS	2009	308,557.00	1.00000	(1)	308,557.00
353.00	LAND AND LAND RIGHTS	2010	27,618.00	1.00000	(1)	27,618.00
353.00	LAND AND LAND RIGHTS	2011	2.00	1.00000	(1)	2.00
353.00	LAND AND LAND RIGHTS	2013	14,620.00	1.00000	(1)	14,620.00
353.00	LAND AND LAND RIGHTS	2014	10,000.00	1.00000	(1)	10,000.00
353.00	LAND AND LAND RIGHTS	2015	2,500.00	1.00000	(1)	2,500.00
353.00	LAND AND LAND RIGHTS	2016	1.00	1.00000	(1)	1.00
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	1969	14,751.42	13.11594	(2)	193,478.77
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	1972	3,829.13	9.83696	(2)	37,666.99
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	1992	339,486.90	3.22064	(2)	1,093,365.28
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	1999	82,172.10	2.63848	(2)	216,809.77
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	2005	46,874.02	2.02009	(2)	94,689.71
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	2010	413,427.90	1.61607	(2)	668,129.02
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	2012	85,918.80	1.49834	(2)	128,735.95
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	2013	19,981,305.32	1.47394	(2)	29,451,272.50
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	2014	7,334,929.35	1.43423	(2)	10,519,985.83
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	2016	527,211.50	1.36914	(2)	721,825.12
354.30	STRUCTURES AND IMPROVEMENTS - PUMPING	2018	713,150.65	1.28551	(2)	916,763.26
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	1964	231,540.50	16.16071	(2)	3,741,859.87
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	1965	856,105.48	15.87719	(2)	13,592,551.92
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	1966	68,822.22	16.16071	(2)	1,112,216.23
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	1982	10,764,000.37	4.57071	(2)	49,199,092.60
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	1993	318,021.19	3.07823	(2)	978,942.78
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	1994	158,949.55	2.93831	(2)	467,043.32
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	1995	66,113.50	2.86392	(2)	189,344.04
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	1999	428,950.00	2.63848	(2)	1,131,777.70
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	2003	445,625.00	2.29695	(2)	1,023,580.27
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	2007	124,400.25	1.82460	(2)	226,980.29
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	2011	2,146,884.83	1.54966	(2)	3,326,936.25
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	2012	624,318.68	1.49834	(2)	935,444.38
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	2013	1,864,142.52	1.47394	(2)	2,747,636.78
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	2015	604,397.45	1.39876	(2)	845,409.11
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	2016	119,387.28	1.36914	(2)	163,457.62
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	2017	142,304.45	1.34074	(2)	190,793.37
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	2019	317,761.10	1.26397	(2)	401,639.38
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	2020	8,152.35	1.23129	(2)	10,037.93
354.40	STRUCTURES AND IMPROVEMENTS - TREATMENT	2022	57,569.43	1.00667	(2)	57,953.65
355.00	POWER GENERATION EQUIPMENT	1999	25,733.55	3.53861	(3)	91,061.10
355.00	POWER GENERATION EQUIPMENT	2000	81,604.00	3.37170	(3)	275,144.05
355.00	POWER GENERATION EQUIPMENT	2001	590,906.80	3.39089	(3)	2,003,701.05

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ACCOUNT (1)	DESCRIPTION (2)	VINTAGE YEAR (3)	BASE COST (4)	TRANSITION FACTOR (5)	FACTOR REFERENCE (6)	REPLACEMENT COST (7)
355.00	POWER GENERATION EQUIPMENT	2005	54,510.00	2.91993	(3)	159,165.64
355.00	POWER GENERATION EQUIPMENT	2009	8,853.85	2.58611	(3)	22,897.00
355.00	POWER GENERATION EQUIPMENT	2010	19,550.00	2.53835	(3)	49,624.79
355.00	POWER GENERATION EQUIPMENT	2013	760,948.96	2.13756	(3)	1,626,573.91
355.00	POWER GENERATION EQUIPMENT	2014	48,300.00	1.99442	(3)	96,330.47
355.00	POWER GENERATION EQUIPMENT	2016	82,235.00	1.75713	(3)	144,497.49
355.00	POWER GENERATION EQUIPMENT	2018	31,050.00	1.47686	(3)	45,856.49
360.10	FORCE MAINS	1964	4,600.00	13.98630	(4)	64,336.99
360.10	FORCE MAINS	1969	9,998.04	12.76250	(4)	127,599.99
360.10	FORCE MAINS	1972	35,042.92	10.41837	(4)	365,090.01
360.10	FORCE MAINS	1979	467,472.84	5.51892	(4)	2,579,944.70
360.10	FORCE MAINS	1980	1,451,956.04	5.05446	(4)	7,338,847.11
360.10	FORCE MAINS	2005	68,212.54	2.17697	(4)	148,496.81
360.10	FORCE MAINS	2010	35,546.50	1.63622	(4)	58,161.82
360.10	FORCE MAINS	2013	2,234,372.95	1.45649	(4)	3,254,343.48
360.10	FORCE MAINS	2016	71,505.28	1.35232	(4)	96,697.87
360.10	FORCE MAINS	2018	172,854.20	1.27148	(4)	219,780.99
361.10	GRAVITY MAINS	1928	283,550.85	51.05000	(4)	14,475,270.89
361.10	GRAVITY MAINS	1935	285,218.80	53.73684	(4)	15,326,757.62
361.10	GRAVITY MAINS	1945	325,249.51	39.26923	(4)	12,772,298.07
361.10	GRAVITY MAINS	1954	323,682.66	21.27083	(4)	6,884,999.91
361.10	GRAVITY MAINS	1955	972,412.62	19.26415	(4)	18,732,703.49
361.10	GRAVITY MAINS	1960	1,587,884.77	15.01471	(4)	23,841,622.80
361.10	GRAVITY MAINS	1963	306,916.46	14.18056	(4)	4,352,245.91
361.10	GRAVITY MAINS	1964	612,699.85	13.98630	(4)	8,569,404.75
361.10	GRAVITY MAINS	1965	54,857.94	13.79730	(4)	756,891.31
361.10	GRAVITY MAINS	1967	122,416.26	13.43421	(4)	1,644,565.81
361.10	GRAVITY MAINS	1970	517,711.54	12.15476	(4)	6,292,660.50
361.10	GRAVITY MAINS	1972	88,357.41	10.41837	(4)	920,539.96
361.10	GRAVITY MAINS	1973	25,454.53	10.21000	(4)	259,890.75
361.10	GRAVITY MAINS	1974	1,247.68	9.28182	(4)	11,580.74
361.10	GRAVITY MAINS	1979	6,661,252.66	5.51892	(4)	36,762,913.33
361.10	GRAVITY MAINS	1980	11,994,705.75	5.05446	(4)	60,626,705.80
361.10	GRAVITY MAINS	1985	27,013.45	4.01969	(4)	108,585.56
361.10	GRAVITY MAINS	1986	47,181.07	4.00392	(4)	188,909.30
361.10	GRAVITY MAINS	1991	65,902.10	3.32573	(4)	219,172.78
361.10	GRAVITY MAINS	1993	488,416.73	3.18069	(4)	1,553,499.94
361.10	GRAVITY MAINS	1994	266,676.09	3.12232	(4)	832,649.20
361.10	GRAVITY MAINS	1997	116,490.75	2.94236	(4)	342,758.09
361.10	GRAVITY MAINS	1999	45,037.00	2.82825	(4)	127,376.11
361.10	GRAVITY MAINS	2000	185,892.25	2.70822	(4)	503,437.63
361.10	GRAVITY MAINS	2001	23,530.20	2.61125	(4)	61,443.31
361.10	GRAVITY MAINS	2002	491,938.59	2.52723	(4)	1,243,240.84
361.10	GRAVITY MAINS	2003	59,419.00	2.50860	(4)	149,058.47
361.10	GRAVITY MAINS	2004	237,996.55	2.36343	(4)	562,487.22
361.10	GRAVITY MAINS	2005	78,705.00	2.17697	(4)	171,338.60
361.10	GRAVITY MAINS	2006	217,154.06	2.04609	(4)	444,317.22
361.10	GRAVITY MAINS	2007	5,723,811.50	1.92642	(4)	11,026,436.87
361.10	GRAVITY MAINS	2008	104,520.92	1.73639	(4)	181,489.56
361.10	GRAVITY MAINS	2009	208,400.76	1.66287	(4)	346,542.63
361.10	GRAVITY MAINS	2010	206,952.74	1.63622	(4)	338,619.79
361.10	GRAVITY MAINS	2011	15,443.00	1.57562	(4)	24,332.26
361.10	GRAVITY MAINS	2012	3,818,149.37	1.48617	(4)	5,674,425.77
361.10	GRAVITY MAINS	2013	355,256.00	1.45649	(4)	517,427.07
361.10	GRAVITY MAINS	2014	3,796,883.03	1.39672	(4)	5,303,170.42
361.10	GRAVITY MAINS	2015	17,292.00	1.37973	(4)	23,858.29
361.10	GRAVITY MAINS	2016	493,027.23	1.35232	(4)	666,729.54
361.10	GRAVITY MAINS	2018	413,059.17	1.27148	(4)	525,197.28
361.10	GRAVITY MAINS	2019	100,917.30	1.23012	(4)	124,140.44
361.10	GRAVITY MAINS	2020	177,015.00	1.18998	(4)	210,643.72
361.10	GRAVITY MAINS	2021	285,463.75	1.10738	(4)	316,115.50
361.10	GRAVITY MAINS	2022	370,884.10	1.00889	(4)	374,182.48

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ACCOUNT (1)	DESCRIPTION (2)	VINTAGE YEAR (3)	BASE COST (4)	TRANSITION FACTOR (5)	FACTOR REFERENCE (6)	REPLACEMENT COST (7)
361.12	MANHOLES	1928	38,503.43	51.05000	(4)	1,965,600.10
361.12	MANHOLES	1935	38,722.04	53.73684	(4)	2,080,800.15
361.12	MANHOLES	1945	44,187.27	39.26923	(4)	1,735,200.10
361.12	MANHOLES	1954	44,236.63	21.27083	(4)	940,949.98
361.12	MANHOLES	1955	131,934.18	19.26415	(4)	2,541,599.96
361.12	MANHOLES	1960	215,308.91	15.01471	(4)	3,232,799.96
361.12	MANHOLES	1963	35,750.00	14.18056	(4)	506,954.86
361.12	MANHOLES	1964	102,376.91	13.98630	(4)	1,431,874.32
361.12	MANHOLES	1965	8,311.71	13.79730	(4)	114,679.13
361.12	MANHOLES	1967	12,803.91	13.43421	(4)	172,010.42
361.12	MANHOLES	1970	102,548.30	12.15476	(4)	1,246,450.17
361.12	MANHOLES	1972	2,604.00	10.41837	(4)	27,129.43
361.12	MANHOLES	1973	5,537.23	10.21000	(4)	56,535.12
361.12	MANHOLES	1979	1,421,677.74	5.51892	(4)	7,846,124.18
361.12	MANHOLES	1980	2,570,294.08	5.05446	(4)	12,991,436.91
361.12	MANHOLES	1985	27,226.40	4.01969	(4)	109,441.55
361.12	MANHOLES	1986	7,170.00	4.00392	(4)	28,708.12
361.12	MANHOLES	1991	12,303.50	3.32573	(4)	40,918.15
361.12	MANHOLES	1993	98,092.05	3.18069	(4)	311,999.95
361.12	MANHOLES	1994	43,750.85	3.12232	(4)	136,604.34
361.12	MANHOLES	1997	27,370.00	2.94236	(4)	80,532.48
361.12	MANHOLES	1999	12,500.00	2.82825	(4)	35,353.19
361.12	MANHOLES	2000	38,819.55	2.70822	(4)	105,131.99
361.12	MANHOLES	2001	26,950.00	2.61125	(4)	70,373.27
361.12	MANHOLES	2002	88,777.00	2.52723	(4)	224,359.70
361.12	MANHOLES	2003	429,053.95	2.50860	(4)	1,076,324.53
361.12	MANHOLES	2004	616,604.42	2.36343	(4)	1,457,298.87
361.12	MANHOLES	2005	35,525.74	2.17697	(4)	77,338.55
361.12	MANHOLES	2006	54,048.80	2.04609	(4)	110,588.83
361.12	MANHOLES	2007	3,000.00	1.92642	(4)	5,779.25
361.12	MANHOLES	2008	78,982.00	1.73639	(4)	137,143.91
361.12	MANHOLES	2009	11,703.23	1.66287	(4)	19,460.91
361.12	MANHOLES	2010	57,235.80	1.63622	(4)	93,650.24
361.12	MANHOLES	2011	343,147.20	1.57562	(4)	540,668.66
361.12	MANHOLES	2012	469,904.94	1.48617	(4)	698,359.45
361.12	MANHOLES	2014	12,000.00	1.39672	(4)	16,760.60
361.12	MANHOLES	2015	37,496.39	1.37973	(4)	51,734.88
361.12	MANHOLES	2016	108,609.03	1.35232	(4)	146,873.93
361.12	MANHOLES	2018	54,752.50	1.27148	(4)	69,616.82
361.12	MANHOLES	2019	54,750.00	1.23012	(4)	67,349.10
361.12	MANHOLES	2020	17,752.46	1.18998	(4)	21,125.01
361.12	MANHOLES	2021	152,310.59	1.10738	(4)	168,664.98
361.12	MANHOLES	2022	233,215.96	1.00889	(4)	235,290.01
363.20	SERVICES TO CUSTOMERS	1930	60,346.72	56.92857	(5)	3,435,452.56
363.20	SERVICES TO CUSTOMERS	1935	60,695.79	61.30769	(5)	3,721,118.82
363.20	SERVICES TO CUSTOMERS	1945	69,237.41	46.88235	(5)	3,246,012.69
363.20	SERVICES TO CUSTOMERS	1954	29,940.65	22.77143	(5)	681,791.37
363.20	SERVICES TO CUSTOMERS	1955	206,871.30	22.13889	(5)	4,579,900.73
363.20	SERVICES TO CUSTOMERS	1960	337,708.91	16.60417	(5)	5,607,375.03
363.20	SERVICES TO CUSTOMERS	1965	7,993.15	13.74138	(5)	109,836.91
363.20	SERVICES TO CUSTOMERS	1967	2,146.91	12.65079	(5)	27,160.12
363.20	SERVICES TO CUSTOMERS	1969	55,000.00	11.06944	(5)	608,819.44
363.20	SERVICES TO CUSTOMERS	1970	83,821.10	10.08861	(5)	845,638.19
363.20	SERVICES TO CUSTOMERS	1972	1,040.00	8.30208	(5)	8,634.17
363.20	SERVICES TO CUSTOMERS	1973	3,471.43	7.97000	(5)	27,667.30
363.20	SERVICES TO CUSTOMERS	1979	19,569.05	4.98125	(5)	97,478.33
363.20	SERVICES TO CUSTOMERS	1980	3,957,907.21	4.55429	(5)	18,025,440.26
363.20	SERVICES TO CUSTOMERS	1985	623.80	3.60633	(5)	2,249.63
363.20	SERVICES TO CUSTOMERS	1986	3,335.00	3.52655	(5)	11,761.04
363.20	SERVICES TO CUSTOMERS	1991	5,412.00	2.93015	(5)	15,857.96
363.20	SERVICES TO CUSTOMERS	1993	59,421.17	2.72945	(5)	162,187.23
363.20	SERVICES TO CUSTOMERS	1994	76,270.62	2.65667	(5)	202,625.61

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ACCOUNT (1)	DESCRIPTION (2)	VINTAGE YEAR (3)	BASE COST (4)	TRANSITION FACTOR (5)	FACTOR REFERENCE (6)	REPLACEMENT COST (7)
363.20	SERVICES TO CUSTOMERS	1997	9,434.38	2.46749	(5)	23,279.26
363.20	SERVICES TO CUSTOMERS	1999	13,748.00	2.38623	(5)	32,805.86
363.20	SERVICES TO CUSTOMERS	2000	57,542.40	2.29023	(5)	131,785.32
363.20	SERVICES TO CUSTOMERS	2001	36,330.40	2.25141	(5)	81,794.71
363.20	SERVICES TO CUSTOMERS	2002	313,816.32	2.21389	(5)	694,754.46
363.20	SERVICES TO CUSTOMERS	2003	59,030.20	2.16576	(5)	127,845.30
363.20	SERVICES TO CUSTOMERS	2004	45,161.85	2.05412	(5)	92,768.03
363.20	SERVICES TO CUSTOMERS	2005	30,026.25	1.94390	(5)	58,368.10
363.20	SERVICES TO CUSTOMERS	2006	33,887.80	1.75551	(5)	59,490.26
363.20	SERVICES TO CUSTOMERS	2007	99,550.00	1.64330	(5)	163,590.41
363.20	SERVICES TO CUSTOMERS	2008	34,752.00	1.55058	(5)	53,885.88
363.20	SERVICES TO CUSTOMERS	2009	56,492.50	1.48417	(5)	83,844.55
363.20	SERVICES TO CUSTOMERS	2010	26,607.10	1.43604	(5)	38,208.75
363.20	SERVICES TO CUSTOMERS	2011	69,556.00	1.38368	(5)	96,243.28
363.20	SERVICES TO CUSTOMERS	2012	1,678,880.86	1.33278	(5)	2,237,571.98
363.20	SERVICES TO CUSTOMERS	2014	361,618.00	1.31086	(5)	474,028.86
363.20	SERVICES TO CUSTOMERS	2016	53,547.71	1.27724	(5)	68,393.47
363.20	SERVICES TO CUSTOMERS	2018	19,717.50	1.19311	(5)	23,525.22
363.20	SERVICES TO CUSTOMERS	2019	124,932.50	1.15843	(5)	144,725.59
363.20	SERVICES TO CUSTOMERS	2020	36,520.00	1.13050	(5)	41,285.73
363.20	SERVICES TO CUSTOMERS	2021	238,252.48	1.07268	(5)	255,568.27
363.20	SERVICES TO CUSTOMERS	2022	128,531.50	1.00504	(5)	129,179.83
364.30	METERS	1999	250,000.00	4.17172	(6)	1,042,929.29
364.30	METERS	2012	50,000.00	2.17942	(6)	108,970.98
371.30	PUMPING EQUIPMENT	1964	237,021.33	24.47945	(3)	5,802,152.28
371.30	PUMPING EQUIPMENT	1969	600.49	21.27381	(3)	12,774.71
371.30	PUMPING EQUIPMENT	1972	23,244.69	18.61458	(3)	432,690.22
371.30	PUMPING EQUIPMENT	1979	248,506.95	8.71707	(3)	2,166,253.27
371.30	PUMPING EQUIPMENT	1980	1,658,239.95	8.04955	(3)	13,348,084.64
371.30	PUMPING EQUIPMENT	1981	1,802,742.53	7.29388	(3)	13,148,983.27
371.30	PUMPING EQUIPMENT	1999	29,611.35	3.53861	(3)	104,783.13
371.30	PUMPING EQUIPMENT	2004	11,585.10	3.12413	(3)	36,193.31
371.30	PUMPING EQUIPMENT	2005	41,250.02	2.91993	(3)	120,447.36
371.30	PUMPING EQUIPMENT	2009	82,190.00	2.58611	(3)	212,552.14
371.30	PUMPING EQUIPMENT	2010	102,350.00	2.53835	(3)	259,800.36
371.30	PUMPING EQUIPMENT	2011	299,133.39	2.37633	(3)	710,839.59
371.30	PUMPING EQUIPMENT	2013	1,893,561.53	2.13756	(3)	4,047,601.02
371.30	PUMPING EQUIPMENT	2015	36,474.55	1.89101	(3)	68,973.57
371.30	PUMPING EQUIPMENT	2016	203,895.00	1.75713	(3)	358,269.78
371.30	PUMPING EQUIPMENT	2018	241,716.20	1.47686	(3)	356,980.87
371.30	PUMPING EQUIPMENT	2019	42,129.10	1.34159	(3)	56,520.05
371.40	GRINDER PUMP EQUIPMENT	2019	4,828.00	1.34159	(3)	6,477.20
371.40	GRINDER PUMP EQUIPMENT	2020	7,242.00	1.24965	(3)	9,049.97
371.40	GRINDER PUMP EQUIPMENT	2021	26,554.00	1.19933	(3)	31,846.98
380.00	TREATMENT AND DISPOSAL EQUIPMENT	1966	79,060.20	16.64063	(7)	1,315,611.14
380.00	TREATMENT AND DISPOSAL EQUIPMENT	1982	5,289,358.26	4.69163	(7)	24,815,711.66
380.00	TREATMENT AND DISPOSAL EQUIPMENT	1991	164,744.00	3.30745	(7)	544,883.11
380.00	TREATMENT AND DISPOSAL EQUIPMENT	1992	105,397.00	3.20783	(7)	338,095.80
380.00	TREATMENT AND DISPOSAL EQUIPMENT	1993	1,564,790.95	3.11404	(7)	4,872,813.92
380.00	TREATMENT AND DISPOSAL EQUIPMENT	1998	358,366.45	2.72379	(7)	976,113.22
380.00	TREATMENT AND DISPOSAL EQUIPMENT	1999	194,925.00	2.65586	(7)	517,693.58
380.00	TREATMENT AND DISPOSAL EQUIPMENT	2000	365,592.13	2.57869	(7)	942,749.68
380.00	TREATMENT AND DISPOSAL EQUIPMENT	2005	6,018.00	2.19136	(7)	13,187.59
380.00	TREATMENT AND DISPOSAL EQUIPMENT	2011	761,737.70	1.62844	(7)	1,240,444.42
380.00	TREATMENT AND DISPOSAL EQUIPMENT	2014	2,635,000.00	1.46897	(7)	3,870,724.14
380.00	TREATMENT AND DISPOSAL EQUIPMENT	2016	24,150.00	1.39947	(7)	33,797.31
380.00	TREATMENT AND DISPOSAL EQUIPMENT	2018	16,100.00	1.30996	(7)	21,090.41
380.00	TREATMENT AND DISPOSAL EQUIPMENT	2019	6,360,680.00	1.25738	(7)	7,997,785.36

**BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS**

**SUMMARY OF REPLACEMENT COST AND TRANSITION FACTORS BY ACCOUNT AND VINTAGE YEAR
OF WASTEWATER SYSTEM AS OF JANUARY 19, 2023**

ACCOUNT (1)	DESCRIPTION (2)	VINTAGE YEAR (3)	BASE COST (4)	TRANSITION FACTOR (5)	FACTOR REFERENCE (6)	REPLACEMENT COST (7)
380.00	TREATMENT AND DISPOSAL EQUIPMENT	2020	192,835.45	1.19261	(7)	229,977.33
380.00	TREATMENT AND DISPOSAL EQUIPMENT	2022	364,734.70	1.01236	(7)	369,241.88
382.00	OUTFALL SEWERS	1965	25,662.14	13.79730	(4)	354,068.17
390.00	OFFICE FURNITURE AND EQUIPMENT	2019	8,298.00	1.30245	(8)	10,807.71
390.00	OFFICE FURNITURE AND EQUIPMENT	2021	1,500.00	1.18101	(8)	1,771.51
390.00	OFFICE FURNITURE AND EQUIPMENT	2022	2,380.00	1.04545	(8)	2,488.17
390.70	COMPUTERS AND PRINTERS	2011	21,241.00	0.86154	(9)	18,300.07
390.70	COMPUTERS AND PRINTERS	2013	11,865.00	0.84027	(9)	9,969.78
390.70	COMPUTERS AND PRINTERS	2015	6,536.00	0.88123	(9)	5,759.74
390.70	COMPUTERS AND PRINTERS	2016	829.00	0.96640	(9)	801.15
390.70	COMPUTERS AND PRINTERS	2017	5,160.00	0.95064	(9)	4,905.30
390.70	COMPUTERS AND PRINTERS	2018	18,779.00	0.93842	(9)	17,622.59
390.70	COMPUTERS AND PRINTERS	2019	1,054.00	0.97796	(9)	1,030.77
390.70	COMPUTERS AND PRINTERS	2020	4,235.00	1.00934	(9)	4,274.54
390.70	COMPUTERS AND PRINTERS	2021	15,520.00	1.00896	(9)	15,659.13
390.70	COMPUTERS AND PRINTERS	2022	1,943.00	0.98071	(9)	1,905.53
391.70	TRANSPORTATION EQUIPMENT	2009	21,780.00	1.22749	(10)	26,734.73
391.70	TRANSPORTATION EQUIPMENT	2011	355,292.00	1.21909	(10)	433,134.54
391.70	TRANSPORTATION EQUIPMENT	2012	88,064.00	1.18831	(10)	104,647.46
391.70	TRANSPORTATION EQUIPMENT	2014	25,851.00	1.15492	(10)	29,855.95
391.70	TRANSPORTATION EQUIPMENT	2017	31,358.00	1.10379	(10)	34,612.51
391.70	TRANSPORTATION EQUIPMENT	2018	43,015.00	1.09526	(10)	47,112.72
391.70	TRANSPORTATION EQUIPMENT	2019	35,000.00	1.09283	(10)	38,248.92
391.70	TRANSPORTATION EQUIPMENT	2020	33,881.00	1.09628	(10)	37,142.93
391.70	TRANSPORTATION EQUIPMENT	2022	80,281.00	1.02299	(10)	82,126.55
391.70	TRANSPORTATION EQUIPMENT	2023	69,650.00	1.00000	(10)	69,650.00
395.70	POWER OPERATED EQUIPMENT	1992	27,892.00	2.17082	(11)	60,548.51
395.70	POWER OPERATED EQUIPMENT	1993	79,275.00	2.10910	(11)	167,199.23
395.70	POWER OPERATED EQUIPMENT	1997	183,665.00	1.94050	(11)	356,401.90
395.70	POWER OPERATED EQUIPMENT	2000	70,959.00	1.84706	(11)	131,065.26
395.70	POWER OPERATED EQUIPMENT	2001	11,397.00	1.83845	(11)	20,952.83
395.70	POWER OPERATED EQUIPMENT	2011	55,592.00	1.40036	(11)	77,848.81
395.70	POWER OPERATED EQUIPMENT	2012	95,512.00	1.35510	(11)	129,428.38
395.70	POWER OPERATED EQUIPMENT	2014	25,114.00	1.31615	(11)	33,053.81
395.70	POWER OPERATED EQUIPMENT	2015	56,800.00	1.30068	(11)	73,878.48
395.70	POWER OPERATED EQUIPMENT	2018	31,137.00	1.27168	(11)	39,596.43
395.70	POWER OPERATED EQUIPMENT	2019	8,789.00	1.21706	(11)	10,696.75
395.70	POWER OPERATED EQUIPMENT	2021	476,106.00	1.14423	(11)	544,772.85
395.70	POWER OPERATED EQUIPMENT	2023	11,931.60	1.00000	(11)	11,931.60
396.00	COMMUNICATION EQUIPMENT	2005	398,545.15	1.02730	(12)	409,425.00
396.00	COMMUNICATION EQUIPMENT	2015	518,728.20	1.01914	(12)	528,655.48
396.00	COMMUNICATION EQUIPMENT	2016	194,345.00	1.02850	(12)	199,884.21
397.70	MISCELLANEOUS EQUIPMENT	1991	3,059.83	2.66503	(13)	8,154.53
TOTAL COMPANY			143,771,330.24			572,395,515.54

- NOTES : (1) Not trended
- (2) Handy-Whitman Index of Public Utility Costs, 7/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 8
- (3) Handy-Whitman Index of Public Utility Costs, 7/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 9
- (4) Handy-Whitman Index of Public Utility Costs, 7/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 34
- (5) Handy-Whitman Index of Public Utility Costs, 7/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 39
- (6) Handy-Whitman Index of Public Utility Costs, 7/1/22, Cost Trends of Water Utility Construction, North Atlantic Region, Line 40
- (7) Handy-Whitman Index of Public Utility Costs, 7/1/22, 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 terminal and other 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 Construction machinery mfg, not seasonally adjusted
- (12) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Broadcast and wireless communications equipment mfg, not seasonally adjusted
- (13) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Air and gas compressor mfg, not seasonally adjusted

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 353.00 LAND AND LAND RIGHTS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
NONDEPRECIABLE							
1970	2.00						
1972	1.00						
1974	1.00						
1977	94,003.50						
1978	60,157.42						
1979	5,822.00						
1980	1,982.00						
1981	11.00						
1982	2.00						
1983	1.00						
1984	2.00						
1988	37,220.00						
1996	1.00						
1999	2.00						
2000	4.00						
2001	15,002.00						
2002	6.00						
2003	1.00						
2004	15,010.00						
2005	2.00						
2006	1.00						
2008	9.00						
2009	308,557.00						
2010	27,618.00						
2011	2.00						
2013	14,620.00						
2014	10,000.00						
2015	2,500.00						
2016	1.00						
	592,540.92						
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 354.30 STRUCTURES AND IMPROVEMENTS - PUMPING

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 65-R3							
NET SALVAGE PERCENT.. 0							
1969	193,478.77	65.00	1.54	2,979.57	19.43	0.7011	135,644
1972	37,666.99	65.00	1.54	580.07	21.37	0.6712	25,283
1992	1,093,365.28	65.00	1.54	16,837.83	36.60	0.4369	477,713
1999	216,809.77	65.00	1.54	3,338.87	42.68	0.3434	74,448
2005	94,689.71	65.00	1.54	1,458.22	48.14	0.2594	24,561
2010	668,129.02	65.00	1.54	10,289.19	52.83	0.1872	125,094
2012	128,735.95	65.00	1.54	1,982.53	54.74	0.1579	20,321
2013	29,451,272.50	65.00	1.54	453,549.60	55.69	0.1432	4,218,306
2014	10,519,985.83	65.00	1.54	162,007.78	56.66	0.1283	1,349,819
2016	721,825.12	65.00	1.54	11,116.11	58.59	0.0986	71,186
2018	916,763.26	65.00	1.54	14,118.15	60.54	0.0686	62,908
	44,042,722.20			678,257.92			6,585,283
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.54							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 354.40 STRUCTURES AND IMPROVEMENTS - TREATMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL RATE	ACCRUAL--AMOUNT	EXP.	--ACCRUED FACTOR	DEPREC.--AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 70-R2.5							
NET SALVAGE PERCENT.. 0							
1964	3,741,859.87	70.00	1.43	53,508.60	22.78	0.6746	2,524,146
1965	13,592,551.92	70.00	1.43	194,373.49	23.38	0.6660	9,052,640
1966	1,112,216.23	70.00	1.43	15,904.69	23.99	0.6573	731,049
1982	49,199,092.60	70.00	1.43	703,547.02	34.97	0.5004	24,620,702
1993	978,942.78	70.00	1.43	13,998.88	43.62	0.3769	368,924
1994	467,043.32	70.00	1.43	6,678.72	44.45	0.3650	170,471
1995	189,344.04	70.00	1.43	2,707.62	45.28	0.3531	66,865
1999	1,131,777.70	70.00	1.43	16,184.42	48.66	0.3049	345,034
2003	1,023,580.27	70.00	1.43	14,637.20	52.12	0.2554	261,453
2007	226,980.29	70.00	1.43	3,245.82	55.66	0.2049	46,499
2011	3,326,936.25	70.00	1.43	47,575.19	59.27	0.1533	509,986
2012	935,444.38	70.00	1.43	13,376.85	60.18	0.1403	131,233
2013	2,747,636.78	70.00	1.43	39,291.21	61.09	0.1273	349,747
2015	845,409.11	70.00	1.43	12,089.35	62.94	0.1009	85,268
2016	163,457.62	70.00	1.43	2,337.44	63.86	0.0877	14,337
2017	190,793.37	70.00	1.43	2,728.35	64.79	0.0744	14,201
2019	401,639.38	70.00	1.43	5,743.44	66.66	0.0477	19,162
2020	10,037.93	70.00	1.43	143.54	67.60	0.0343	344
2022	57,953.65	70.00	1.43	828.74	69.48	0.0074	431
80,342,697.49				1,148,900.57		39,312,492	
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 355.00 POWER GENERATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 30-S2							
NET SALVAGE PERCENT.. 0							
1999	91,061.10	30.00	3.33	3,032.33	10.55	0.6483	59,038
2000	275,144.05	30.00	3.33	9,162.30	11.09	0.6303	173,432
2001	2,003,701.05	30.00	3.33	66,723.24	11.65	0.6117	1,225,604
2005	159,165.64	30.00	3.33	5,300.22	14.18	0.5273	83,933
2009	22,897.00	30.00	3.33	762.47	17.18	0.4273	9,785
2010	49,624.79	30.00	3.33	1,652.51	18.01	0.3997	19,834
2013	1,626,573.91	30.00	3.33	54,164.91	20.65	0.3117	506,954
2014	96,330.47	30.00	3.33	3,207.80	21.58	0.2807	27,037
2016	144,497.49	30.00	3.33	4,811.77	23.49	0.2170	31,356
2018	45,856.49	30.00	3.33	1,527.02	25.46	0.1513	6,939
	4,514,851.99			150,344.57			2,143,912

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 3.33

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 360.10 FORCE MAINS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 70-R2.5							
NET SALVAGE PERCENT.. 0							
1964	64,336.99	70.00	1.43	920.02	22.78	0.6746	43,400
1969	127,599.99	70.00	1.43	1,824.68	25.87	0.6304	80,443
1972	365,090.01	70.00	1.43	5,220.79	27.85	0.6021	219,835
1979	2,579,944.70	70.00	1.43	36,893.21	32.75	0.5321	1,372,892
1980	7,338,847.11	70.00	1.43	104,945.51	33.48	0.5217	3,828,750
2005	148,496.81	70.00	1.43	2,123.50	53.88	0.2303	34,197
2010	58,161.82	70.00	1.43	831.71	58.36	0.1663	9,672
2013	3,254,343.48	70.00	1.43	46,537.11	61.09	0.1273	414,245
2016	96,697.87	70.00	1.43	1,382.78	63.86	0.0877	8,481
2018	219,780.99	70.00	1.43	3,142.87	65.72	0.0611	13,437
	14,253,299.77			203,822.18			6,025,352
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 361.10 GRAVITY MAINS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 65-R2.5							
NET SALVAGE PERCENT.. 0							
1928	14,475,270.89	65.00	1.54	222,919.17	6.47	0.9005	13,034,402
1935	15,326,757.62	65.00	1.54	236,032.07	8.10	0.8754	13,416,737
1945	12,772,298.07	65.00	1.54	196,693.39	10.78	0.8342	10,654,012
1954	6,884,999.91	65.00	1.54	106,029.00	13.99	0.7848	5,403,141
1955	18,732,703.49	65.00	1.54	288,483.63	14.40	0.7785	14,582,660
1960	23,841,622.80	65.00	1.54	367,160.99	16.70	0.7431	17,716,233
1963	4,352,245.91	65.00	1.54	67,024.59	18.23	0.7195	3,131,615
1964	8,569,404.75	65.00	1.54	131,968.83	18.77	0.7112	6,094,818
1965	756,891.31	65.00	1.54	11,656.13	19.32	0.7028	531,921
1967	1,644,565.81	65.00	1.54	25,326.31	20.46	0.6852	1,126,906
1970	6,292,660.50	65.00	1.54	96,906.97	22.25	0.6577	4,138,620
1972	920,539.96	65.00	1.54	14,176.32	23.50	0.6385	587,728
1973	259,890.75	65.00	1.54	4,002.32	24.14	0.6286	163,373
1974	11,580.74	65.00	1.54	178.34	24.79	0.6186	7,164
1979	36,762,913.33	65.00	1.54	566,148.87	28.19	0.5663	20,819,205
1980	60,626,705.80	65.00	1.54	933,651.27	28.89	0.5555	33,680,560
1985	108,585.56	65.00	1.54	1,672.22	32.55	0.4992	54,209
1986	188,909.30	65.00	1.54	2,909.20	33.30	0.4877	92,129
1991	219,172.78	65.00	1.54	3,375.26	37.19	0.4279	93,773
1993	1,553,499.94	65.00	1.54	23,923.90	38.79	0.4032	626,418
1994	832,649.20	65.00	1.54	12,822.80	39.60	0.3908	325,374
1997	342,758.09	65.00	1.54	5,278.47	42.07	0.3528	120,915
1999	127,376.11	65.00	1.54	1,961.59	43.75	0.3269	41,642
2000	503,437.63	65.00	1.54	7,752.94	44.60	0.3139	158,004
2001	61,443.31	65.00	1.54	946.23	45.45	0.3008	18,480
2002	1,243,240.84	65.00	1.54	19,145.91	46.31	0.2875	357,481
2003	149,058.47	65.00	1.54	2,295.50	47.18	0.2742	40,864
2004	562,487.22	65.00	1.54	8,662.30	48.05	0.2608	146,680
2005	171,338.60	65.00	1.54	2,638.61	48.93	0.2472	42,360
2006	444,317.22	65.00	1.54	6,842.49	49.81	0.2337	103,832
2007	11,026,436.87	65.00	1.54	169,807.13	50.69	0.2202	2,427,470
2008	181,489.56	65.00	1.54	2,794.94	51.58	0.2065	37,470
2009	346,542.63	65.00	1.54	5,336.76	52.48	0.1926	66,751
2010	338,619.79	65.00	1.54	5,214.74	53.38	0.1788	60,535
2011	24,332.26	65.00	1.54	374.72	54.28	0.1649	4,013
2012	5,674,425.77	65.00	1.54	87,386.16	55.19	0.1509	856,384
2013	517,427.07	65.00	1.54	7,968.38	56.11	0.1368	70,769
2014	5,303,170.42	65.00	1.54	81,668.82	57.02	0.1228	651,070
2015	23,858.29	65.00	1.54	367.42	57.94	0.1086	2,591
2016	666,729.54	65.00	1.54	10,267.63	58.87	0.0943	62,879
2018	525,197.28	65.00	1.54	8,088.04	60.72	0.0659	34,584

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 361.10 GRAVITY MAINS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 65-R2.5							
NET SALVAGE PERCENT.. 0							
2019	124,140.44	65.00	1.54	1,911.76	61.66	0.0514	6,378
2020	210,643.72	65.00	1.54	3,243.91	62.60	0.0369	7,777
2021	316,115.50	65.00	1.54	4,868.18	63.54	0.0225	7,100
2022	374,182.48	65.00	1.54	5,762.41	64.48	0.0080	2,993
	244,392,637.53			3,763,646.62			151,610,020
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.54							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 361.12 MANHOLES

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 60-R3							
NET SALVAGE PERCENT.. 0							
1928	1,965,600.10	60.00	1.67	32,825.52	1.62	0.9730	1,912,529
1935	2,080,800.15	60.00	1.67	34,749.36	3.38	0.9437	1,963,589
1945	1,735,200.10	60.00	1.67	28,977.84	5.96	0.9007	1,562,843
1954	940,949.98	60.00	1.67	15,713.86	8.65	0.8558	805,293
1955	2,541,599.96	60.00	1.67	42,444.72	9.00	0.8500	2,160,360
1960	3,232,799.96	60.00	1.67	53,987.76	10.96	0.8173	2,642,264
1963	506,954.86	60.00	1.67	8,466.15	12.32	0.7947	402,862
1964	1,431,874.32	60.00	1.67	23,912.30	12.80	0.7867	1,126,413
1965	114,679.13	60.00	1.67	1,915.14	13.30	0.7783	89,258
1967	172,010.42	60.00	1.67	2,872.57	14.35	0.7608	130,871
1970	1,246,450.17	60.00	1.67	20,815.72	16.04	0.7327	913,237
1972	27,129.43	60.00	1.67	453.06	17.24	0.7127	19,334
1973	56,535.12	60.00	1.67	944.14	17.86	0.7023	39,706
1979	7,846,124.18	60.00	1.67	131,030.27	21.86	0.6357	4,987,546
1980	12,991,436.91	60.00	1.67	216,957.00	22.56	0.6240	8,106,657
1985	109,441.55	60.00	1.67	1,827.67	26.26	0.5623	61,542
1986	28,708.12	60.00	1.67	479.43	27.02	0.5497	15,780
1991	40,918.15	60.00	1.67	683.33	31.00	0.4833	19,777
1993	311,999.95	60.00	1.67	5,210.40	32.65	0.4558	142,219
1994	136,604.34	60.00	1.67	2,281.29	33.49	0.4418	60,356
1997	80,532.48	60.00	1.67	1,344.89	36.05	0.3992	32,146
1999	35,353.19	60.00	1.67	590.40	37.79	0.3702	13,087
2000	105,131.99	60.00	1.67	1,755.70	38.67	0.3555	37,374
2001	70,373.27	60.00	1.67	1,175.23	39.56	0.3407	23,974
2002	224,359.70	60.00	1.67	3,746.81	40.46	0.3257	73,067
2003	1,076,324.53	60.00	1.67	17,974.62	41.36	0.3107	334,382
2004	1,457,298.87	60.00	1.67	24,336.89	42.27	0.2955	430,632
2005	77,338.55	60.00	1.67	1,291.55	43.19	0.2802	21,668
2006	110,588.83	60.00	1.67	1,846.83	44.11	0.2648	29,287
2007	5,779.25	60.00	1.67	96.51	45.04	0.2493	1,441
2008	137,143.91	60.00	1.67	2,290.30	45.97	0.2338	32,068
2009	19,460.91	60.00	1.67	325.00	46.91	0.2182	4,246
2010	93,650.24	60.00	1.67	1,563.96	47.85	0.2025	18,964
2011	540,668.66	60.00	1.67	9,029.17	48.80	0.1867	100,927
2012	698,359.45	60.00	1.67	11,662.60	49.75	0.1708	119,301
2014	16,760.60	60.00	1.67	279.90	51.67	0.1388	2,327
2015	51,734.88	60.00	1.67	863.97	52.63	0.1228	6,355
2016	146,873.93	60.00	1.67	2,452.79	53.60	0.1067	15,667
2018	69,616.82	60.00	1.67	1,162.60	55.54	0.0743	5,175
2019	67,349.10	60.00	1.67	1,124.73	56.51	0.0582	3,918

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 361.12 MANHOLES

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 60-R3							
NET SALVAGE PERCENT.. 0							
2020	21,125.01	60.00	1.67	352.79	57.49	0.0418	884
2021	168,664.98	60.00	1.67	2,816.71	58.47	0.0255	4,301
2022	235,290.01	60.00	1.67	3,929.34	59.46	0.0090	2,118
	43,027,596.06			718,560.82			28,475,745
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.67							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 363.20 SERVICES TO CUSTOMERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 55-R2.5							
NET SALVAGE PERCENT.. 0							
1930	3,435,452.56	55.00	1.82	62,525.24	2.53	0.9540	3,277,422
1935	3,721,118.82	55.00	1.82	67,724.36	3.81	0.9307	3,463,357
1945	3,246,012.69	55.00	1.82	59,077.43	6.04	0.8902	2,889,536
1954	681,791.37	55.00	1.82	12,408.60	8.27	0.8496	579,277
1955	4,579,900.73	55.00	1.82	83,354.19	8.56	0.8444	3,867,085
1960	5,607,375.03	55.00	1.82	102,054.23	10.12	0.8160	4,575,618
1965	109,836.91	55.00	1.82	1,999.03	12.02	0.7815	85,832
1967	27,160.12	55.00	1.82	494.31	12.89	0.7656	20,795
1969	608,819.44	55.00	1.82	11,080.51	13.82	0.7487	455,841
1970	845,638.19	55.00	1.82	15,390.62	14.31	0.7398	625,620
1972	8,634.17	55.00	1.82	157.14	15.34	0.7211	6,226
1973	27,667.30	55.00	1.82	503.54	15.88	0.7113	19,679
1979	97,478.33	55.00	1.82	1,774.11	19.39	0.6475	63,112
1980	18,025,440.26	55.00	1.82	328,063.01	20.03	0.6358	11,460,935
1985	2,249.63	55.00	1.82	40.94	23.36	0.5753	1,294
1986	11,761.04	55.00	1.82	214.05	24.06	0.5626	6,616
1991	15,857.96	55.00	1.82	288.61	27.71	0.4962	7,868
1993	162,187.23	55.00	1.82	2,951.81	29.23	0.4686	75,993
1994	202,625.61	55.00	1.82	3,687.79	30.01	0.4544	92,065
1997	23,279.26	55.00	1.82	423.68	32.38	0.4113	9,574
1999	32,805.86	55.00	1.82	597.07	34.00	0.3818	12,526
2000	131,785.32	55.00	1.82	2,398.49	34.83	0.3667	48,330
2001	81,794.71	55.00	1.82	1,488.66	35.66	0.3516	28,762
2002	694,754.46	55.00	1.82	12,644.53	36.49	0.3366	233,820
2003	127,845.30	55.00	1.82	2,326.78	37.34	0.3211	41,050
2004	92,768.03	55.00	1.82	1,688.38	38.19	0.3056	28,354
2005	58,368.10	55.00	1.82	1,062.30	39.05	0.2900	16,927
2006	59,490.26	55.00	1.82	1,082.72	39.91	0.2744	16,322
2007	163,590.41	55.00	1.82	2,977.35	40.79	0.2584	42,265
2008	53,885.88	55.00	1.82	980.72	41.66	0.2426	13,070
2009	83,844.55	55.00	1.82	1,525.97	42.55	0.2264	18,979
2010	38,208.75	55.00	1.82	695.40	43.44	0.2102	8,031
2011	96,243.28	55.00	1.82	1,751.63	44.33	0.1940	18,671
2012	2,237,571.98	55.00	1.82	40,723.81	45.23	0.1776	397,482
2014	474,028.86	55.00	1.82	8,627.33	47.05	0.1446	68,521
2016	68,393.47	55.00	1.82	1,244.76	48.88	0.1113	7,610
2018	23,525.22	55.00	1.82	428.16	50.73	0.0776	1,826
2019	144,725.59	55.00	1.82	2,634.01	51.66	0.0607	8,789

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 363.20 SERVICES TO CUSTOMERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 55-R2.5							
NET SALVAGE PERCENT.. 0							
2020	41,285.73	55.00	1.82	751.40	52.60	0.0436	1,802
2021	255,568.27	55.00	1.82	4,651.34	53.54	0.0266	6,785
2022	129,179.83	55.00	1.82	2,351.07	54.48	0.0095	1,221
	46,529,950.51			846,845.08			32,604,888
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.82							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 364.30 METERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 30-L3							
NET SALVAGE PERCENT.. 0							
1999	1,042,929.29	30.00	3.33	34,729.55	10.56	0.6480	675,818
2012	108,970.98	30.00	3.33	3,628.73	19.68	0.3440	37,486
	1,151,900.27			38,358.28			713,304
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 3.33							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 371.30 PUMPING EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 40-R1.5							
NET SALVAGE PERCENT.. 0							
1964	5,802,152.28	40.00	2.50	145,053.81	6.09	0.8478	4,918,775
1969	12,774.71	40.00	2.50	319.37	7.61	0.8098	10,344
1972	432,690.22	40.00	2.50	10,817.26	8.60	0.7850	339,662
1979	2,166,253.27	40.00	2.50	54,156.33	11.27	0.7183	1,555,911
1980	13,348,084.64	40.00	2.50	333,702.12	11.70	0.7075	9,443,770
1981	13,148,983.27	40.00	2.50	328,724.58	12.15	0.6963	9,154,980
1999	104,783.13	40.00	2.50	2,619.58	22.27	0.4433	46,445
2004	36,193.31	40.00	2.50	904.83	25.71	0.3573	12,930
2005	120,447.36	40.00	2.50	3,011.18	26.43	0.3393	40,862
2009	212,552.14	40.00	2.50	5,313.80	29.35	0.2663	56,592
2010	259,800.36	40.00	2.50	6,495.01	30.10	0.2475	64,301
2011	710,839.59	40.00	2.50	17,770.99	30.85	0.2288	162,605
2013	4,047,601.02	40.00	2.50	101,190.03	32.38	0.1905	771,068
2015	68,973.57	40.00	2.50	1,724.34	33.93	0.1518	10,467
2016	358,269.78	40.00	2.50	8,956.74	34.72	0.1320	47,292
2018	356,980.87	40.00	2.50	8,924.52	36.30	0.0925	33,021
2019	56,520.05	40.00	2.50	1,413.00	37.11	0.0723	4,084

41,243,899.57 1,031,097.49 26,673,109

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.50

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 371.40 GRINDER PUMP EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 10-R1.5							
NET SALVAGE PERCENT.. 0							
2019	6,477.20	10.00	10.00	647.72	7.22	0.2780	1,801
2020	9,049.97	10.00	10.00	905.00	7.97	0.2030	1,837
2021	31,846.98	10.00	10.00	3,184.70	8.75	0.1250	3,981
	47,374.15			4,737.42			7,619
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 10.00							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 380.00 TREATMENT AND DISPOSAL EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 45-S0.5							
NET SALVAGE PERCENT.. 0							
1966	1,315,611.14	45.00	2.22	29,206.57	11.59	0.7424	976,762
1982	24,815,711.66	45.00	2.22	550,908.80	18.11	0.5976	14,828,877
1991	544,883.11	45.00	2.22	12,096.41	22.45	0.5011	273,046
1992	338,095.80	45.00	2.22	7,505.73	22.97	0.4896	165,518
1993	4,872,813.92	45.00	2.22	108,176.47	23.50	0.4778	2,328,133
1998	976,113.22	45.00	2.22	21,669.71	26.30	0.4156	405,634
1999	517,693.58	45.00	2.22	11,492.80	26.89	0.4024	208,341
2000	942,749.68	45.00	2.22	20,929.04	27.49	0.3891	366,833
2005	13,187.59	45.00	2.22	292.76	30.69	0.3180	4,194
2011	1,240,444.42	45.00	2.22	27,537.87	34.98	0.2227	276,210
2014	3,870,724.14	45.00	2.22	85,930.08	37.34	0.1702	658,875
2016	33,797.31	45.00	2.22	750.30	39.00	0.1333	4,506
2018	21,090.41	45.00	2.22	468.21	40.73	0.0949	2,001
2019	7,997,785.36	45.00	2.22	177,550.83	41.63	0.0749	598,954
2020	229,977.33	45.00	2.22	5,105.50	42.55	0.0544	12,520
2022	369,241.88	45.00	2.22	8,197.17	44.46	0.0120	4,431
48,099,920.55				1,067,818.25		21,114,835	
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.22							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 382.00 OUTFALL SEWERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 70-R2.5							
NET SALVAGE PERCENT.. 0							
1965	354,068.17	70.00	1.43	5,063.17	23.38	0.6660	235,809
	354,068.17			5,063.17			235,809
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.43							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 390.00 OFFICE FURNITURE AND EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. 20-SQUARE							
NET SALVAGE PERCENT.. 0							
2019	10,807.71	20.00	5.00	540.39	16.45	0.1775	1,918
2021	1,771.51	20.00	5.00	88.58	18.45	0.0775	137
2022	2,488.17	20.00	5.00	124.41	19.45	0.0275	68
	15,067.39			753.38			2,123
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 5.00							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 390.70 COMPUTERS AND PRINTERS

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. 5-SQUARE							
NET SALVAGE PERCENT.. 0							
2011	18,300.07	5.00				1.0000	18,300
2013	9,969.78	5.00				1.0000	9,970
2015	5,759.74	5.00				1.0000	5,760
2016	801.15	5.00				1.0000	801
2017	4,905.30	5.00				1.0000	4,905
2018	17,622.59	5.00	20.00	3,524.52	0.45	0.9100	16,037
2019	1,030.77	5.00	20.00	206.15	1.45	0.7100	732
2020	4,274.54	5.00	20.00	854.91	2.45	0.5100	2,180
2021	15,659.13	5.00	20.00	3,131.83	3.45	0.3100	4,854
2022	1,905.53	5.00	20.00	381.11	4.45	0.1100	210

80,228.60 8,098.52 63,749

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 10.09

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 391.70 TRANSPORTATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 11-S1.5							
NET SALVAGE PERCENT.. 0							
2009	26,734.73	11.00	9.09	2,430.19	2.26	0.7946	21,242
2011	433,134.54	11.00	9.09	39,371.93	2.95	0.7318	316,977
2012	104,647.46	11.00	9.09	9,512.45	3.34	0.6964	72,872
2014	29,855.95	11.00	9.09	2,713.91	4.27	0.6118	18,266
2017	34,612.51	11.00	9.09	3,146.28	6.09	0.4464	15,450
2018	47,112.72	11.00	9.09	4,282.55	6.83	0.3791	17,860
2019	38,248.92	11.00	9.09	3,476.83	7.65	0.3046	11,649
2020	37,142.93	11.00	9.09	3,376.29	8.53	0.2246	8,340
2022	82,126.55	11.00	9.09	7,465.30	10.45	0.0500	4,106
2023	69,650.00	11.00	9.09	6,331.18	10.97	0.0027	190
	903,266.31			82,106.91			486,952
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 9.09							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 395.70 POWER OPERATED EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. IOWA 15-L2.5							
NET SALVAGE PERCENT.. 0							
1992	60,548.51	15.00	6.67	4,038.59	2.07	0.8620	52,193
1993	167,199.23	15.00	6.67	11,152.19	2.21	0.8527	142,566
1997	356,401.90	15.00	6.67	23,772.01	2.88	0.8080	287,973
2000	131,065.26	15.00	6.67	8,742.05	3.51	0.7660	100,396
2001	20,952.83	15.00	6.67	1,397.55	3.74	0.7507	15,729
2011	77,848.81	15.00	6.67	5,192.52	6.01	0.5993	46,657
2012	129,428.38	15.00	6.67	8,632.87	6.41	0.5727	74,120
2014	33,053.81	15.00	6.67	2,204.69	7.49	0.5007	16,549
2015	73,878.48	15.00	6.67	4,927.69	8.17	0.4553	33,639
2018	39,596.43	15.00	6.67	2,641.08	10.63	0.2913	11,536
2019	10,696.75	15.00	6.67	713.47	11.54	0.2307	2,467
2021	544,772.85	15.00	6.67	36,336.35	13.46	0.1027	55,932
2023	11,931.60	15.00	6.67	795.84	14.97	0.0020	24
	1,657,374.84			110,546.90			839,781
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 6.67							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 396.00 COMMUNICATION EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. 15-SQUARE							
NET SALVAGE PERCENT.. 0							
2005	409,425.00	15.00				1.0000	409,425
2015	528,655.48	15.00	6.67	35,261.32	7.45	0.5033	266,088
2016	199,884.21	15.00	6.67	13,332.28	8.45	0.4367	87,283
	1,137,964.69			48,593.60			762,796
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 4.27							

BUTLER AREA SEWER AUTHORITY
BUTLER AREA SEWER AUTHORITY WASTEWATER SYSTEM ASSETS

ACCOUNT 397.70 MISCELLANEOUS EQUIPMENT

CALCULATED ANNUAL AND ACCRUED DEPRECIATION
RELATED TO REPLACEMENT COST AT JANUARY 19, 2023

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL RATE (4)	ACCRUAL-- AMOUNT (5)	EXP. (6)	--ACCRUED FACTOR (7)	DEPREC.-- AMOUNT (8)
SURVIVOR CURVE.. 15-SQUARE							
NET SALVAGE PERCENT.. 0							
1991	8,154.53	15.00				1.0000	8,155
	8,154.53						8,155
COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00							

Income Approach
Butler Area Sewer Authority
Pro Forma Operations
Earnings Capitalization Model

	<u>Actual</u>			<u>Actual</u>
				<u>Year 0</u>
	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
1. <u>OPERATING REVENUES (1)</u>				
2. Charges for services	10,373,400	10,692,751	10,890,555	12,160,150
3. Other operating revenue	203,150	144,273	260,786	98,350
4. Tap Fees	0	0	0	0
5. Total Operating Revenues	10,576,550	10,837,024	11,151,341	12,258,500
6. Rate Increase				
7. <u>OPERATING EXPENSES (1)</u>				
8. Operating & Maintenance Expenses	6,478,400	6,140,125	6,250,851	6,193,970
9. Operating Expenses Before Depreciation	6,478,400	6,140,125	6,250,851	6,193,970
10. Depreciation (2)	3,695,178	3,685,849	3,685,849	3,734,344
11. Total Operating Expenses	10,173,578	9,825,974	9,936,700	9,928,314
12. Operating Income	402,972	1,011,050	1,214,641	2,330,186
13. Revenues (3)	10,576,550	10,837,024	11,151,341	12,258,500
14. EBITDA (4)	4,098,150	4,696,899	4,900,490	6,064,530
15. EBIT (5)	402,972	1,011,050	1,214,641	2,330,186
16. EBIT	402,972	1,011,050	1,214,641	2,330,186
17. (-) Income Taxes	0	0	0	0
18. Debt Free Net Income	402,972	1,011,050	1,214,641	2,330,186
19. (+) Depreciation & Amortization	3,695,178	3,685,849	3,685,849	3,734,344
20. (-) Capital Expenditures (6)	296,183	958,729	1,675,045	1,468,260
21. (-) Changes in Working Capital (7)	(5,288)	(5,419)	(5,576)	(6,129)
22. Debt Free Net Cash Flow	\$3,807,255	\$3,743,589	\$3,231,021	\$4,602,399

		2023	Pro Forma 2023 (11)
		3.97% Capitalization Rate Model (No Growth)	3.97% Capitalization Rate Model (No Growth)
23.	Debt Free Net Cash Flow (10)	\$4,602,399	\$4,971,105
24.	Capitalization Factor: (8)	3.97%	3.97%
25.	Indicated Value (line 23 ÷ line 24)	\$115,929,452	\$125,216,751
		3.87% Capitalization Rate Model (0.10% Growth)	3.87% Capitalization Rate Model (0.10% Growth)
26.	Debt Free Net Cash Flow (10)	\$4,602,399	\$4,971,105
27.	Capitalization Factor: (9)	3.87%	3.87%
28.	Indicated Value (line 26 ÷ line 27)	\$118,925,045	\$128,452,326
See last page of this EXHIBIT for notes and assumptions.			

Income Approach
Butler Area Sewer Authority
Pro Forma Operations
Earnings Capitalization Model

Notes: (1) Assumptions:

Charges for services - Pre-2023 are actual. 2023 results are based on 2023 budget. Post-2023 based on customer growth (EDU) and average revenue per customer.

OPERATING EXPENSES - increase at 2.5% annually after 2023 unless noted elsewhere. Assumed economies of scale are shown on lines below.

- (2) Depreciation - Pre-2023 based on actual depreciation. Post-2022 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-2024 based on financials/budget. Post-2023 years based on APA's CAPX and are estimates at 1.77% of prior year-end GROSS Property, plant and equipment.
- (7) Changes in Working Capital - based on water industry -0.05% of revenues.
- (8) Discount rate is the the current MUNI discount rate. Capitalization rate (K) at 1/19/2023 equal to discount rate, where capitalization rate = $K - g$.
- (9) Discount rate is the current MUNI discount rate. Capitalization rate (K) at 1/19/2023 adjusted for stated growth (g) where capitalization rate = $K - g$.
- (10) Final year shown, line 22.
- (11) Debt Free Net Cash Flow adjusted for average 2020-2023 CAPX 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

Butler Area Sewer Authority

Pro Forma and Estimated Operations With MUNI Ownership

DCF With Capitalization of Terminal Value Model and

DCF With EBIT & EBITDA Terminal Value Model

	Actual			Actual	Estimated	Estimated
	Year 0			Year 1	Year 2	Year 2
	2020	2021	2022	2023	2024	2025
1. <u>OPERATING REVENUES (1)</u>						
2. Charges for services	10,373,400	10,692,751	10,890,555	12,160,150	12,219,714	12,975,319
3. Other operating revenue	203,150	144,273	260,786	98,350	98,350	98,350
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	0	0	696,330	1,227,899
6. Total Operating Revenues	10,576,550	10,837,024	11,151,341	12,258,500	13,014,394	14,301,568
7. Rate Increase					6%	9%
8. <u>OPERATING EXPENSES (1)</u>						
9. Operating & Maintenance Expenses	6,478,400	6,140,125	6,250,851	6,193,970	6,348,819	6,507,540
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	(599,880)	(614,877)	(630,249)
12. LESS: EOS - Professional Services	0	0	0	(114,560)	(117,424)	(120,360)
13. LESS: EOS - Eliminated Expenses	0	0	0	0	0	0
14. ADD: Additional O&M	0	0	0	0	0	0
15. Operating Expenses Before Depreciation	6,478,400	6,140,125	6,250,851	5,479,530	5,616,518	5,756,931
16. Depreciation (2)	3,695,178	3,685,849	3,685,849	3,734,344	2,672,521	2,813,317
17. Total Operating Expenses	10,173,578	9,825,974	9,936,700	9,213,874	8,289,039	8,570,248
18. Operating Income	402,972	1,011,050	1,214,641	3,044,626	4,725,355	5,731,320
19. Revenues (3)	10,576,550	10,837,024	11,151,341	12,258,500	13,014,394	14,301,568
20. EBITDA (4)	4,098,150	4,696,899	4,900,490	6,778,970	7,397,876	8,544,637
21. EBIT (5)	402,972	1,011,050	1,214,641	3,044,626	4,725,355	5,731,320
22. EBIT	402,972	1,011,050	1,214,641	3,044,626	4,725,355	5,731,320
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	402,972	1,011,050	1,214,641	3,044,626	4,725,355	5,731,320
25. (+) Depreciation & Amortization	3,695,178	3,685,849	3,685,849	3,734,344	2,672,521	2,813,317
26. (-) Capital Expenditures (6)	296,183	958,729	1,675,045	1,468,260	7,525,000	11,475,000
27. (-) Changes in Working Capital (7)	(5,288)	(5,419)	(5,576)	(6,129)	(6,507)	(7,151)
28. Debt Free Net Cash Flow	\$3,807,255	\$3,743,589	\$3,231,021	\$5,316,839	(\$120,617)	(\$2,923,212)
29. PV Time Period (mid-year)				(0.5)	0.5	1.5
30. Present Value Factor: 3.97% (8)					1	2
31. Present Value Debt Free Net Cash Flow					0.9807	0.9433
32. Present Value Factor: 3.77% (9)						
33. Present Value Debt Free Net Cash Flow					(\$118,289)	(\$2,757,466)
					1	2
					0.9817	0.9460
					(\$118,410)	(\$2,765,359)

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority

Pro Forma and Estimated Operations With MUNI Ownership

DCF With Capitalization of Terminal Value Model and

DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 3 2026	Estimated Year 4 2027	Estimated Year 5 2028	Estimated Year 6 2029	Estimated Year 7 2030	Estimated Year 8 2031
1. <u>OPERATING REVENUES (1)</u>						
2. Charges for services	13,637,293	13,767,698	15,519,187	15,571,952	16,093,643	16,148,362
3. Other operating revenue	98,350	98,350	98,350	98,350	98,350	98,350
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	1,652,124	0	467,159	0	0
6. Total Operating Revenues	13,735,643	15,518,172	15,617,537	16,137,461	16,191,993	16,246,712
7. Rate Increase		12%		3%		
8. <u>OPERATING EXPENSES (1)</u>						
9. Operating & Maintenance Expenses	6,670,228	6,836,984	7,007,909	7,183,106	7,362,684	7,546,751
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(646,005)	(662,155)	(678,709)	(695,677)	(713,069)	(730,896)
12. LESS: EOS - Professional Services	(123,369)	(126,453)	(129,614)	(132,854)	(136,176)	(139,580)
13. LESS: EOS - Eliminated Expenses	0	0	0	0	0	0
14. ADD: Additional O&M	0	0	0	0	0	0
15. Operating Expenses Before Depreciation	5,900,854	6,048,376	6,199,585	6,354,575	6,513,439	6,676,275
16. Depreciation (2)	3,028,819	3,297,288	3,474,385	3,526,769	3,579,944	3,633,919
17. Total Operating Expenses	8,929,674	9,345,664	9,673,970	9,881,344	10,093,383	10,310,194
18. Operating Income	4,805,969	6,172,508	5,943,567	6,256,117	6,098,610	5,936,518
19. Revenues (3)	13,735,643	15,518,172	15,617,537	16,137,461	16,191,993	16,246,712
20. EBITDA (4)	7,834,789	9,469,796	9,417,952	9,782,886	9,678,554	9,570,437
21. EBIT (5)	4,805,969	6,172,508	5,943,567	6,256,117	6,098,610	5,936,518
22. EBIT	4,805,969	6,172,508	5,943,567	6,256,117	6,098,610	5,936,518
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	4,805,969	6,172,508	5,943,567	6,256,117	6,098,610	5,936,518
25. (+) Depreciation & Amortization	3,028,819	3,297,288	3,474,385	3,526,769	3,579,944	3,633,919
26. (-) Capital Expenditures (6)	17,625,000	17,200,000	3,383,889	3,434,909	3,486,698	3,539,268
27. (-) Changes in Working Capital (7)	(6,868)	(7,759)	(7,809)	(8,069)	(8,096)	(8,123)
28. Debt Free Net Cash Flow	(\$9,783,344)	(\$7,722,445)	\$6,041,872	\$6,356,046	\$6,199,952	\$6,039,292
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: 3.97% (8)	0.9073	0.8726	0.8393	0.8072	0.7764	0.7468
31. Present Value Debt Free Net Cash Flow	(\$8,876,428)	(\$6,738,605)	\$5,070,943	\$5,130,600	\$4,813,643	\$4,510,143
	3	4	5	6	7	8
32. Present Value Factor: 3.77% (9)	0.9116	0.8785	0.8466	0.8158	0.7862	0.7576
33. Present Value Debt Free Net Cash Flow	(\$8,918,496)	(\$6,784,168)	\$5,115,048	\$5,185,262	\$4,874,402	\$4,575,368

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority

Pro Forma and Estimated Operations With MUNI Ownership

DCF With Capitalization of Terminal Value Model and

DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 9 2032	Estimated Year 10 2033	Estimated Year 11 2034	Estimated Year 12 2035	Estimated Year 13 2036	Estimated Year 14 2037
1. OPERATING REVENUES (1)						
2. Charges for services	16,203,266	16,746,108	16,803,045	16,860,175	17,425,025	17,484,270
3. Other operating revenue	98,350	98,350	98,350	98,350	98,350	98,350
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	486,098	0	0	505,805	0	349,685
6. Total Operating Revenues	16,787,714	16,844,458	16,901,395	17,464,330	17,523,375	17,932,305
7. Rate Increase	3%			3%		2%
8. OPERATING EXPENSES (1)						
9. Operating & Maintenance Expenses	7,735,420	7,928,805	8,127,025	8,330,201	8,538,456	8,751,917
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(749,168)	(767,897)	(787,095)	(806,772)	(826,941)	(847,615)
12. LESS: EOS - Professional Services	(143,070)	(146,646)	(150,313)	(154,070)	(157,922)	(161,870)
13. LESS: EOS - Eliminated Expenses	0	0	0	0	0	0
14. ADD: Additional O&M	0	0	0	0	0	0
15. Operating Expenses Before Depreciation	6,843,182	7,014,262	7,189,618	7,369,359	7,553,593	7,742,432
16. Depreciation (2)	3,688,709	3,744,325	3,800,779	3,858,084	3,916,254	3,975,300
17. Total Operating Expenses	10,531,891	10,758,587	10,990,397	11,227,443	11,469,847	11,717,733
18. Operating Income	6,255,823	6,085,871	5,910,998	6,236,887	6,053,528	6,214,572
19. Revenues (3)	16,787,714	16,844,458	16,901,395	17,464,330	17,523,375	17,932,305
20. EBITDA (4)	9,944,532	9,830,196	9,711,777	10,094,971	9,969,782	10,189,873
21. EBIT (5)	6,255,823	6,085,871	5,910,998	6,236,887	6,053,528	6,214,572
22. EBIT	6,255,823	6,085,871	5,910,998	6,236,887	6,053,528	6,214,572
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	6,255,823	6,085,871	5,910,998	6,236,887	6,053,528	6,214,572
25. (+) Depreciation & Amortization	3,688,709	3,744,325	3,800,779	3,858,084	3,916,254	3,975,300
26. (-) Capital Expenditures (6)	3,592,631	3,646,798	3,701,782	3,757,595	3,814,249	3,871,757
27. (-) Changes in Working Capital (7)	(8,394)	(8,422)	(8,451)	(8,732)	(8,762)	(8,966)
28. Debt Free Net Cash Flow	\$6,360,295	\$6,191,821	\$6,018,445	\$6,346,109	\$6,164,295	\$6,327,082
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: 3.97% (8)	0.7183	0.6908	0.6645	0.6391	0.6147	0.5912
31. Present Value Debt Free Net Cash Flow	\$4,568,600	\$4,277,310	\$3,999,257	\$4,055,798	\$3,789,192	\$3,740,571
	9	10	11	12	13	14
32. Present Value Factor: 3.77% (9)	0.7301	0.7036	0.6780	0.6534	0.6297	0.6068
33. Present Value Debt Free Net Cash Flow	\$4,643,651	\$4,356,565	\$4,080,506	\$4,146,547	\$3,881,657	\$3,839,273

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority

Pro Forma and Estimated Operations With MUNI Ownership

DCF With Capitalization of Terminal Value Model and

DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 15 2038	Estimated Year 16 2039	Estimated Year 17 2040	Estimated Year 18 2041	Estimated Year 19 2042	Estimated Year 20 2043
1. <u>OPERATING REVENUES (1)</u>						
2. Charges for services	17,894,591	17,955,432	18,196,646	18,258,514	18,723,646	18,787,306
3. Other operating revenue	98,350	98,350	98,350	98,350	98,350	98,350
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	179,554	0	401,687	0	450,895
6. Total Operating Revenues	17,992,941	18,233,336	18,294,996	18,758,551	18,821,996	19,336,551
7. Rate Increase		1%		2%		2%
8. <u>OPERATING EXPENSES (1)</u>						
9. Operating & Maintenance Expenses	8,970,715	9,194,983	9,424,858	9,660,479	9,901,991	10,149,541
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(868,805)	(890,525)	(912,788)	(935,608)	(958,998)	(982,973)
12. LESS: EOS - Professional Services	(165,917)	(170,065)	(174,317)	(178,675)	(183,141)	(187,720)
13. LESS: EOS - Eliminated Expenses	0	0	0	0	0	0
14. ADD: Additional O&M	0	0	0	0	0	0
15. Operating Expenses Before Depreciation	7,935,993	8,134,393	8,337,753	8,546,197	8,759,852	8,978,848
16. Depreciation (2)	4,035,238	4,096,078	4,157,835	4,220,525	4,284,159	4,348,752
17. Total Operating Expenses	11,971,231	12,230,471	12,495,588	12,766,721	13,044,011	13,327,600
18. Operating Income	6,021,710	6,002,865	5,799,408	5,991,830	5,777,985	6,008,951
19. Revenues (3)	17,992,941	18,233,336	18,294,996	18,758,551	18,821,996	19,336,551
20. EBITDA (4)	10,056,948	10,098,943	9,957,243	10,212,354	10,062,144	10,357,703
21. EBIT (5)	6,021,710	6,002,865	5,799,408	5,991,830	5,777,985	6,008,951
22. EBIT	6,021,710	6,002,865	5,799,408	5,991,830	5,777,985	6,008,951
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	6,021,710	6,002,865	5,799,408	5,991,830	5,777,985	6,008,951
25. (+) Depreciation & Amortization	4,035,238	4,096,078	4,157,835	4,220,525	4,284,159	4,348,752
26. (-) Capital Expenditures (6)	3,930,133	3,989,389	4,049,538	4,110,594	4,172,571	4,235,482
27. (-) Changes in Working Capital (7)	(8,996)	(9,117)	(9,147)	(9,379)	(9,411)	(9,668)
28. Debt Free Net Cash Flow	\$6,135,811	\$6,118,671	\$5,916,853	\$6,111,140	\$5,898,984	\$6,131,889
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: 3.97% (8)	0.5686	0.5469	0.5260	0.5060	0.4866	0.4681
31. Present Value Debt Free Net Cash Flow	\$3,488,822	\$3,346,301	\$3,112,264	\$3,092,237	\$2,870,446	\$2,870,337
	15	16	17	18	19	20
32. Present Value Factor: 3.77% (9)	0.5847	0.5635	0.5430	0.5233	0.5043	0.4860
33. Present Value Debt Free Net Cash Flow	\$3,587,609	\$3,447,871	\$3,212,851	\$3,197,959	\$2,974,858	\$2,980,098

See last page of this EXHIBIT for notes and assumptions.

Income Approach
Butler Area Sewer Authority
Pro Forma and Estimated 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 @ 3.97%	
	Terminal Value
Projected Debt Free Net Cash Flow (10)	\$6,131,889
Divided by Capitalization Factor (8)	3.97%
20th Year Terminal Value	154,455,651
20th Year Present Value Factor (11)	0.4681
Present Value of Terminal Value	72,300,690
Present Value Debt Free Net	
Cash Flow for 20 Years	44,245,675
Indicated Value	<u>\$116,546,365</u>

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 3.97%			
		Multiples (13)	Terminal Value
Projected EBIT	\$6,008,951	30.2	\$181,470,320
Projected EBITDA	10,357,703	18.8	194,724,817
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			190,350,833
20th Year Present Value Factor (11)			0.4681
Present Value of Terminal Value			89,103,225
Present Value Debt Free Net			
Cash Flow for 20 Years			44,245,675
Indicated Value			<u>\$133,348,900</u>

DCF With Capitalization of Terminal Value Model @ 3.77%	
	Terminal Value
Projected Debt Free Net Cash Flow (10)	\$6,131,889
Divided by Capitalization Factor (9)	3.77%
20th Year Terminal Value	162,649,584
20th Year Present Value Factor (12)	0.4681
Present Value of Terminal Value	76,136,270
Present Value Debt Free Net	
Cash Flow for 20 Years	44,245,675
Indicated Value	<u>\$120,381,946</u>

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 3.77%			
		Multiples (13)	Terminal Value
Projected EBIT	\$6,008,951	30.2	\$181,470,320
Projected EBITDA	10,357,703	18.8	194,724,817
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			190,350,833
20th Year Present Value Factor (12)			0.4681
Present Value of Terminal Value			89,103,225
Present Value Debt Free Net			
Cash Flow for 20 Years			44,245,675
Indicated Value			<u>\$133,348,900</u>

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority
 Pro Forma and Estimated 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-2023 are actual. 2023 results are based on 2023 budget and 2024 based on APA increase. Post-2024 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 2023 with shown rate increases.

OPERATING EXPENSES - increase at 2.5% annually after 2023 unless noted elsewhere. Assumed economies of scale are shown on lines below.

Wages & Benefits - Post-2023 assumed 15% savings due to economies of scale. Increase at 3.0% afterwards.

Professional Services - Post-2023 assumed 50% savings due to economies of scale. Increase at 3.0% afterwards.

No Additional O&M.

- (2) Depreciation - Pre-2023 based on actual depreciation. Post-2022 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-2024 based on financials/budget. Post-2023 years based on APA's CAPX and are estimates at 1.77% of prior year-end GROSS Property, plant and equipment.
- (7) Changes in Working Capital - based on water industry -0.05% of revenues.
- (8) Discount rate is the the current MUNI discount rate. Capitalization rate (K) at 1/19/2023 equal to discount rate, where capitalization rate = $K - g$.
- (9) Discount rate is the current MUNI discount rate. Capitalization rate (K) at 1/19/2023 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 18.

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

Butler Area Sewer Authority

Pro Forma and Estimated Operations With IOU Ownership

DCF With Capitalization of Terminal Value Model and

DCF With EBIT & EBITDA Terminal Value Model

	Actual			Actual	Estimated	Estimated
	Year 0			Year 1	Year 2	Year 2
	2020	2021	2022	2023	2024	2025
1. <u>OPERATING REVENUES (1)</u>						
2. Charges for services	10,373,400	10,692,751	10,890,555	12,160,150	12,219,714	12,975,319
3. Other operating revenue	203,150	144,273	260,786	98,350	98,350	98,350
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	0	0	696,330	9,823,191
6. Total Operating Revenues	10,576,550	10,837,024	11,151,341	12,258,500	13,014,394	22,896,860
7. Rate Increase					6%	76%
8. <u>OPERATING EXPENSES (1)</u>						
9. Operating & Maintenance Expenses	6,478,400	6,140,125	6,250,851	6,193,970	6,348,819	6,507,540
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	(599,880)	(614,877)	(630,249)
12. LESS: EOS - Professional Services	0	0	0	(114,560)	(117,424)	(120,360)
13. LESS: EOS - Eliminated Expenses	0	0	0	0	0	0
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: PURTA & Reg Assessment	0	0	0	0	200,268	211,518
16. Operating Expenses Before Depreciation	6,478,400	6,140,125	6,250,851	5,479,530	5,816,786	5,968,449
17. Depreciation (2)	3,695,178	3,685,849	3,685,849	3,734,344	2,672,521	2,813,317
18. Total Operating Expenses	10,173,578	9,825,974	9,936,700	9,213,874	8,489,307	8,781,766
19. Operating Income	402,972	1,011,050	1,214,641	3,044,626	4,525,087	14,115,094
20. Revenues (3)	10,576,550	10,837,024	11,151,341	12,258,500	13,014,394	22,896,860
21. EBITDA (4)	4,098,150	4,696,899	4,900,490	6,778,970	7,197,608	16,928,411
22. EBIT (5)	402,972	1,011,050	1,214,641	3,044,626	4,525,087	14,115,094
23. EBIT	402,972	1,011,050	1,214,641	3,044,626	4,525,087	14,115,094
24. (-) Income Taxes	0	0	0	879,593	1,307,298	4,077,851
25. Debt Free Net Income	402,972	1,011,050	1,214,641	2,165,033	3,217,789	10,037,243
26. (+) Depreciation & Amortization	3,695,178	3,685,849	3,685,849	3,734,344	2,672,521	2,813,317
27. (-) Capital Expenditures (6)	296,183	958,729	1,675,045	1,468,260	7,525,000	11,475,000
28. (-) Changes in Working Capital (7)	(5,288)	(5,419)	(5,576)	(6,129)	(6,507)	(11,448)
29. Debt Free Net Cash Flow	\$3,807,255	\$3,743,589	\$3,231,021	\$4,437,246	(\$1,628,183)	\$1,387,008
30. PV Time Period (mid-year)				(0.5)	0.5	1.5
31. Present Value Factor: 7.85% (8)					0.9629	0.8928
32. Present Value Debt Free Net Cash Flow					(\$1,567,777)	\$1,238,321
33. Present Value Factor: 9.75% (9)					0.9545	0.8697
34. Present Value Debt Free Net Cash Flow					(\$1,554,101)	\$1,206,281
35. Present Value Factor: 7.65% (8)					0.9638	0.8953
36. Present Value Debt Free Net Cash Flow					(\$1,569,243)	\$1,241,788
37. Present Value Factor: 9.55% (9)					0.9554	0.8721
38. Present Value Debt Free Net Cash Flow					(\$1,555,566)	\$1,209,610

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority

Pro Forma and Estimated Operations With IOU Ownership

DCF With Capitalization of Terminal Value Model and

DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 3 2026	Estimated Year 4 2027	Estimated Year 5 2028	Estimated Year 6 2029	Estimated Year 7 2030	Estimated Year 8 2031
1. <u>OPERATING REVENUES (1)</u>						
2. Charges for services	22,315,570	22,528,961	24,941,550	25,026,351	25,613,670	25,700,756
3. Other operating revenue	98,350	98,350	98,350	98,350	98,350	98,350
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	2,252,896	0	500,527	0	257,008
6. Total Operating Revenues	22,413,920	24,880,207	25,039,900	25,625,228	25,712,020	26,056,114
7. Rate Increase		10%		2%		1%
8. <u>OPERATING EXPENSES (1)</u>						
9. Operating & Maintenance Expenses	6,670,228	6,836,984	7,007,909	7,183,106	7,362,684	7,546,751
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(646,005)	(662,155)	(678,709)	(695,677)	(713,069)	(730,896)
12. LESS: EOS - Professional Services	(123,369)	(126,453)	(129,614)	(132,854)	(136,176)	(139,580)
13. LESS: EOS - Eliminated Expenses	0	0	0	0	0	0
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: PURTA & Reg Assessment	280,152	298,306	332,247	333,027	336,226	336,586
16. Operating Expenses Before Depreciation	6,181,006	6,346,682	6,531,832	6,687,602	6,849,665	7,012,861
17. Depreciation (2)	3,028,819	3,297,288	3,474,385	3,526,769	3,579,944	3,633,919
18. Total Operating Expenses	9,209,826	9,643,970	10,006,217	10,214,371	10,429,609	10,646,780
19. Operating Income	13,204,094	15,236,237	15,033,683	15,410,857	15,282,411	15,409,334
20. Revenues (3)	22,413,920	24,880,207	25,039,900	25,625,228	25,712,020	26,056,114
21. EBITDA (4)	16,232,914	18,533,525	18,508,068	18,937,626	18,862,355	19,043,253
22. EBIT (5)	13,204,094	15,236,237	15,033,683	15,410,857	15,282,411	15,409,334
23. EBIT	13,204,094	15,236,237	15,033,683	15,410,857	15,282,411	15,409,334
24. (-) Income Taxes	3,814,663	4,401,749	4,343,231	4,452,197	4,415,089	4,451,757
25. Debt Free Net Income	9,389,431	10,834,488	10,690,452	10,958,660	10,867,322	10,957,577
26. (+) Depreciation & Amortization	3,028,819	3,297,288	3,474,385	3,526,769	3,579,944	3,633,919
27. (-) Capital Expenditures (6)	17,625,000	17,200,000	3,383,889	3,434,909	3,486,698	3,539,268
28. (-) Changes in Working Capital (7)	(11,207)	(12,440)	(12,520)	(12,813)	(12,856)	(13,028)
29. Debt Free Net Cash Flow	(\$5,195,543)	(\$3,055,784)	\$10,793,468	\$11,063,333	\$10,973,424	\$11,065,256
30. PV Time Period (mid-year)	2.5	3.5	4.5	5.5	6.5	7.5
31. Present Value Factor: 7.85% (8)	0.8278	0.7676	0.7117	0.6599	0.6119	0.5673
32. Present Value Debt Free Net Cash Flow	(\$4,300,870)	(\$2,345,620)	\$7,681,711	\$7,300,693	\$6,714,638	\$6,277,320
	3	4	5	6	7	8
33. Present Value Factor: 9.75% (9)	0.7925	0.7221	0.6579	0.5995	0.5462	0.4977
34. Present Value Debt Free Net Cash Flow	(\$4,117,467)	(\$2,206,581)	\$7,101,022	\$6,632,468	\$5,993,684	\$5,507,178
	3	4	5	6	7	8
35. Present Value Factor: 7.65% (8)	0.8317	0.7726	0.7177	0.6667	0.6193	0.5753
36. Present Value Debt Free Net Cash Flow	(\$4,321,133)	(\$2,360,899)	\$7,746,472	\$7,375,924	\$6,795,841	\$6,365,842
	3	4	5	6	7	8
37. Present Value Factor: 9.55% (9)	0.7961	0.7267	0.6634	0.6055	0.5527	0.5046
38. Present Value Debt Free Net Cash Flow	(\$4,136,171)	(\$2,220,638)	\$7,160,386	\$6,698,848	\$6,065,011	\$5,583,528

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority

Pro Forma and Estimated Operations With IOU Ownership

DCF With Capitalization of Terminal Value Model and

DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 9 2032	Estimated Year 10 2033	Estimated Year 11 2034	Estimated Year 12 2035	Estimated Year 13 2036	Estimated Year 14 2037
1. OPERATING REVENUES (1)						
2. Charges for services	26,046,020	26,134,576	26,538,115	26,628,345	27,039,508	27,131,442
3. Other operating revenue	98,350	98,350	98,350	98,350	98,350	98,350
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	313,615	0	319,540	0	325,577
6. Total Operating Revenues	26,144,370	26,546,541	26,636,465	27,046,235	27,137,858	27,555,369
7. Rate Increase		1%		1%		1%
8. OPERATING EXPENSES (1)						
9. Operating & Maintenance Expenses	7,735,420	7,928,805	8,127,025	8,330,201	8,538,456	8,751,917
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(749,168)	(767,897)	(787,095)	(806,772)	(826,941)	(847,615)
12. LESS: EOS - Professional Services	(143,070)	(146,646)	(150,313)	(154,070)	(157,922)	(161,870)
13. LESS: EOS - Eliminated Expenses	0	0	0	0	0	0
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: PURTA & Reg Assessment	338,408	338,773	340,922	341,291	343,479	343,854
16. Operating Expenses Before Depreciation	7,181,590	7,353,035	7,530,540	7,710,650	7,897,072	8,086,286
17. Depreciation (2)	3,688,709	3,744,325	3,800,779	3,858,084	3,916,254	3,975,300
18. Total Operating Expenses	10,870,299	11,097,360	11,331,319	11,568,734	11,813,326	12,061,587
19. Operating Income	15,274,071	15,449,181	15,305,146	15,477,501	15,324,532	15,493,782
20. Revenues (3)	26,144,370	26,546,541	26,636,465	27,046,235	27,137,858	27,555,369
21. EBITDA (4)	18,962,780	19,193,506	19,105,925	19,335,585	19,240,786	19,469,083
22. EBIT (5)	15,274,071	15,449,181	15,305,146	15,477,501	15,324,532	15,493,782
23. EBIT	15,274,071	15,449,181	15,305,146	15,477,501	15,324,532	15,493,782
24. (-) Income Taxes	4,412,679	4,463,268	4,421,657	4,471,450	4,427,257	4,476,154
25. Debt Free Net Income	10,861,392	10,985,913	10,883,489	11,006,051	10,897,275	11,017,628
26. (+) Depreciation & Amortization	3,688,709	3,744,325	3,800,779	3,858,084	3,916,254	3,975,300
27. (-) Capital Expenditures (6)	3,592,631	3,646,798	3,701,782	3,757,595	3,814,249	3,871,757
28. (-) Changes in Working Capital (7)	(13,072)	(13,273)	(13,318)	(13,523)	(13,569)	(13,778)
29. Debt Free Net Cash Flow	\$10,970,542	\$11,096,714	\$10,995,804	\$11,120,063	\$11,012,849	\$11,134,949
30. PV Time Period (mid-year)	8.5	9.5	10.5	11.5	12.5	13.5
31. Present Value Factor: 7.85% (8)	0.5261	0.4878	0.4523	0.4193	0.3888	0.3605
32. Present Value Debt Free Net Cash Flow	\$5,771,602	\$5,412,977	\$4,973,402	\$4,662,643	\$4,281,796	\$4,014,149
	9	10	11	12	13	14
33. Present Value Factor: 9.75% (9)	0.4535	0.4132	0.3765	0.3430	0.3126	0.2848
34. Present Value Debt Free Net Cash Flow	\$4,975,141	\$4,585,162	\$4,139,920	\$3,814,182	\$3,442,617	\$3,171,234
	9	10	11	12	13	14
35. Present Value Factor: 7.65% (8)	0.5344	0.4964	0.4612	0.4284	0.3979	0.3697
36. Present Value Debt Free Net Cash Flow	\$5,862,658	\$5,508,409	\$5,071,265	\$4,763,835	\$4,382,013	\$4,116,591
	9	10	11	12	13	14
37. Present Value Factor: 9.55% (9)	0.4606	0.4204	0.3838	0.3503	0.3198	0.2919
38. Present Value Debt Free Net Cash Flow	\$5,053,032	\$4,665,058	\$4,220,190	\$3,895,358	\$3,521,909	\$3,250,292

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority

Pro Forma and Estimated Operations With IOU Ownership

DCF With Capitalization of Terminal Value Model and

DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 15 2038	Estimated Year 16 2039	Estimated Year 17 2040	Estimated Year 18 2041	Estimated Year 19 2042	Estimated Year 20 2043
1. OPERATING REVENUES (1)						
2. Charges for services	27,550,373	27,644,045	28,070,891	28,166,332	28,657,767	28,755,203
3. Other operating revenue	98,350	98,350	98,350	98,350	98,350	98,350
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	331,729	0	394,329	0	431,328
6. Total Operating Revenues	27,648,723	28,074,124	28,169,241	28,659,011	28,756,117	29,284,881
7. Rate Increase		1%		1%		1%
8. OPERATING EXPENSES (1)						
9. Operating & Maintenance Expenses	8,970,715	9,194,983	9,424,858	9,660,479	9,901,991	10,149,541
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(868,805)	(890,525)	(912,788)	(935,608)	(958,998)	(982,973)
12. LESS: EOS - Professional Services	(165,917)	(170,065)	(174,317)	(178,675)	(183,141)	(187,720)
13. LESS: EOS - Eliminated Expenses	0	0	0	0	0	0
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: PURTA & Reg Assessment	346,082	346,463	348,731	349,117	351,746	352,138
16. Operating Expenses Before Depreciation	8,282,075	8,480,856	8,686,484	8,895,314	9,111,598	9,330,986
17. Depreciation (2)	4,035,238	4,096,078	4,157,835	4,220,525	4,284,159	4,348,752
18. Total Operating Expenses	12,317,313	12,576,934	12,844,319	13,115,838	13,395,757	13,679,738
19. Operating Income	15,331,410	15,497,190	15,324,922	15,543,173	15,360,360	15,605,143
20. Revenues (3)	27,648,723	28,074,124	28,169,241	28,659,011	28,756,117	29,284,881
21. EBITDA (4)	19,366,648	19,593,268	19,482,757	19,763,697	19,644,519	19,953,895
22. EBIT (5)	15,331,410	15,497,190	15,324,922	15,543,173	15,360,360	15,605,143
23. EBIT	15,331,410	15,497,190	15,324,922	15,543,173	15,360,360	15,605,143
24. (-) Income Taxes	4,429,244	4,477,138	4,427,370	4,490,423	4,437,608	4,508,326
25. Debt Free Net Income	10,902,166	11,020,052	10,897,552	11,052,750	10,922,752	11,096,817
26. (+) Depreciation & Amortization	4,035,238	4,096,078	4,157,835	4,220,525	4,284,159	4,348,752
27. (-) Capital Expenditures (6)	3,930,133	3,989,389	4,049,538	4,110,594	4,172,571	4,235,482
28. (-) Changes in Working Capital (7)	(13,824)	(14,037)	(14,085)	(14,330)	(14,378)	(14,642)
29. Debt Free Net Cash Flow	\$11,021,095	\$11,140,778	\$11,019,934	\$11,177,010	\$11,048,718	\$11,224,729
30. PV Time Period (mid-year)	14.5	15.5	16.5	17.5	18.5	19.5
31. Present Value Factor: 7.85% (8)	0.3343	0.3099	0.2874	0.2665	0.2471	0.2291
32. Present Value Debt Free Net Cash Flow	\$3,684,352	\$3,452,527	\$3,167,129	\$2,978,673	\$2,730,138	\$2,571,586
	15	16	17	18	19	20
33. Present Value Factor: 9.75% (9)	0.2595	0.2364	0.2154	0.1963	0.1789	0.1630
34. Present Value Debt Free Net Cash Flow	\$2,859,974	\$2,633,680	\$2,373,694	\$2,194,047	\$1,976,616	\$1,829,631
	15	16	17	18	19	20
35. Present Value Factor: 7.65% (8)	0.3434	0.3190	0.2963	0.2753	0.2557	0.2375
36. Present Value Debt Free Net Cash Flow	\$3,784,644	\$3,553,908	\$3,265,206	\$3,077,031	\$2,825,157	\$2,665,873
	15	16	17	18	19	20
37. Present Value Factor: 9.55% (9)	0.2665	0.2432	0.2220	0.2027	0.1850	0.1689
38. Present Value Debt Free Net Cash Flow	\$2,937,122	\$2,709,437	\$2,446,425	\$2,265,580	\$2,044,013	\$1,895,857

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority

Pro Forma and Estimated 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 @ 7.85%	
	<u>Terminal Value</u>
Projected Debt Free Net Cash Flow (10)	\$11,224,729
Divided by Capitalization Factor (8)	<u>7.85%</u>
20th Year Terminal Value	142,990,185
20th Year Present Value Factor (11)	<u>0.2291</u>
Present Value of Terminal Value	32,759,051
Present Value Debt Free Net	
Cash Flow for 20 Years	<u>68,699,390</u>
Indicated Value	<u>\$101,458,441</u>

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 7.85%			
		<u>Multiples (13)</u>	<u>Terminal Value</u>
Projected EBIT	\$15,605,143	30.2	\$471,275,318
Projected EBITDA	19,953,895	18.8	<u>375,133,227</u>
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			406,860,117
20th Year Present Value Factor (11)			<u>0.2291</u>
Present Value of Terminal Value			93,211,653
Present Value Debt Free Net			
Cash Flow for 20 Years			<u>68,699,390</u>
Indicated Value			<u>\$161,911,042</u>

DCF With Capitalization of Terminal Value Model @ 9.75%	
	<u>Terminal Value</u>
Projected Debt Free Net Cash Flow (10)	\$11,224,729
Divided by Capitalization Factor (9)	<u>9.75%</u>
20th Year Terminal Value	115,125,431
20th Year Present Value Factor (12)	<u>0.1630</u>
Present Value of Terminal Value	18,765,445
Present Value Debt Free Net	
Cash Flow for 20 Years	<u>56,558,380</u>
Indicated Value	<u>\$75,323,825</u>

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 9.75%			
		<u>Multiples (13)</u>	<u>Terminal Value</u>
Projected EBIT	\$15,605,143	30.2	\$471,275,318
Projected EBITDA	19,953,895	18.8	<u>375,133,227</u>
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			406,860,117
20th Year Present Value Factor (12)			<u>0.1630</u>
Present Value of Terminal Value			66,318,199
Present Value Debt Free Net			
Cash Flow for 20 Years			<u>56,558,380</u>
Indicated Value			<u>\$122,876,579</u>

DCF With Capitalization of Terminal Value Model @ 7.65%	
	<u>Terminal Value</u>
Projected Debt Free Net Cash Flow (10)	\$11,224,729
Divided by Capitalization Factor (8)	<u>7.65%</u>
20th Year Terminal Value	146,728,490
20th Year Present Value Factor (11)	<u>0.2291</u>
Present Value of Terminal Value	33,615,497
Present Value Debt Free Net	
Cash Flow for 20 Years	<u>68,699,390</u>
Indicated Value	<u>\$102,314,887</u>

DCF With Capitalization of Terminal Value Model @ 9.55%	
	<u>Terminal Value</u>
Projected Debt Free Net Cash Flow (10)	\$11,224,729
Divided by Capitalization Factor (9)	<u>9.55%</u>
20th Year Terminal Value	117,536,435
20th Year Present Value Factor (12)	<u>0.1630</u>
Present Value of Terminal Value	19,158,439
Present Value Debt Free Net	
Cash Flow for 20 Years	<u>56,558,380</u>
Indicated Value	<u>\$75,716,819</u>

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority
 Pro Forma and Estimated 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-2023 are actual. 2023 results are based on 2023 budget and 2024 based on APA increase. Post-2024 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 2023 with shown rate increases.

OPERATING EXPENSES - increase at 2.5% annually after 2023 unless noted elsewhere. Assumed economies of scale are shown on lines below.

Wages & Benefits - Post-2023 assumed 15% savings due to economies of scale. Increase at 3.0% afterwards.

Professional Services - Post-2023 assumed 50% savings due to economies of scale. Increase at 3.0% afterwards.

No Additional O&M.

PURTA & Reg Assessment - 2024 assumed due to IOU purchase at the end of 2023.

- (2) Depreciation - Pre-2023 based on actual depreciation. Post-2022 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-2024 based on financials/budget. Post-2023 years based on APA's CAPX and are estimates at 1.77% of prior year-end GROSS Property, plant and equipment.
- (7) Changes in Working Capital - based on water industry -0.05% of revenues.
- (8) Discount rate is the current lower end of the IOU discount rate. Capitalization rate (K) at 1/19/2023 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 1/19/2023 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 18.

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

Butler Area Sewer Authority

Pro Forma and Estimated Operations With MUNI Ownership

DCF With Capitalization of Terminal Value Model and

DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 3 2026	Estimated Year 4 2027	Estimated Year 5 2028	Estimated Year 6 2029	Estimated Year 7 2030	Estimated Year 8 2031
1. OPERATING REVENUES (1)						
2. Charges for services	18,596,309	18,774,134	18,895,114	21,803,260	21,877,392	21,951,775
3. Other operating revenue	98,350	98,350	98,350	98,350	98,350	98,350
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	2,834,267	0	0	2,195,177
6. Total Operating Revenues	18,694,659	18,872,484	21,827,731	21,901,610	21,975,742	24,245,302
7. Rate Increase			15%			10%
8. OPERATING EXPENSES (1)						
9. Operating & Maintenance Expenses	6,670,228	6,836,984	7,007,909	7,183,106	7,362,684	7,546,751
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(646,005)	(662,155)	(678,709)	(695,677)	(713,069)	(730,896)
12. LESS: EOS - Professional Services	(123,369)	(126,453)	(129,614)	(132,854)	(136,176)	(139,580)
13. LESS: EOS - Eliminated Expenses	0	0	0	0	0	0
14. ADD: Additional O&M	0	0	0	0	0	0
15. Operating Expenses Before Depreciation	5,900,854	6,048,376	6,199,585	6,354,575	6,513,439	6,676,275
16. Depreciation (2)	4,732,705	4,989,307	5,168,577	5,243,060	5,318,617	5,395,264
17. Total Operating Expenses	10,633,559	11,037,683	11,368,162	11,597,635	11,832,057	12,071,539
18. Operating Income	8,061,100	7,834,801	10,459,569	10,303,975	10,143,685	12,173,763
19. Revenues (3)	18,694,659	18,872,484	21,827,731	21,901,610	21,975,742	24,245,302
20. EBITDA (4)	12,793,805	12,824,108	15,628,146	15,547,035	15,462,303	17,569,027
21. EBIT (5)	8,061,100	7,834,801	10,459,569	10,303,975	10,143,685	12,173,763
22. EBIT	8,061,100	7,834,801	10,459,569	10,303,975	10,143,685	12,173,763
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	8,061,100	7,834,801	10,459,569	10,303,975	10,143,685	12,173,763
25. (+) Depreciation & Amortization	4,732,705	4,989,307	5,168,577	5,243,060	5,318,617	5,395,264
26. (-) Capital Expenditures (6)	17,625,000	17,200,000	5,035,326	5,107,889	5,181,499	5,256,169
27. (-) Changes in Working Capital (7)	(9,347)	(9,436)	(10,914)	(10,951)	(10,988)	(12,123)
28. Debt Free Net Cash Flow	(\$4,821,848)	(\$4,366,456)	\$10,603,734	\$10,450,097	\$10,291,792	\$12,324,980
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: 3.97% (8)	0.9073	0.8726	0.8393	0.8072	0.7764	0.7468
31. Present Value Debt Free Net Cash Flow	(\$4,374,863)	(\$3,810,169)	\$8,899,714	\$8,435,318	\$7,990,547	\$9,204,295
	3	4	5	6	7	8
32. Present Value Factor: 3.77% (9)	0.9116	0.8785	0.8466	0.8158	0.7862	0.7576
33. Present Value Debt Free Net Cash Flow	(\$4,395,597)	(\$3,835,931)	\$8,977,121	\$8,525,189	\$8,091,407	\$9,337,405

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority

Pro Forma and Estimated Operations With MUNI Ownership

DCF With Capitalization of Terminal Value Model and

DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 9 2032	Estimated Year 10 2033	Estimated Year 11 2034	Estimated Year 12 2035	Estimated Year 13 2036	Estimated Year 14 2037
1. <u>OPERATING REVENUES (1)</u>						
2. Charges for services	24,229,052	24,311,431	24,394,089	24,966,570	25,051,456	25,136,631
3. Other operating revenue	98,350	98,350	98,350	98,350	98,350	98,350
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	487,882	0	0	502,733
6. Total Operating Revenues	24,327,402	24,409,781	24,980,321	25,064,920	25,149,806	25,737,714
7. Rate Increase			2%			2%
8. <u>OPERATING EXPENSES (1)</u>						
9. Operating & Maintenance Expenses	7,735,420	7,928,805	8,127,025	8,330,201	8,538,456	8,751,917
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(749,168)	(767,897)	(787,095)	(806,772)	(826,941)	(847,615)
12. LESS: EOS - Professional Services	(143,070)	(146,646)	(150,313)	(154,070)	(157,922)	(161,870)
13. LESS: EOS - Eliminated Expenses	0	0	0	0	0	0
14. ADD: Additional O&M	0	0	0	0	0	0
15. Operating Expenses Before Depreciation	6,843,182	7,014,262	7,189,618	7,369,359	7,553,593	7,742,432
16. Depreciation (2)	5,473,014	5,551,885	5,631,893	5,713,053	5,795,384	5,878,900
17. Total Operating Expenses	12,316,196	12,566,147	12,821,511	13,082,412	13,348,977	13,621,332
18. Operating Income	12,011,206	11,843,634	12,158,810	11,982,508	11,800,829	12,116,382
19. Revenues (3)	24,327,402	24,409,781	24,980,321	25,064,920	25,149,806	25,737,714
20. EBITDA (4)	17,484,220	17,395,519	17,790,703	17,695,561	17,596,213	17,995,282
21. EBIT (5)	12,011,206	11,843,634	12,158,810	11,982,508	11,800,829	12,116,382
22. EBIT	12,011,206	11,843,634	12,158,810	11,982,508	11,800,829	12,116,382
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	12,011,206	11,843,634	12,158,810	11,982,508	11,800,829	12,116,382
25. (+) Depreciation & Amortization	5,473,014	5,551,885	5,631,893	5,713,053	5,795,384	5,878,900
26. (-) Capital Expenditures (6)	5,331,915	5,408,752	5,486,697	5,565,766	5,645,973	5,727,337
27. (-) Changes in Working Capital (7)	(12,164)	(12,205)	(12,490)	(12,532)	(12,575)	(12,869)
28. Debt Free Net Cash Flow	\$12,164,469	\$11,998,972	\$12,316,496	\$12,142,328	\$11,962,815	\$12,280,813
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: 3.97% (8)	0.7183	0.6908	0.6645	0.6391	0.6147	0.5912
31. Present Value Debt Free Net Cash Flow	\$8,737,738	\$8,288,890	\$8,184,312	\$7,760,162	\$7,353,543	\$7,260,417
	9	10	11	12	13	14
32. Present Value Factor: 3.77% (9)	0.7301	0.7036	0.6780	0.6534	0.6297	0.6068
33. Present Value Debt Free Net Cash Flow	\$8,881,279	\$8,442,477	\$8,350,584	\$7,933,797	\$7,532,985	\$7,451,998

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority

Pro Forma and Estimated Operations With MUNI Ownership

DCF With Capitalization of Terminal Value Model and

DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 15 2038	Estimated Year 16 2039	Estimated Year 17 2040	Estimated Year 18 2041	Estimated Year 19 2042	Estimated Year 20 2043
1. OPERATING REVENUES (1)						
2. Charges for services	25,726,538	25,814,008	26,290,302	26,379,689	26,892,890	26,984,326
3. Other operating revenue	98,350	98,350	98,350	98,350	98,350	98,350
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	387,210	0	422,075	0	458,734
6. Total Operating Revenues	25,824,888	26,299,568	26,388,652	26,900,114	26,991,240	27,541,410
7. Rate Increase		1%		2%		2%
8. OPERATING EXPENSES (1)						
9. Operating & Maintenance Expenses	8,970,715	9,194,983	9,424,858	9,660,479	9,901,991	10,149,541
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(868,805)	(890,525)	(912,788)	(935,608)	(958,998)	(982,973)
12. LESS: EOS - Professional Services	(165,917)	(170,065)	(174,317)	(178,675)	(183,141)	(187,720)
13. LESS: EOS - Eliminated Expenses	0	0	0	0	0	0
14. ADD: Additional O&M	0	0	0	0	0	0
15. Operating Expenses Before Depreciation	7,935,993	8,134,393	8,337,753	8,546,197	8,759,852	8,978,848
16. Depreciation (2)	5,963,620	6,049,562	6,136,741	6,225,178	6,314,888	6,405,890
17. Total Operating Expenses	13,899,613	14,183,955	14,474,494	14,771,374	15,074,740	15,384,738
18. Operating Income	11,925,275	12,115,613	11,914,158	12,128,740	11,916,500	12,156,672
19. Revenues (3)	25,824,888	26,299,568	26,388,652	26,900,114	26,991,240	27,541,410
20. EBITDA (4)	17,888,895	18,165,175	18,050,899	18,353,917	18,231,388	18,562,562
21. EBIT (5)	11,925,275	12,115,613	11,914,158	12,128,740	11,916,500	12,156,672
22. EBIT	11,925,275	12,115,613	11,914,158	12,128,740	11,916,500	12,156,672
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	11,925,275	12,115,613	11,914,158	12,128,740	11,916,500	12,156,672
25. (+) Depreciation & Amortization	5,963,620	6,049,562	6,136,741	6,225,178	6,314,888	6,405,890
26. (-) Capital Expenditures (6)	5,809,873	5,893,598	5,978,530	6,064,686	6,152,084	6,240,741
27. (-) Changes in Working Capital (7)	(12,912)	(13,150)	(13,194)	(13,450)	(13,496)	(13,771)
28. Debt Free Net Cash Flow	\$12,091,934	\$12,284,727	\$12,085,563	\$12,302,681	\$12,092,800	\$12,335,592
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: 3.97% (8)	0.5686	0.5469	0.5260	0.5060	0.4866	0.4681
31. Present Value Debt Free Net Cash Flow	\$6,875,474	\$6,718,517	\$6,357,006	\$6,225,157	\$5,884,356	\$5,774,291
	15	16	17	18	19	20
32. Present Value Factor: 3.77% (9)	0.5847	0.5635	0.5430	0.5233	0.5043	0.4860
33. Present Value Debt Free Net Cash Flow	\$7,070,154	\$6,922,443	\$6,562,461	\$6,437,993	\$6,098,399	\$5,995,098

See last page of this EXHIBIT for notes and assumptions.

Income Approach
Butler Area Sewer Authority
Pro Forma and Estimated 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 @ 3.97%	
	Terminal Value
Projected Debt Free Net Cash Flow (10)	\$12,335,592
Divided by Capitalization Factor (8)	3.97%
20th Year Terminal Value	310,720,196
20th Year Present Value Factor (11)	0.4681
Present Value of Terminal Value	145,448,124
Present Value Debt Free Net	
Cash Flow for 20 Years	113,524,373
Indicated Value	\$258,972,497

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 3.97%			
		Multiples (13)	Terminal Value
Projected EBIT	\$12,156,672	30.2	\$367,131,483
Projected EBITDA	18,562,562	18.8	348,976,167
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			354,967,421
20th Year Present Value Factor (11)			0.4681
Present Value of Terminal Value			166,160,250
Present Value Debt Free Net			
Cash Flow for 20 Years			113,524,373
Indicated Value			\$279,684,623

DCF With Capitalization of Terminal Value Model @ 3.77%	
	Terminal Value
Projected Debt Free Net Cash Flow (10)	\$12,335,592
Divided by Capitalization Factor (9)	3.77%
20th Year Terminal Value	327,204,026
20th Year Present Value Factor (12)	0.4681
Present Value of Terminal Value	153,164,204
Present Value Debt Free Net	
Cash Flow for 20 Years	113,524,373
Indicated Value	\$266,688,578

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 3.77%			
		Multiples (13)	Terminal Value
Projected EBIT	\$12,156,672	30.2	\$367,131,483
Projected EBITDA	18,562,562	18.8	348,976,167
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			354,967,421
20th Year Present Value Factor (12)			0.4681
Present Value of Terminal Value			166,160,250
Present Value Debt Free Net			
Cash Flow for 20 Years			113,524,373
Indicated Value			\$279,684,623

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority
 Pro Forma and Estimated 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-2023 are actual. 2023 results are based on 2023 budget and 2024 based on APA increase. Post-2024 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 2023 with shown rate increases.

OPERATING EXPENSES - increase at 2.5% annually after 2023 unless noted elsewhere. Assumed economies of scale are shown on lines below.

Wages & Benefits - Post-2023 assumed 15% savings due to economies of scale. Increase at 3.0% afterwards.

Professional Services - Post-2023 assumed 50% savings due to economies of scale. Increase at 3.0% afterwards.

No Additional O&M.

- (2) Depreciation - Pre-2023 based on actual depreciation. Post-2022 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-2024 based on financials/budget. Post-2023 years based on APA's CAPX and are estimates at 1.70% of prior year-end GROSS Property, plant and equipment.
- (7) Changes in Working Capital - based on water industry -0.05% of revenues.
- (8) Discount rate is the the current MUNI discount rate. Capitalization rate (K) at 1/19/2023 equal to discount rate, where capitalization rate = $K - g$.
- (9) Discount rate is the current MUNI discount rate. Capitalization rate (K) at 1/19/2023 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 18.

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

Butler Area Sewer Authority

Pro Forma and Estimated Operations With IOU Ownership

DCF With Capitalization of Terminal Value Model and

DCF With EBIT & EBITDA Terminal Value Model

	Actual			Actual	Estimated	Estimated
	Year 0			Year 1	Year 2	Year 2
	2020	2021	2022	2023	2024	2025
1. <u>OPERATING REVENUES (1)</u>						
2. Charges for services	10,373,400	10,692,751	10,890,555	12,160,150	12,219,714	12,975,319
3. Other operating revenue	203,150	144,273	260,786	98,350	98,350	98,350
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	0	0	696,330	14,734,787
6. Total Operating Revenues	10,576,550	10,837,024	11,151,341	12,258,500	13,014,394	27,808,456
7. Rate Increase					6%	114%
8. <u>OPERATING EXPENSES (1)</u>						
9. Operating & Maintenance Expenses	6,478,400	6,140,125	6,250,851	6,193,970	6,348,819	6,507,540
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	(599,880)	(614,877)	(630,249)
12. LESS: EOS - Professional Services	0	0	0	(114,560)	(117,424)	(120,360)
13. LESS: EOS - Eliminated Expenses	0	0	0	0	0	0
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: PURTA & Reg Assessment	0	0	0	0	424,507	433,294
16. Operating Expenses Before Depreciation	6,478,400	6,140,125	6,250,851	5,479,530	6,041,025	6,190,225
17. Depreciation (2)	3,695,178	3,685,849	3,685,849	3,733,932	4,392,154	4,526,727
18. Total Operating Expenses	10,173,578	9,825,974	9,936,700	9,213,462	10,433,180	10,716,952
19. Operating Income	402,972	1,011,050	1,214,641	3,045,038	2,581,214	17,091,504
20. Revenues (3)	10,576,550	10,837,024	11,151,341	12,258,500	13,014,394	27,808,456
21. EBITDA (4)	4,098,150	4,696,899	4,900,490	6,778,970	6,973,369	21,618,231
22. EBIT (5)	402,972	1,011,050	1,214,641	3,045,038	2,581,214	17,091,504
23. EBIT	402,972	1,011,050	1,214,641	3,045,038	2,581,214	17,091,504
24. (-) Income Taxes	0	0	0	879,712	745,713	4,937,735
25. Debt Free Net Income	402,972	1,011,050	1,214,641	2,165,326	1,835,501	12,153,769
26. (+) Depreciation & Amortization	3,695,178	3,685,849	3,685,849	3,733,932	4,392,154	4,526,727
27. (-) Capital Expenditures (6)	296,183	958,729	1,675,045	1,468,260	7,525,000	11,475,000
28. (-) Changes in Working Capital (7)	(5,288)	(5,419)	(5,576)	(6,129)	(6,507)	(13,904)
29. Debt Free Net Cash Flow	\$3,807,255	\$3,743,589	\$3,231,021	\$4,437,127	(\$1,290,837)	\$5,219,400
30. PV Time Period (mid-year)				(0.5)	0.5	1.5
31. Present Value Factor: 7.85% (8)					0.9629	0.8928
32. Present Value Debt Free Net Cash Flow					(\$1,242,947)	\$4,659,880
33. Present Value Factor: 9.75% (9)					0.9545	0.8697
34. Present Value Debt Free Net Cash Flow					(\$1,232,104)	\$4,539,312
35. Present Value Factor: 7.65% (8)					0.9638	0.8953
36. Present Value Debt Free Net Cash Flow					(\$1,244,109)	\$4,672,929
37. Present Value Factor: 9.55% (9)					0.9554	0.8721
38. Present Value Debt Free Net Cash Flow					(\$1,233,266)	\$4,551,839

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority

Pro Forma and Estimated Operations With IOU Ownership

DCF With Capitalization of Terminal Value Model and

DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 3 2026	Estimated Year 4 2027	Estimated Year 5 2028	Estimated Year 6 2029	Estimated Year 7 2030	Estimated Year 8 2031
1. <u>OPERATING REVENUES (1)</u>						
2. Charges for services	27,274,586	27,535,396	27,712,833	41,710,585	41,852,401	41,994,699
3. Other operating revenue	98,350	98,350	98,350	98,350	98,350	98,350
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	13,856,417	0	0	3,779,523
6. Total Operating Revenues	27,372,936	27,633,746	41,667,600	41,808,935	41,950,751	45,872,572
7. Rate Increase			50%			9%
8. <u>OPERATING EXPENSES (1)</u>						
9. Operating & Maintenance Expenses	6,670,228	6,836,984	7,007,909	7,183,106	7,362,684	7,546,751
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(646,005)	(662,155)	(678,709)	(695,677)	(713,069)	(730,896)
12. LESS: EOS - Professional Services	(123,369)	(126,453)	(129,614)	(132,854)	(136,176)	(139,580)
13. LESS: EOS - Eliminated Expenses	0	0	0	0	0	0
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: PURTA & Reg Assessment	527,422	543,405	562,375	642,037	642,648	643,258
16. Operating Expenses Before Depreciation	6,428,276	6,591,781	6,761,960	6,996,612	7,156,087	7,319,533
17. Depreciation (2)	4,732,705	4,989,307	5,168,577	5,243,060	5,318,617	5,395,264
18. Total Operating Expenses	11,160,981	11,581,088	11,930,537	12,239,672	12,474,705	12,714,797
19. Operating Income	16,211,955	16,052,658	29,737,063	29,569,263	29,476,046	33,157,775
20. Revenues (3)	27,372,936	27,633,746	41,667,600	41,808,935	41,950,751	45,872,572
21. EBITDA (4)	20,944,660	21,041,965	34,905,640	34,812,323	34,794,664	38,553,039
22. EBIT (5)	16,211,955	16,052,658	29,737,063	29,569,263	29,476,046	33,157,775
23. EBIT	16,211,955	16,052,658	29,737,063	29,569,263	29,476,046	33,157,775
24. (-) Income Taxes	4,683,634	4,637,613	8,591,038	8,542,560	8,515,630	9,579,281
25. Debt Free Net Income	11,528,321	11,415,045	21,146,025	21,026,703	20,960,416	23,578,494
26. (+) Depreciation & Amortization	4,732,705	4,989,307	5,168,577	5,243,060	5,318,617	5,395,264
27. (-) Capital Expenditures (6)	17,625,000	17,200,000	5,035,326	5,107,889	5,181,499	5,256,169
28. (-) Changes in Working Capital (7)	(13,686)	(13,817)	(20,834)	(20,904)	(20,975)	(22,936)
29. Debt Free Net Cash Flow	(\$1,350,288)	(\$781,831)	\$21,300,110	\$21,182,779	\$21,118,510	\$23,740,525
30. PV Time Period (mid-year)	2.5	3.5	4.5	5.5	6.5	7.5
31. Present Value Factor: 7.85% (8)	0.8278	0.7676	0.7117	0.6599	0.6119	0.5673
32. Present Value Debt Free Net Cash Flow	(\$1,117,768)	(\$600,133)	\$15,159,288	\$13,978,516	\$12,922,416	\$13,468,000
33. Present Value Factor: 9.75% (9)	0.7925	0.7221	0.6579	0.5995	0.5462	0.4977
34. Present Value Debt Free Net Cash Flow	(\$1,070,103)	(\$564,560)	\$14,013,342	\$12,699,076	\$11,534,930	\$11,815,659
35. Present Value Factor: 7.65% (8)	0.8317	0.7726	0.7177	0.6667	0.6193	0.5753
36. Present Value Debt Free Net Cash Flow	(\$1,123,035)	(\$604,043)	\$15,287,089	\$14,122,558	\$13,078,693	\$13,657,924
37. Present Value Factor: 9.55% (9)	0.7961	0.7267	0.6634	0.6055	0.5527	0.5046
38. Present Value Debt Free Net Cash Flow	(\$1,074,964)	(\$568,157)	\$14,130,493	\$12,826,172	\$11,672,201	\$11,979,469

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority

Pro Forma and Estimated Operations With IOU Ownership

DCF With Capitalization of Terminal Value Model and

DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 9 2032	Estimated Year 10 2033	Estimated Year 11 2034	Estimated Year 12 2035	Estimated Year 13 2036	Estimated Year 14 2037
1. <u>OPERATING REVENUES (1)</u>						
2. Charges for services	45,929,855	46,086,016	46,242,709	47,791,932	47,954,424	48,117,469
3. Other operating revenue	98,350	98,350	98,350	98,350	98,350	98,350
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	1,387,281	0	0	481,175
6. Total Operating Revenues	46,028,205	46,184,366	47,728,340	47,890,282	48,052,774	48,696,994
7. Rate Increase			3%			1%
8. <u>OPERATING EXPENSES (1)</u>						
9. Operating & Maintenance Expenses	7,735,420	7,928,805	8,127,025	8,330,201	8,538,456	8,751,917
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(749,168)	(767,897)	(787,095)	(806,772)	(826,941)	(847,615)
12. LESS: EOS - Professional Services	(143,070)	(146,646)	(150,313)	(154,070)	(157,922)	(161,870)
13. LESS: EOS - Eliminated Expenses	0	0	0	0	0	0
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: PURTA & Reg Assessment	665,374	666,057	666,741	675,318	676,029	676,739
16. Operating Expenses Before Depreciation	7,508,556	7,680,319	7,856,359	8,044,677	8,229,622	8,419,171
17. Depreciation (2)	5,473,014	5,551,885	5,631,893	5,713,053	5,795,384	5,878,900
18. Total Operating Expenses	12,981,570	13,232,204	13,488,252	13,757,730	14,025,006	14,298,071
19. Operating Income	33,046,635	32,952,162	34,240,088	34,132,552	34,027,768	34,398,923
20. Revenues (3)	46,028,205	46,184,366	47,728,340	47,890,282	48,052,774	48,696,994
21. EBITDA (4)	38,519,649	38,504,047	39,871,981	39,845,605	39,823,152	40,277,823
22. EBIT (5)	33,046,635	32,952,162	34,240,088	34,132,552	34,027,768	34,398,923
23. EBIT	33,046,635	32,952,162	34,240,088	34,132,552	34,027,768	34,398,923
24. (-) Income Taxes	9,547,173	9,519,880	9,891,961	9,860,894	9,830,622	9,937,849
25. Debt Free Net Income	23,499,462	23,432,282	24,348,127	24,271,658	24,197,146	24,461,074
26. (+) Depreciation & Amortization	5,473,014	5,551,885	5,631,893	5,713,053	5,795,384	5,878,900
27. (-) Capital Expenditures (6)	5,331,915	5,408,752	5,486,697	5,565,766	5,645,973	5,727,337
28. (-) Changes in Working Capital (7)	(23,014)	(23,092)	(23,864)	(23,945)	(24,026)	(24,348)
29. Debt Free Net Cash Flow	\$23,663,575	\$23,598,508	\$24,517,187	\$24,442,890	\$24,370,584	\$24,636,985
30. PV Time Period (mid-year)	8.5	9.5	10.5	11.5	12.5	13.5
31. Present Value Factor: 7.85% (8)	0.5261	0.4878	0.4523	0.4193	0.3888	0.3605
32. Present Value Debt Free Net Cash Flow	\$12,449,407	\$11,511,352	\$11,089,124	\$10,248,904	\$9,475,283	\$8,881,633
	9	10	11	12	13	14
33. Present Value Factor: 9.75% (9)	0.4535	0.4132	0.3765	0.3430	0.3126	0.2848
34. Present Value Debt Free Net Cash Flow	\$10,731,431	\$9,750,903	\$9,230,721	\$8,383,911	\$7,618,244	\$7,016,613
	9	10	11	12	13	14
35. Present Value Factor: 7.65% (8)	0.5344	0.4964	0.4612	0.4284	0.3979	0.3697
36. Present Value Debt Free Net Cash Flow	\$12,645,814	\$11,714,299	\$11,307,327	\$10,471,334	\$9,697,055	\$9,108,293
	9	10	11	12	13	14
37. Present Value Factor: 9.55% (9)	0.4606	0.4204	0.3838	0.3503	0.3198	0.2919
38. Present Value Debt Free Net Cash Flow	\$10,899,443	\$9,920,813	\$9,409,696	\$8,562,345	\$7,793,713	\$7,191,536

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority

Pro Forma and Estimated Operations With IOU Ownership

DCF With Capitalization of Terminal Value Model and

DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 15 2038	Estimated Year 16 2039	Estimated Year 17 2040	Estimated Year 18 2041	Estimated Year 19 2042	Estimated Year 20 2043
1. <u>OPERATING REVENUES (1)</u>						
2. Charges for services	48,763,880	48,929,677	49,096,038	49,755,594	49,924,763	50,094,507
3. Other operating revenue	98,350	98,350	98,350	98,350	98,350	98,350
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	490,960	0	0	400,756
6. Total Operating Revenues	48,862,230	49,028,027	49,685,348	49,853,944	50,023,113	50,593,613
7. Rate Increase			1%			1%
8. <u>OPERATING EXPENSES (1)</u>						
9. Operating & Maintenance Expenses	8,970,715	9,194,983	9,424,858	9,660,479	9,901,991	10,149,541
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	(868,805)	(890,525)	(912,788)	(935,608)	(958,998)	(982,973)
12. LESS: EOS - Professional Services	(165,917)	(170,065)	(174,317)	(178,675)	(183,141)	(187,720)
13. LESS: EOS - Eliminated Expenses	0	0	0	0	0	0
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: PURTA & Reg Assessment	680,188	680,908	681,628	685,142	685,872	686,601
16. Operating Expenses Before Depreciation	8,616,181	8,815,301	9,019,381	9,231,339	9,445,724	9,665,449
17. Depreciation (2)	5,963,620	6,049,562	6,136,741	6,225,178	6,314,888	6,405,890
18. Total Operating Expenses	14,579,801	14,864,863	15,156,122	15,456,516	15,760,612	16,071,339
19. Operating Income	34,282,429	34,163,164	34,529,226	34,397,428	34,262,501	34,522,274
20. Revenues (3)	48,862,230	49,028,027	49,685,348	49,853,944	50,023,113	50,593,613
21. EBITDA (4)	40,246,049	40,212,726	40,665,967	40,622,605	40,577,389	40,928,164
22. EBIT (5)	34,282,429	34,163,164	34,529,226	34,397,428	34,262,501	34,522,274
23. EBIT	34,282,429	34,163,164	34,529,226	34,397,428	34,262,501	34,522,274
24. (-) Income Taxes	9,904,194	9,869,738	9,975,493	9,937,417	9,898,437	9,973,485
25. Debt Free Net Income	24,378,235	24,293,426	24,553,733	24,460,011	24,364,064	24,548,789
26. (+) Depreciation & Amortization	5,963,620	6,049,562	6,136,741	6,225,178	6,314,888	6,405,890
27. (-) Capital Expenditures (6)	5,809,873	5,893,598	5,978,530	6,064,686	6,152,084	6,240,741
28. (-) Changes in Working Capital (7)	(24,431)	(24,514)	(24,843)	(24,927)	(25,012)	(25,297)
29. Debt Free Net Cash Flow	\$24,556,413	\$24,473,904	\$24,736,787	\$24,645,429	\$24,551,880	\$24,739,235
30. PV Time Period (mid-year)	14.5	15.5	16.5	17.5	18.5	19.5
31. Present Value Factor: 7.85% (8)	0.3343	0.3099	0.2874	0.2665	0.2471	0.2291
32. Present Value Debt Free Net Cash Flow	\$8,209,209	\$7,584,463	\$7,109,353	\$6,568,007	\$6,066,770	\$5,667,759
33. Present Value Factor: 9.75% (9)	0.2595	0.2364	0.2154	0.1963	0.1789	0.1630
34. Present Value Debt Free Net Cash Flow	\$6,372,389	\$5,785,631	\$5,328,304	\$4,837,898	\$4,392,331	\$4,032,495
35. Present Value Factor: 7.65% (8)	0.3434	0.3190	0.2963	0.2753	0.2557	0.2375
36. Present Value Debt Free Net Cash Flow	\$8,432,672	\$7,807,175	\$7,329,510	\$6,784,887	\$6,277,916	\$5,875,568
37. Present Value Factor: 9.55% (9)	0.2665	0.2432	0.2220	0.2027	0.1850	0.1689
38. Present Value Debt Free Net Cash Flow	\$6,544,284	\$5,952,053	\$5,491,567	\$4,995,629	\$4,542,098	\$4,178,457

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority

Pro Forma and Estimated 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 @ 7.85%	
	<u>Terminal Value</u>
Projected Debt Free Net Cash Flow (10)	\$24,739,235
Divided by Capitalization Factor (8)	<u>7.85%</u>
20th Year Terminal Value	315,149,489
20th Year Present Value Factor (11)	<u>0.2291</u>
Present Value of Terminal Value	72,200,748
Present Value Debt Free Net	
Cash Flow for 20 Years	<u>162,088,513</u>
Indicated Value	<u>\$234,289,261</u>

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 7.85%			
		<u>Multiples (13)</u>	<u>Terminal Value</u>
Projected EBIT	\$34,522,274	30.2	\$1,042,572,663
Projected EBITDA	40,928,164	18.8	769,449,484
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			859,580,133
20th Year Present Value Factor (11)			<u>0.2291</u>
Present Value of Terminal Value			196,929,808
Present Value Debt Free Net			
Cash Flow for 20 Years			<u>162,088,513</u>
Indicated Value			<u>\$359,018,321</u>

DCF With Capitalization of Terminal Value Model @ 9.75%	
	<u>Terminal Value</u>
Projected Debt Free Net Cash Flow (10)	\$24,739,235
Divided by Capitalization Factor (9)	<u>9.75%</u>
20th Year Terminal Value	253,735,742
20th Year Present Value Factor (12)	<u>0.1630</u>
Present Value of Terminal Value	41,358,926
Present Value Debt Free Net	
Cash Flow for 20 Years	<u>135,216,425</u>
Indicated Value	<u>\$176,575,351</u>

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 9.75%			
		<u>Multiples (13)</u>	<u>Terminal Value</u>
Projected EBIT	\$34,522,274	30.2	\$1,042,572,663
Projected EBITDA	40,928,164	18.8	769,449,484
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			859,580,133
20th Year Present Value Factor (12)			<u>0.1630</u>
Present Value of Terminal Value			140,111,562
Present Value Debt Free Net			
Cash Flow for 20 Years			<u>135,216,425</u>
Indicated Value			<u>\$275,327,987</u>

DCF With Capitalization of Terminal Value Model @ 7.65%	
	<u>Terminal Value</u>
Projected Debt Free Net Cash Flow (10)	\$24,739,235
Divided by Capitalization Factor (8)	<u>7.65%</u>
20th Year Terminal Value	323,388,691
20th Year Present Value Factor (11)	<u>0.2291</u>
Present Value of Terminal Value	74,088,349
Present Value Debt Free Net	
Cash Flow for 20 Years	<u>162,088,513</u>
Indicated Value	<u>\$236,176,862</u>

DCF With Capitalization of Terminal Value Model @ 9.55%	
	<u>Terminal Value</u>
Projected Debt Free Net Cash Flow (10)	\$24,739,235
Divided by Capitalization Factor (9)	<u>9.55%</u>
20th Year Terminal Value	259,049,580
20th Year Present Value Factor (12)	<u>0.1630</u>
Present Value of Terminal Value	42,225,081
Present Value Debt Free Net	
Cash Flow for 20 Years	<u>135,216,425</u>
Indicated Value	<u>\$177,441,507</u>

See last page of this EXHIBIT for notes and assumptions.

Income Approach

Butler Area Sewer Authority
 Pro Forma and Estimated 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-2023 are actual. 2023 results are based on 2023 budget and 2024 based on APA increase. Post-2024 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 2023 with shown rate increases.

OPERATING EXPENSES - increase at 2.5% annually after 2023 unless noted elsewhere. Assumed economies of scale are shown on lines below.

Wages & Benefits - Post-2023 assumed 15% savings due to economies of scale. Increase at 3.0% afterwards.

Professional Services - Post-2023 assumed 50% savings due to economies of scale. Increase at 3.0% afterwards.

No Additional O&M.

PURTA & Reg Assessment - 2024 assumed due to IOU purchase at the end of 2023.

- (2) Depreciation - Pre-2023 based on actual depreciation. Post-2022 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-2024 based on financials/budget. Post-2023 years based on APA's CAPX and are estimates at 1.70% of prior year-end GROSS Property, plant and equipment.
- (7) Changes in Working Capital - based on water industry -0.05% of revenues.
- (8) Discount rate is the current lower end of the IOU discount rate. Capitalization rate (K) at 1/19/2023 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 1/19/2023 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 18.

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

Butler Area Sewer Authority
Summary of Income Approach Results and Conclusion

<u>Methods</u>	<u>Results</u>
Exhibit 15, page 5 (MUNI)	
DCF With Capitalization of Terminal Value Model @ 3.77%	\$266,688,578
DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 3.77%	279,684,623
Indicated Value (Median)	<u>\$273,186,600</u>
Exhibit 16, page 5 (IOU)	
DCF With Capitalization of Terminal Value Model @ 7.65%	\$236,176,862
DCF With Capitalization of Terminal Value Model @ 9.55%	177,441,507
DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 7.85%	359,018,321
DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 9.75%	275,327,987
Indicated Value (Median)	<u>\$255,752,425</u>
Conclusion	
MUNI DCF	\$273,186,600
IOU DCF	255,752,425
Conclusion (Median)	<u>\$264,469,512</u>

Market Multiples Method
Butler Area Sewer Authority
2022 Operations
Market Multiple Method

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u> (Col B × Col C)	<u>E</u> (Col A × Col D)	
		Comparison		Butler's Wastewater		
	Subject	Group's	Butler's Wastewater	Risk Adjusted	Butler's Wastewater	
	Company	Valuation	Growth &	Valuation	Market	
	Statistic (1)	Multiples	Risk	Multiples	Multiples	
	<u>Statistic (1)</u>	<u>1/19/2023</u>	<u>Adjustment</u>	<u>1/19/2023</u>	<u>Valuation</u>	
Risk Adjusted Multiple						
1.	<u>Butler Area Sewer Authority</u>					
2.	Investor Provided Capital	\$74,049,964	2.01	95.00%	1.91	\$141,435,431
3.	Gross PP&E	\$143,771,330	1.37	111.00%	1.52	218,532,422
4.	Net PP&E	\$93,409,083	1.72	111.00%	1.91	178,411,349
5.	Revenues	\$12,258,500	8.71	95.00%	8.27	101,377,795
6.	EBITDA	\$6,064,530	19.76	95.00%	18.77	113,831,228
7.	EBIT	\$2,330,186	31.82	95.00%	30.23	70,441,533
8.	Customers	14,699	\$10,540	114.00%	\$12,016	176,623,184
9.	Population	52,499	\$3,159	114.00%	\$3,601	189,048,899
10.						
11.	Average					\$148,712,730

Conclusion of Market Multiple Method Valuation					
		<u>Low</u>	<u>High</u>		<u>Conclusion</u>
12.	Capital Items	\$141,435,431	\$218,532,422		\$179,983,926
13.	(Items 2-4)				
14.	Income Statement Items	70,441,533	113,831,228		-
15.	(Items 5 -7)				
16.	Demographics Items	176,623,184	189,048,899		<u>182,836,042</u>
17.	(Items 8-9)				
				Conclusion *	<u>\$181,409,984</u>

* - Conclusion based on weighting of 50% Capital Items and 50% Demographics Items

Market Multiples Method
Butler Area Sewer Authority
Development of Market Multiples Method for the Market Multiples Method

	Latest Quarter End			Latest 12 Months			2021		1/19/2023
	Gross PP&E (\$ Mill)	Net PP&E (\$ Mill)	Invest. Total Capital (\$ Mill)	12 Mos. Rev. (\$ Mill)	12 Mos. EBITDA (\$ Mill)	12 Mos. EBIT (\$ Mill)	Customers	Population	Enterprise Value (\$ Mill)
American States Water Co	\$2,340.189	\$1,736.437	\$1,403.833	\$482.785	\$178.337	\$137.115	287,500	1,000,000	\$4,128.999
American Water Works Company Inc	\$29,152.000	\$22,726.000	\$19,681.000	\$3,812.000	\$1,954.000	\$1,309.000	3,530,000	14,000,000	\$39,131.728
Artesian Resources Corp	\$830.607	\$660.160	\$373.901	\$96.607	\$42.852	\$30.575	100,640	326,700	\$761.063
California Water Service Group	\$4,422.312	\$2,987.612	\$2,408.066	\$818.820	\$247.047	\$130.651	547,600	2,000,000	\$4,379.641
Essential Utilities, Inc.	\$13,511.141	\$10,918.773	\$11,936.944	\$2,118.336	\$962.242	\$645.661	1,820,049	5,000,000	\$18,767.001
Middlesex Water Co	\$1,130.147	\$914.945	\$754.035	\$157.635	\$73.891	\$44.210	121,300	500,000	\$1,760.965
SJW Corp.	\$3,857.583	\$2,634.038	\$2,706.605	\$589.061	\$209.060	\$104.636	398,000	1,526,000	\$3,965.618
York Water Company (The)	\$523.869	\$418.560	\$329.581	\$58.684	\$32.734	\$22.925	73,144	204,000	\$787.711
Average	\$6,970.981	\$5,374.566	\$4,949.246	\$1,016.741	\$462.520	\$303.097	859,779	3,069,588	\$9,210.341
Max	\$29,152.000	\$22,726.000	\$19,681.000	\$3,812.000	\$1,954.000	\$1,309.000	3,530,000	14,000,000	\$39,131.728
Min	\$523.869	\$418.560	\$329.581	\$58.684	\$32.734	\$22.925	73,144	204,000	\$761.063
Median	\$3,098.886	\$2,185.238	\$1,905.950	\$535.923	\$193.699	\$117.644	342,750	1,263,000	\$4,047.309

	Enterprise Value as a Multiple of								Population Per Customer
	Invest. Capital (x)	Gross PP&E (x)	Net PP&E (x)	Rev. (x)	EBITDA (x)	EBIT (x)	Customers (\$)	Population (\$)	
American States Water Co	2.94	1.76	2.38	8.55	23.15	30.11	\$14,362	\$4,129	3.48
American Water Works Company Inc	1.99	1.34	1.72	10.27	20.03	29.89	\$11,085	\$2,795	3.97
Artesian Resources Corp	2.04	0.92	1.15	7.88	17.76	24.89	\$7,562	\$2,330	3.25
California Water Service Group	1.82	0.99	1.47	5.35	17.73	33.52	\$7,998	\$2,190	3.65
Essential Utilities, Inc.	1.57	1.39	1.72	8.86	19.50	29.07	\$10,311	\$3,753	2.75
Middlesex Water Co	2.34	1.56	1.92	11.17	23.83	39.83	\$14,517	\$3,522	4.12
SJW Corp.	1.47	1.03	1.51	6.73	18.97	37.90	\$9,964	\$2,599	3.83
York Water Company (The)	2.39	1.50	1.88	13.42	24.06	34.36	\$10,769	\$3,861	2.79
Average	2.07	1.31	1.72	9.03	20.63	32.45	\$10,821	\$3,147	3.48
Max	2.94	1.76	2.38	13.42	24.06	39.83	\$14,517	\$4,129	4.12
Min	1.47	0.92	1.15	5.35	17.73	24.89	\$7,562	\$2,190	2.75
Median	2.01	1.37	1.72	8.71	19.76	31.82	\$10,540	\$3,159	3.57

Market Multiples Method
Butler Area Sewer Authority
Quantification of the Effective Risk/Growth Adjustments

	Net PP&E	Gross PP&E	Invest. Capital
Comparable Group Multiple	1.72	1.37	2.01
Ratio to Net PPE		79.65%	
Not Contributed Multiple (NPPE = ICAP mult.)	2.01	1.60	
Base Risk Factor	x 95%	95%	
Subject Company Adjusted Multiple	1.91	1.52	
Subject Company Adjusted Multiple	1.91	1.52	
Comparable Group Multiple	÷ 1.72	1.37	
Effective Risk/Growth Adjustment	111%	111%	

	Net PP&E	Gross PP&E
Plant Assets	100%	100%
Ratio of Known "Cost Free" Capital	26%	26%
Plant Assets Less Known "Cost Free" Capital	74%	74%
Comparable Group Multiple	1.72	1.37
Plant Assets Less Known "Cost Free" Capital	÷ 74%	74%
Multiple Without "Cost Free" Capital	2.32	1.85
Base Risk Factor	x 95%	95%
Subject Company Adjusted Multiple	2.21	1.76
Subject Company Adjusted Multiple	2.21	1.76
Comparable Group Multiple	÷ 1.72	1.37
Effective Risk/Growth Adjustment	128%	128%

	Net PP&E	Customers
Comparable Group Multiple	1.72	10,540.00
Implied Capitalization Rate (1÷Multiple)	58.14%	0.0095%
Ratio of Net PP&E Mult. to Invest. Capital Mult.	116.86%	
Less 1	- 1.00	
Difference in Capital Source due to Contributions	16.86%	
Assumed Investor Financed (1-Difference in Capital Source)	83.14%	83.14%
Implied Capitalization Rate (1÷Multiple)	x 0.0095%	
Not Contributed Cap. Rate		0.0079%
Not Contributed Multiple (1÷Cap. Rate)		12,677.41
Base Risk Factor	x 95%	
Subject Company Adjusted Multiple		12,043.54
Subject Company Adjusted Multiple		12,043.54
Comparable Group Multiple	÷ 10,540.00	
Effective Risk/Growth Adjustment		114%

Selected Transactions Method
For Butler Area Sewer Authority
Summary

	<u>Median</u>	<u>Mid-Point</u>	<u>Value</u>
<u>All Selected Transactions Companies (N = 20)</u>			
1. Asset Items			\$199,200,126
2. Ex-Ante (page 2)	\$194,248,220	\$222,833,397	
3. Ex-Post (page 3)	\$154,788,726	\$224,930,161	
4. Demographics Items			\$132,913,352
5. Ex-Ante (page 2)	\$126,988,338	\$138,838,366	
6. Ex-Post (page 3)	\$126,988,338	\$138,838,366	
7.		Indicated Value *	<u>\$166,056,739</u>
<u>Fully Integrated Selected Transactions Companies (N = 8)</u>			
8. Asset Items			\$189,022,385
9. Ex-Ante (page 2)	\$195,830,708	\$202,299,857	
10. Ex-Post (page 3)	\$176,020,290	\$181,938,686	
11. Demographics Items			\$181,668,543
12. Ex-Ante (page 2)	\$177,835,689	\$185,501,396	
13. Ex-Post (page 3)	\$177,835,689	\$185,501,396	
14.		Indicated Value *	<u>\$185,345,464</u>
<u>Mostly Collection/Distribution Selected Transactions Companies (N = 12)</u>			
15. Asset Items			\$188,567,307
16. Ex-Ante (page 2)	\$162,253,588	\$222,833,397	
17. Ex-Post (page 3)	\$144,252,082	\$224,930,161	
18. Demographics Items			\$93,960,283
19. Ex-Ante (page 2)	\$71,071,487	\$116,849,080	
20. Ex-Post (page 3)	\$71,071,487	\$116,849,080	
21.		Indicated Value *	<u>\$141,263,795</u>
<u>Integrated, Excluding Wholesale Selected Transactions Companies (N = 6)</u>			
22. Asset Items			\$180,236,407
23. Ex-Ante (page 2)	\$180,896,732	\$198,056,403	
24. Ex-Post (page 3)	\$160,053,809	\$181,938,686	
25. Demographics Items			\$175,194,940
26. Ex-Ante (page 2)	\$169,807,129	\$180,582,750	
27. Ex-Post (page 3)	\$169,807,129	\$180,582,750	
28.		Indicated Value *	<u>\$177,715,673</u>

Conclusion of Selected Transactions Method Valuation

	<u>Indicated Values</u>	<u>Weight</u>	
29. Integrated, Excluding Wholesale Transactions	\$177,715,673	100%	<u>\$177,715,673</u>
30.		Conclusion	<u>\$177,715,673</u>

* - Indicated Value based on weighting of 50% Asset Items and 50% Demographics Items

Selected Transactions Method - Ex-Ante
For Butler Area Sewer Authority
Based on 2016 - 2021 Acquisitions of Assets of Water or Sewer System, Without Discount for Customer Contributions

Selected Transactions' Metrics											
Name	Service	System	Announced Purchase Price was:	Investor Provided Capital	Gross PP&E	Net PP&E	Revenues	EBITDA	EBIT	Customers	Population
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										
Butler Area Sewer Authority										
	\$74,049,964	\$143,771,330	\$93,409,083	\$12,258,500	\$6,064,530	\$2,330,186	14,699	52,499		

Subject Company's Selected Transactions Multiples Valuations											
Municipal Authority of the City of McKeesport	WW	INT	\$166,381,845	\$137,679,990	\$245,290,447	\$197,413,196	\$146,562,605	\$153,069,966	\$95,367,177	\$179,424,413	\$176,246,966
New Garden Township/Authority's WW System's Assets	WW	INT	\$159,473,711	\$94,972,420	\$163,198,414	\$153,365,560	\$159,919,829	\$197,163,759	\$137,580,602	\$241,436,804	\$128,152,296
Limerick Township Wastewater System's Assets	WW	INT	\$187,542,819	\$127,837,424	\$177,448,067	\$194,248,220	\$208,341,305	\$183,073,712	\$195,833,699	\$203,821,067	\$209,739,063
Steelton Borough (Water) Authority	W	INT	\$166,458,738	NA	NA	NA	NA	NA	NA	\$133,789,442	\$199,128,034
Exeter Township Wastewater System Assets	WW	INT	\$132,928,587	NA	NA	NA	\$152,126,196	\$124,908,604	\$47,993,879	\$157,068,566	\$182,545,692
Kane Borough Authority Wastewater System	WW	INT	\$160,796,970	\$120,298,227	\$124,574,843	\$184,345,397	\$150,113,363	\$155,503,040	\$225,230,481	\$127,842,714	\$198,467,694
Borough of Royersford Wastewater System Assets	WW	INT	\$196,177,101	\$204,689,616	\$271,537,962	\$267,135,611	\$184,658,749	\$281,200,899	\$108,046,376	\$119,728,697	\$132,418,898
York City Sewer Authority Wastewater System Assets	WW	INT	\$186,021,238	\$173,163,549	\$280,024,872	\$279,303,769	\$116,907,850	\$146,023,995	\$89,026,235	\$251,274,096	\$152,445,539
Sadsbury Township Wastewater Utility	WW	C/D	\$131,186,094	NA	NA	NA	NA	NA	NA	\$136,238,226	\$126,133,961
East Bradford Township Wastewater System Assets	WW	C/D	\$211,233,357	\$285,108,672	NA	NA	\$54,223,300	\$608,839,651	\$233,935,660	\$58,890,224	\$26,402,635
Township of Mahoning Water System Assets	W	C/D	\$100,848,227	NA	NA	NA	\$76,992,782	\$189,014,297	\$120,620,767	\$58,681,977	\$58,931,310
Township of Mahoning Sewer System Assets	WW	C/D	(\$11,080,518)	NA	NA	NA	\$48,961,874	(\$166,502,126)	(\$45,444,713)	\$48,272,691	\$59,309,681
Cheltenham Township Wastewater System Assets	WW	C/D	\$60,382,027	NA	NA	NA	\$66,303,173	\$67,627,890	\$25,984,797	\$72,279,553	\$69,714,721
East Norriton Township Wastewater System Assets	WW	C/D	\$147,992,790	\$383,476,282	NA	NA	\$77,538,705	\$207,815,795	\$79,849,473	\$62,158,478	\$77,118,005
Valley Township Water System Assets	W	C/D	\$205,134,934	NA	NA	NA	\$128,542,713	\$564,427,250	\$216,870,996	\$64,511,788	\$51,321,924
Valley Township Wastewater System Assets	WW	C/D	(\$12,190,747)	NA	NA	NA	\$62,320,975	(\$207,068,189)	(\$79,562,219)	\$65,616,336	\$97,739,363
Upper Pottsgrove Township Wastewater System Assets	WW	C/D	\$109,862,868	NA	\$129,245,566	\$111,211,910	\$122,119,436	\$97,088,629	\$37,304,555	\$141,534,489	\$130,535,488
Lower Makefield Township Wastewater System Assets	WW	C/D	\$121,691,198	\$237,491,708	NA	\$281,415,497	\$64,886,191	\$79,288,260	\$35,077,093	\$69,863,420	\$83,816,218
Willistown Township Wastewater Systems Assets	WW	C/D	(\$394,848,515)	\$131,337,895	\$290,071,855	\$334,454,885	\$99,847,778	\$356,595,979	(\$4,565,156,530)	\$112,132,738	\$81,927,278
East Whiteland Township Wastewater System Assets	WW	C/D	\$155,542,763	\$95,677,583	\$162,253,588	\$150,275,599	\$155,582,118	\$171,488,093	\$105,861,306	\$207,295,525	\$195,908,293

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 Butler Area Sewer Authority
Based on 2016 - 2021 Acquisitions of Assets of Water or Sewer System, Without Discount for Customer Contributions

Name	Service	System	Ex-Post Selected Transactions' Metrics								
			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											
Butler Area Sewer Authority				\$74,049,964	\$143,771,330	\$93,409,083	\$12,258,500	\$6,064,530	\$2,330,186	14,699	52,499

Ex-Post Subject Company's Selected Transactions Multiples Valuations											
Municipal Authority of the City of McKeesport	WW	INT	\$159,691,188	\$137,679,990	\$207,225,373	\$181,953,018	\$146,562,605	\$153,069,966	\$95,367,177	\$179,424,413	\$176,246,966
New Garden Township/Authority's WW System's Assets	WW	INT	\$157,983,220	\$94,972,420	\$156,233,740	\$148,406,307	\$159,919,829	\$197,163,759	\$137,580,602	\$241,436,804	\$128,152,296
Limerick Township Wastewater System's Assets	WW	INT	\$181,340,739	\$127,837,424	\$170,087,563	\$151,992,077	\$208,341,305	\$183,073,712	\$195,833,699	\$203,821,067	\$209,739,063
Steelton Borough (Water) Authority	W	INT	\$160,601,238	NA	\$163,873,877	\$145,613,598	NA	NA	NA	\$133,789,442	\$199,128,034
Exeter Township Wastewater System Assets	WW	INT	\$153,789,620	NA	\$201,771,505	\$210,112,896	\$152,126,196	\$124,908,604	\$47,993,879	\$157,068,566	\$182,545,692
Kane Borough Authority Wastewater System	WW	INT	\$152,375,888	\$120,298,227	\$120,085,681	\$121,465,901	\$150,113,363	\$155,503,040	\$225,230,481	\$127,842,714	\$198,467,694
Borough of Royersford Wastewater System Assets	WW	INT	\$187,152,548	\$204,689,616	\$243,791,691	\$222,685,463	\$184,658,749	\$281,200,899	\$108,046,376	\$119,728,697	\$132,418,898
York City Sewer Authority Wastewater System Assets	WW	INT	\$166,908,940	\$173,163,549	\$216,751,207	\$189,679,044	\$116,907,850	\$146,023,995	\$89,026,235	\$251,274,096	\$152,445,539
Sadsbury Township Wastewater Utility	WW	C/D	\$145,281,889	NA	\$177,777,802	\$140,977,566	NA	NA	NA	\$136,238,226	\$126,133,961
East Bradford Township Wastewater System Assets	WW	C/D	\$179,922,974	\$285,108,672	\$86,662,160	\$85,321,490	\$54,223,300	\$608,839,651	\$233,935,660	\$58,890,224	\$26,402,635
Township of Mahoning Water System Assets	W	C/D	\$108,418,008	NA	\$128,578,300	\$126,106,622	\$76,992,782	\$189,014,297	\$120,620,767	\$58,681,977	\$58,931,310
Township of Mahoning Sewer System Assets	WW	C/D	\$31,587,880	NA	\$138,918,877	\$137,598,876	\$48,961,874	(\$166,502,126)	(\$45,444,713)	\$48,272,691	\$59,309,681
Cheltenham Township Wastewater System Assets	WW	C/D	\$138,724,897	NA	\$364,538,831	\$304,625,316	\$66,303,173	\$67,627,890	\$25,984,797	\$72,279,553	\$69,714,721
East Norriton Township Wastewater System Assets	WW	C/D	\$159,808,364	\$383,476,282	\$178,479,551	\$212,030,627	\$77,538,705	\$207,815,795	\$79,849,473	\$62,158,478	\$77,118,005
Valley Township Water System Assets	W	C/D	\$188,121,710	NA	\$153,884,290	\$137,293,008	\$128,542,713	\$564,427,250	\$216,870,996	\$64,511,788	\$51,321,924
Valley Township Wastewater System Assets	WW	C/D	\$33,766,716	NA	\$149,794,150	\$147,526,598	\$62,320,975	(\$207,068,189)	(\$79,562,219)	\$65,616,336	\$97,739,363
Upper Pottsgrove Township Wastewater System Assets	WW	C/D	\$109,862,868	NA	\$129,245,566	\$111,211,910	\$122,119,436	\$97,088,629	\$37,304,555	\$141,534,489	\$130,535,488
Lower Makefield Township Wastewater System Assets	WW	C/D	\$132,305,617	\$237,491,708	\$238,092,069	\$249,929,974	\$64,886,191	\$79,288,260	\$35,077,093	\$69,863,420	\$83,816,218
Willistown Township Wastewater Systems Assets	WW	C/D	(\$441,616,353)	\$131,337,895	\$128,095,905	\$122,288,131	\$99,847,778	\$356,595,979	(\$4,565,156,530)	\$112,132,738	\$81,927,278
East Whiteland Township Wastewater System Assets	WW	C/D	\$158,659,342	\$95,677,583	\$181,768,660	\$155,693,161	\$155,582,118	\$171,488,093	\$105,861,306	\$207,295,525	\$195,908,293

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 Butler Area Sewer Authority

Based on Recent Walls Sreet Transactions Without Discount for Cost Free Capital

	Butler Area Sewer Authority's Indicated Value
Based on Recent SJW Group's Purchase of Connecticut Water Service Inc.	\$187,576,792
Based on Recent Aquarion Water Company's Purchase of New England Service Company, Inc.	\$161,483,769
Based on Recent Aquarion Water Company's Purchase of Torrington Water Company, Inc.	\$243,762,416

Summary of Selected Transactions Method - Wall Street Transactions

For Butler Area Sewer Authority

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 \$)			Butler Area Sewer Authority		
Purchase Price was: \$1,106,267			Butler Area Sewer Authority's Company Statistics	Selected Transactions Multiples Valuation	Indicated Value *
	<u>Subject Company Statistics</u>	<u>Transaction Multiple</u>			
Investor Provided Capital	\$573,223	1.93	\$74,049,964	\$142,909,540	
Gross PP&E	\$939,050	1.18	\$143,771,330	\$169,372,755	
Net PP&E	\$697,723	1.59	\$93,409,083	\$148,103,747	\$156,141,147
Revenues	\$107,054	10.33	\$12,258,500	\$126,676,020	
EBITDA	\$48,920	22.61	\$6,064,530	\$137,142,063	
EBIT	\$32,236	34.32	\$2,330,186	\$79,966,756	\$140,305,891
Customers	135,645	\$8,156	14,699	\$119,879,239	
Population	450,000	\$2,458	52,499	\$129,062,031	\$124,470,635
Average				<u>\$131,639,019</u>	
	<u>Subject Company Statistics</u>	<u>Transaction Multiple</u>			
Investor Provided Capital	\$573,223	1.93	\$74,049,964	\$142,909,540	
Gross PP&E (Less "Cost Free" Capital)	\$646,723	1.71	\$143,771,330	\$245,931,533	
Net PP&E (Less "Cost Free" Capital)	\$480,521	2.30	\$93,409,083	\$215,048,647	\$194,420,537
Revenues	\$107,054	10.33	\$12,258,500	\$126,676,020	
EBITDA	\$48,920	22.61	\$6,064,530	\$137,142,063	
EBIT	\$32,236	34.32	\$2,330,186	\$79,966,756	\$187,576,792
Customers (Adj. "Cost Free" Capital)	93,419	\$11,842	14,699	\$174,066,279	
Population (Adj. "Cost Free" Capital)	309,914	\$3,570	52,499	\$187,399,817	\$180,733,048
Average				<u>\$163,642,582</u>	

* - Indicated Value based on weighting of 50% Capital Items and 50% Demographics Items

Summary of Selected Transactions Method - Wall Street Transactions

For Butler Area Sewer Authority

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.			Butler Area Sewer Authority		
Purchase Price was: \$49,290,414			Butler Area Sewer Authority's Company Statistics	Selected Transactions Multiples Valuation	Indicated Value *
	<u>Subject Company Statistics</u>	<u>Transaction Multiple</u>			
Investor Provided Capital	\$26,734,587	1.84	\$74,049,964	\$136,525,518	
Gross PP&E	\$54,517,263	0.90	\$143,771,330	\$129,987,236	
Net PP&E	\$36,566,790	1.35	\$93,409,083	\$125,911,307	\$131,218,413
Revenues	\$7,994,088	6.17	\$12,258,500	\$75,584,173	
EBITDA	\$2,729,953	18.06	\$6,064,530	\$109,497,560	
EBIT	\$1,559,860	31.60	\$2,330,186	\$73,632,151	\$109,115,874
Customers	9,515	\$5,180	14,699	\$76,145,012	
Population	26,437	\$1,864	52,499	\$97,881,659	\$87,013,335
Average				<u>\$103,145,577</u>	
	<u>Subject Company Statistics</u>	<u>Transaction Multiple</u>			
Investor Provided Capital	\$26,734,587	1.84	\$74,049,964	\$136,525,518	
Gross PP&E (Less "Cost Free" Capital)	\$32,535,719	1.51	\$143,771,330	\$217,808,260	
Net PP&E (Less "Cost Free" Capital)	\$21,822,937	2.26	\$93,409,083	\$210,978,583	\$177,166,889
Revenues	\$7,994,088	6.17	\$12,258,500	\$75,584,173	
EBITDA	\$2,729,953	18.06	\$6,064,530	\$109,497,560	
EBIT	\$1,559,860	31.60	\$2,330,186	\$73,632,151	\$161,483,769
Customers (Adj. "Cost Free" Capital)	5,679	\$8,680	14,699	\$127,589,548	
Population (Adj. "Cost Free" Capital)	15,778	\$3,124	52,499	\$164,011,749	\$145,800,648
Average				<u>\$139,453,443</u>	

* - Indicated Value based on weighting of 50% Capital Items and 50% Demographics Items

Summar of Selected Transactions Method - Wall Street Transactions

For Butler Area Sewer Authority

Based on Recent Aquarion Water Company's Bid For Torrington Water Company, With and Without Discount for Cost Free Capital

Torrington Water Company			Butler Area Sewer Authority		
Purchase Price was: \$91,880,072			Butler Area Sewer Authority's Company Statistics	Selected Transactions Multiples Valuation	Indicated Value *
	<u>Subject Company Statistics</u>	<u>Transaction Multiple</u>			
Investor Provided Capital	\$36,395,842	2.52	\$74,049,964	\$186,936,629	
Gross PP&E	\$75,202,417	1.22	\$143,771,330	\$175,655,526	
Net PP&E	\$48,743,673	1.88	\$93,409,083	\$176,072,765	\$181,296,078
Revenues	\$7,835,144	11.73	\$12,258,500	\$143,751,265	
EBITDA	\$3,264,018	28.15	\$6,064,530	\$170,712,739	
EBIT	\$2,046,050	44.91	\$2,330,186	\$104,639,519	\$164,184,901
Customers	10,125	\$9,075	14,699	\$133,387,178	
Population	30,005	\$3,062	52,499	\$160,760,270	\$147,073,724
Average				<u>\$156,489,486</u>	
	<u>Subject Company Statistics</u>	<u>Transaction Multiple</u>			
Investor Provided Capital	\$36,395,842	2.52	\$74,049,964	\$186,936,629	
Gross PP&E (Less "Cost Free" Capital)	\$44,868,813	2.05	\$143,771,330	\$294,407,612	
Net PP&E (Less "Cost Free" Capital)	\$29,082,453	3.16	\$93,409,083	\$295,106,925	\$241,021,777
Revenues	\$7,835,144	11.73	\$12,258,500	\$143,751,265	
EBITDA	\$3,264,018	28.15	\$6,064,530	\$170,712,739	
EBIT	\$2,046,050	44.91	\$2,330,186	\$104,639,519	\$243,762,416
Customers (Adj. "Cost Free" Capital)	6,041	\$15,209	14,699	\$223,563,707	
Population (Adj. "Cost Free" Capital)	17,902	\$5,132	52,499	\$269,442,403	\$246,503,055
Average				<u>\$211,070,100</u>	

* - Indicated Value based on weighting of 50% Capital Items and 50% Demographics Items

Market Approach
Butler Area Sewer Authority
Market Approach Conclusion

<u>Method</u>	<u>Results</u>	<u>Wtd.</u>
1. Market Multiples Method	\$181,409,984	50%
2. Selected Transactions Method	<u>177,715,673</u>	50%
3. Conclusion (Wtd.)	<u><u>\$179,562,829</u></u>	
4. Check - Wall Street Transactions		
5. Min	\$161,483,769	
6. Max	243,762,416	

Butler Area Sewer Authority
Summary of Approach Results and
Fair Market Value Conclusion at Appraisal Date

<u>Valuation Approach</u>	<u>Indicated Value</u>	<u>Conclusion</u>	<u>Consideration</u>
Cost Approach	\$254,729,592		33.33%
Income Approach	264,469,512		33.33%
Market Approach	178,105,462		33.34%
		Conclusion \$232,429,000	

WORKPAPERS

Daily Bond Yields and Key Indicators

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

Data as of 4-Jan-23

Moody's Daily Long-term Corporate Bond Yield Averages

	Utilities	Industrial	Corporate
Aaa	NA	4.59	4.59
Aa	5.19	4.66	4.93
A	5.42	5.11	5.27
Baa	5.73	5.78	5.76
Avg	5.45	5.04	5.25

Moody's Daily Treasury Yield Averages

Short-Term (3-5 yrs)	3.49
Medium-Term (5-10 yrs)	3.01
Long-Term (10+ yrs)	3.7

Moody's Daily Public Utility Common Stock Yield Averages

Price	543.51
Yield	3.61
New Dividend	19.64

Moody's Commodity and Scrap Price Indexes

Spot Commodity Index	9,086.17
Industrial Metals Index	2,998.68

Index Name: S&P Municipal Bond Revenue Index

As of: Jan 26, 2023

1/12/2023	4.03%
1/13/2023	4.01%
1/17/2023	4.00%
1/18/2023	3.97%
1/19/2023	3.94%
1/20/2023	3.95%
1/23/2023	3.97%
1/24/2023	3.95%
1/25/2023	3.95%

FED H.15

DATE	DAAA	DBAA	DGS10	DGS20	DGS30
2023-01-13	4.34	5.44	3.49	3.79	3.61
2023-01-16	#N/A	#N/A	#N/A	#N/A	#N/A
2023-01-17	4.33	5.44	3.53	3.81	3.64
2023-01-18	4.23	5.33	3.37	3.65	3.54
2023-01-19	4.27	5.38	3.39	3.69	3.57
2023-01-20	4.36	5.46	3.48	3.77	3.66
2023-01-23	4.39	5.48	3.52	3.80	3.69
2023-01-24	4.33	5.40	3.46	3.73	3.62
2023-01-25	4.35	5.42	3.46	3.74	3.62

FED H.15

		AAA Corp	BAA CORP	10-yr T-bond	20-yr T-bond	30-yr T-bond
Spot	1/19/23	4.27		5.38	3.39	3.69
						3.57

FED H.15

	1/19/23	AAA Corp	BAA CORP		A Rated Utility	
		4.27	5.38	Spread	-0.32	-0.38
Moody's Spot ==>		4.59	5.76	Moody's Spot ==>	5.42	5.42
		-0.32	-0.38	Implied	5.10	5.04
						5.07

Moody's Daily Long-term Corporate Bond Yield Averages

	1/4/2023	Utilities	Industrial	Corporate
Spot				
Aaa		NA	4.59	4.59
Aa		5.19	4.66	4.93
A		5.42	5.11	5.27
Baa		5.73	5.78	5.76
Avg		5.45	5.04	5.25

S&P Municipal Bond Revenue Index

1/19/23 3.94%

Utilities

Aa

A

Baa

5.07

		Decade Spread	Annual Spread
10-Year	3.39		
20-Year	3.69	0.300	0.03
30-Year	3.57	-0.120	

REVENUE BOND INDEX

	3.94
10-20 Yr	0.15
20-30 Yr	-0.12

3.97

30-Yr Rev Bond Est.

3.97

	Lt Debt	5.07	5.07
	Prf Stk	6.6	130%
Pref Stock Est.		130%	6.6

1/19/23

A-Rated Rev Bonds	3.97
A-Rated PU Bonds	5.07
A-Rated PU Pref Stk	6.60
30-yr T-bond	3.57

	SBB	SBB
Equity Risk Premium	7.46	7.46
Beta (Value Line Med.)	0.75	0.75
Risk Adjusted Equity Premium	5.60	5.60
Yield (RF)	3.57	3.57
Size Premium	2.48	0.00
	11.65	9.17

High 11.65
Low 9.17

0.75

12.33 Total Return SBB 1926-2021
4.87 Income Return SBB 1926-2021
3.57 30-yr T-bond

	Recent Market Value (Mill \$)	Market Quartile Name	Market Quartile	Quartile Size Premium	Value Line Beta
American States Water Co	3,432.93	Mid-Cap	2	2.48	0.65
American Water Works Co Inc	27,308.73	Large-Cap	1	0	0.90
Artesian Resources Corp	575.14	Low-Cap	3	3.95	0.70
California Water Service Gp	3,335.49	Mid-Cap	2	2.48	0.70
Essential Utilities, Inc.	12,196.52	Mid-Cap	2	2.48	0.95
Middlesex Water Co	1,407.91	Low-Cap	3	3.95	0.70
SJW Corp	2,321.55	Low-Cap	3	3.95	0.80
York Water Co	662.71	Low-Cap	3	3.95	0.80
Average	<u>6,405.120</u>	<u>Mid-Cap</u>	<u>2</u>	<u>2.48</u>	<u>0.78</u>
Median	<u>2,828.521</u>	<u>Mid-Cap</u>	<u>2</u>	<u>2.48</u>	<u>0.75</u>

1/27/2023																	
9/30/22		Market Ratios															
Company Name	Ticker Symbol	LT Debt-Total Qly	Preferred S Minority	In Common Equity-Total-Qly	Invested Capital-Total Qly	Market Value-Monthly	1/19/23			Book Ratios			Market Ratios				
							LTD	Pref	Equity	LTD	Pref	Equity					
AMERICAN ST	AWR	698.329	0.000	0.000	705.504	1,403.833	19,047.000	27,308.728	AMERICA	0.497	0.000	0.503	1.000	0.169	0.000	0.831	1.000
AMERICAN W	AWK	11,289.000	0.000	0.000	17,758.000	19,047.000	27,308.728	27,308.728	AMERICA	0.593	0.000	0.407	1.000	0.292	0.000	0.708	1.000
ARTESIAN RE	ARTN.A	176.499	0.000	0.000	187.873	364.372	575.143	575.143	ARTESIA	0.484	0.000	0.516	1.000	0.235	0.000	0.765	1.000
CALIFORNIA W	CWT	1,059.734	0.000	4.873	2,338.459	2,338.066	3,335.492	3,335.492	CALIFORI	0.453	0.000	0.547	1.000	0.241	0.000	0.759	1.000
ESSENTIAL UT	WTRG	6,363.211	0.000	0.000	5,343.102	11,706.313	12,196.525	12,196.525	ESSENTIA	0.544	0.000	0.456	1.000	0.343	0.000	0.657	1.000
MIDDLESEX W	MSX	313.376	2.084	0.000	398.075	713.535	1,407.913	1,407.913	MIDDLES	0.439	0.003	0.558	1.000	0.182	0.001	0.817	1.000
SIW GROUP	SIW	1,458.088	0.000	0.000	1,049.347	2,507.435	2,321.550	2,321.550	SIW GROU	0.582	0.000	0.418	1.000	0.386	0.000	0.614	1.000
THE YORK WA	YORW	125.005	0.000	0.000	204.576	329.581	662.707	662.707	THE YORI	0.379	0.000	0.621	1.000	0.159	0.000	0.841	1.000
							0.496	0.000	0.503				Avg	0.251	0.000	0.749	
							0.491	0.000	0.510				Med	0.238	0.000	0.762	

<u>Assumptions:</u>	1/19/2023
Debt Cost	5.07
Pref. Stock Cost	6.60
Equity Cost	11.65
Equity Cost	9.17

Ratio	Cost	Wt	Shield	
23.80%	5,070	1.21	0.72	Overall
0.00%	6,600	0.00	1	0.8687952
76.20%	11,650	8.88	1	0
		10.08		8.8773
				9.75
				<<<<ANSWER
23.80%	5,070	1.21	0.72	Overall
0.00%	6,600	0.00	1	0.8687952
76.20%	9,165	6.98	1	6.98373
		8.19		7.85
				7.85
				<<<<ANSWER

Public Meeting held October 27, 2022

ROE
9.75

DSIC Weighted Cost of Capital

<u>Assumptions:</u>	<u>1/19/2023</u>					
Debt Cost	5.07					
Pref. Stock Cost	6.6					
DSIC Equity Cost	9.75					
		Ratio	Cost	Wt	Shield	Overall
Debt		49.10%	5.070	2.49	0.72	1.792346
Pref		0.00%	6.600	0.00	1	0
Equity		50.90%	9.750	4.96	1	4.96275
				7.45		6.76 <<<<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.

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.

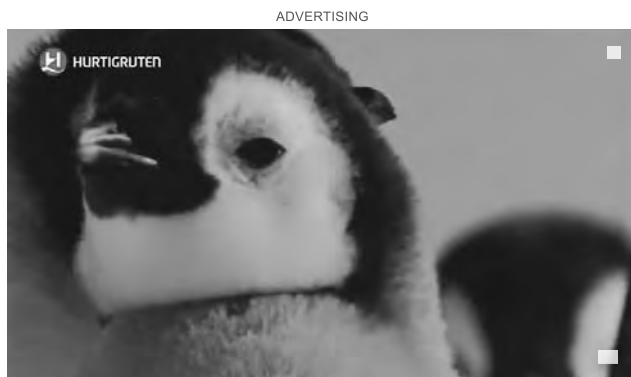
ADVERTISEMENT

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).

ADVERTISEMENT



"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.

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.

RBS sounds alarm over Brexit

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

Our Standards: [The Thomson Reuters Trust Principles.](#)

MORE FROM REUTERS

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.

Media Contacts:**Aquarion Contact:**

Peter Fazekas
Director – Corporate Communications
Aquarion Water Company
Phone: (203) 336-7651
pfazekas@aquarionwater.com

New England Service Company Contact:

Nicholas LaChance
President and Chief Executive Officer
New England Service Company
37 Northwest Drive
Plainville, CT 06062
Phone: (860)-747-1665
NLaChance@NewEnglandServiceCompany.com

###

MUNICIPALITIES SUPPLIED					
1. Show below the names of the municipalities in which the respondent supplies water and the number of customers in each.					
Line No.	Name (a)	Estimated Population Supplied*** (b)	Number of customers served by meter* (c)	Number of customers not served by meter** (d)	Total customers supplied (e)
1	Torrington	29,000	9,789	-	9,789
2	New Hartford	18	7	-	7
3	Litchfield	171	57	-	57
4	Harwinton	402	134	-	134
5	Burlington	414	138		138
6					
7					
8					
9					
10					
11					
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49					
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51					
52					
53					
54					
55	Total	30,005	10,125	-	10,125

Filed by Eversource Energy
(Commission File No. 001-05324) pursuant
to Rule 425 under the Securities Act of 1933
Subject Company: The Torrington Water Company

THE TORRINGTON WATER COMPANY LETTERHEAD

March 8, 2022

Dear Stockholder:

We are pleased to announce that on March 7, 2022, the Board of Directors of The Torrington Water Company (OTC Pink Sheets Trading Symbol: TORW) unanimously approved an Agreement and Plan of Merger (the "Agreement") with Aquarion Company ("Aquarion"), a wholly-owned subsidiary of Eversource Energy (NYSE: ES). Aquarion is a holding company based in Bridgeport, Connecticut with regulated water operations in Connecticut, Massachusetts, and New Hampshire. The Torrington Water Company ("TWC") is a public utility that provides water service to approximately 10,000 customers in the city of Torrington and the towns of Burlington, Harwinton, Litchfield and New Hartford, Connecticut.

Under the terms of the Agreement, which has been unanimously approved by the boards of directors of Aquarion and TWC, TWC would merge with and become a wholly-owned subsidiary of Aquarion, and the stockholders of TWC would receive in exchange for their TWC shares a number of validly issued, fully paid and nonassessable common shares, par value \$5.00 per share, of Eversource Energy. The exchange ratio ("Exchange Ratio") that determines the number of Eversource Energy common shares issued in the merger will float between 1.0241 and 1.07 IO and will be determined by dividing \$93.51 by Eversource's volume weighted average share price for IO full trading days ending on and including the second full trading day prior to closing date of the merger ("Eversource Share Value"). The Exchange Ratio becomes fixed at 1.0710 if the Eversource Share Value is less than \$87.32 and becomes fixed at 1.0241 if the Eversource Share Value is greater than \$91.32. An Exchange Ratio of 1.0710 implies a \$92.81 per share value based on the closing price of \$88.66 for Eversource Energy common shares on March 7, 2022, or a market premium of approximately 1.04% over TWC's \$45.50 closing price on March 7, 2022. Boenning & Scattergood, Inc. provided a fairness opinion to the Board of Directors of TWC. Based on an Exchange Ratio of 1.07 IO and the most recently declared dividends by TWC and Eversource Energy, TWC shareholders would receive an equivalent dividend of \$2.58 per share compared to their current dividend on TWC shares of \$1.38 per share.

The completion of the merger will require approval by the stockholders of TWC, and the TWC Board of Directors has resolved to recommend the adoption of the Agreement by the stockholders. The merger is also subject to the satisfaction of several other customary closing conditions, including the approval of the Connecticut Public Utilities Regulatory Authority. The parties plan to file for the approval of the Connecticut Public Utilities Regulatory Authority shortly, with an anticipated consummation of the merger by the end of 2022.

Within the coming weeks, you will be mailed a Proxy Statement/Prospectus for the TWC Stockholder Meeting, at which TWC stockholders will consider and vote with respect to the proposed merger.

Enclosed with this letter is the press release announcing the signing of the Agreement. The press release provides additional information that will answer many of your questions.

Sincerely yours,
Susan Suhanovsky
President

Forward-Looking Statements

This letter includes statements concerning The Torrington 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 Aquarion Water 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.

This Communication Does Not Constitute a Solicitation of Proxies

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 The Torrington Water 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 The Torrington Water Company may file with the SEC in connection with the proposed transaction. INVESTORS AND SECURITY HOLDERS OF THE TORRINGTON WATER 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, THE TORRINGTON WATER COMPANY AND THE PROPOSED TRANSACTION. Investors and security holders may be able to obtain free copies of these documents (when they are available) and other related documents filed with the SEC at the SEC's website at www.sec.gov. The materials may also be obtained for free by directing a written request to: Susan Suhanovsky, President, The Torrington Water Company, PO Box 867, Torrington, CT 06790, telephone (860) 489-4149. Investors should read the proxy materials/prospectus before making a decision regarding the merger.

This filing may be deemed solicitation material in respect of the proposed business combination transaction between Aquarion Company and The Torrington Water Company. The directors, trustees, executive officers and certain other members of management and employees of Eversource Energy, Aquarion Company and The Torrington Water Company may be deemed “participants” in the solicitation of proxies from stockholders of The Torrington Water 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, 2021, which was filed with the SEC on February 17, 2022 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 The Torrington Water 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 Susan Suhanovsky at The Torrington Water Company as described above.

About Aquarion Water Company:

Aquarion Water Company is the public water supply company for more than 700,000 people in 68 cities and towns in Connecticut, 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 Water 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.

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.

Page 415			
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.			

Page 415			
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	

Page 415

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
1	Belmont N. H.	7,356	160	16	Sub Totals Forward:	30,120	725
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

Annual Return of Mountain Water Systems, Inc.

Page 415

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

1 **Q. How many customers will the acquisition add?**

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

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

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

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

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

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 ($\$38.52 + \$13.42 = \$51.94$). ($\$13.42 \div \$38.52 \times 100 = 34.84\%$).

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 summarize 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.

09/02/16

Exeter Township
Customer List

Report by Class

Account	Name Service Address	Tax ID	Book	Status	Alert Code
97990.00	F M BROWN SONS INC 790 DANIEL BOONE ROAD	43-5345-07-68-8539 BIRDSBORO	PA	A 19508-8737	
99991.00	DIEROLF, CANDACE 21 PINE AVENUE	BIRDSBORO	PA	A 19508	
99992.00	TELFORD, MARK 19-6 CRANBERRY RIDGE	READING	PA	A 19606-3934	
Total Class: R: 8,708					
Class: TRAILER PARK					
20000.00	KLIEWER, KIM B 4851 PERKIOMEN AVENUE	43-5325-08-79- READING	100 PA	A 19606	
(610)670-0191					
20010.00	KL MHC LLC 44 KEYSTONE ROAD	43-5335-14-34- READING	201 PA	A 19606-3655	
20020.00	BORDIC MOBILE HOME PARK 214 BORDIC ROAD	43-5335-09-16- READING	200 PA	A 19606-3605	
20030.00	KL MHC LLC 44 KEYSTONE ROAD	43-5335-10-35- READING	201 PA	A 19606-3655	
20060.00	ALSACE TOWNSHIP 240 SPIES CHURCH ROAD	READING	101 PA	A 19606	
20070.00	KL MHC LLC 44 KEYSTONE ROAD	43-5335-14-34-2494 READING	PA	A 19606-3655	
91230.00	PENN VIEW MOBILE PARK BROADWAY AVENUE	43-5327-14-42- READING	200 PA	A 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](https://www.readingeagle.com/news/article/exeter-township-supervisors-agree-to-sell-municipal-wastewater-system-for-96-million)

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

7

8 **Q. Please briefly summarize the Acquisition Transaction that the Joint Applicants**

9 **are proposing.**

10 A. Under the terms of the Proposed Transaction, PAWC would acquire the wastewater

11 utility assets of Kane for \$17.56 million.

12

13 **Q. Please describe the Kane wastewater utility.**

14 A. Kane owns and operates a sanitary wastewater collection system that provides

15 sanitary wastewater service to approximately 2,019 customers in Kane Borough and

16 a portion of Westmore Township in McKean County. The breakout of Kane's

17 customer count is: 1,847 residential, 162 commercial, 3 industrial, and 7 municipal.

18 The \$17.56 million purchase price for a wastewater utility assets serving 2,019

19 customers equates to a cost of approximately \$8,700 per customer.

20

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

22 A. Yes, the Asset Purchase Agreement ("APA") dated November 4, 2019 was included

23 with the Application. The APA states that the purchase price is Seventeen Million,

24 Five Hundred Sixty Thousand Dollars (\$17,560,000). The Application indicates that

25 the purchase price is based on arm's length negotiations. PAWC and Kane Borough

26 are not affiliated with each other.

Direct Testimony of Ralph C. Smith
On Behalf of the Office of Consumer Advocate
Page 15 of 45

Customer Number	Edu Purchased	Service Address	Group Code	Drainage Basin	SPA Amt	SPA Qty	SWR Amt	SWR Qty	Svr Base Amt	PEN Amt	INT Amt
3793	12133	900 FOXMEADOW DR	16	King Road	SOUTHEAST (6)	-	-	-	\$	1,348.80	-
3794	12134	1000 FOXMEADOW DR	16	King Road	SOUTHEAST (6)	-	-	-	\$	1,348.80	-
3795	12135	1100 FOXMEADOW DR	16	King Road	SOUTHEAST (6)	\$	216.44	-	\$	1,348.80	-
3796	12136	1200 FOXMEADOW DR	16	King Road	SOUTHEAST (6)	\$	69.15	-	\$	1,348.80	-
3799	12139	1500 FOXMEADOW CIR	16	King Road	SOUTHEAST (6)	\$	43.95	-	\$	1,348.80	-
3800	12140	1600 FOXMEADOW CIR	16	King Road	SOUTHEAST (6)	-	-	-	\$	1,348.80	-
3801	12141	1700 FOXMEADOW CIR	16	King Road	SOUTHEAST (6)	-	-	-	\$	1,348.80	-
3802	12142	1800 FOXMEADOW CIR	16	King Road	SOUTHEAST (6)	-	-	-	\$	1,348.80	-
3803	12143	1900 FOXMEADOW DR	16	King Road	SOUTHEAST (6)	-	-	-	\$	1,348.80	-
3804	12144	2000 FOXMEADOW CIR	16	King Road	SOUTHEAST (6)	\$	8.42	-	\$	1,348.80	-
3805	12145	2100 FOXMEADOW CIR	16	King Road	SOUTHEAST (6)	\$	160.88	-	\$	1,348.80	-
3806	12146	2200 FOXMEADOW DR	16	King Road	SOUTHEAST (6)	-	-	-	\$	1,348.80	-
3807	12147	2300 FOXMEADOW DR	16	King Road	SOUTHEAST (6)	\$	176.38	-	\$	1,348.80	-
3808	12148	2400 FOXMEADOW CIR	16	King Road	SOUTHEAST (6)	\$	94.99	-	\$	1,348.80	-
3809	12149	2500 FOXMEADOW CIR	16	King Road	SOUTHEAST (6)	\$	107.26	-	\$	1,348.80	-
161	275	640 N LEWIS RD	17	King Road	SOUTHEAST (6)	\$	1,932.95	-	\$	84.30	-
3674	12005	7-27 W RIDGE PIKE/STRP ML	18	King Road	SOUTHEAST (6)	\$	63.37	-	\$	927.30	-
3727	12065	125 SUNSET DR	18	King Road	282 GRATERFORD RD (20)	\$	1,198.45	-	\$	84.30	-
3772	12112	15 KEYSTONE DR	18	King Road	TRINLEY (5)	\$	2,452.98	-	\$	84.30	-
5199	60965	256 SWAMP PIKE/SCHOOL	18	Possum Hollow	RAVENS CLAW (18)	\$	2,015.24	-	\$	252.90	-
162	276	339 N LEWIS RD	19	King Road	SOUTHEAST (6)	\$	1,256.59	-	\$	84.30	-
3706	12039	W RIDGE PIKE/STRIP/BANK	19	King Road	SOUTH LIMERICK (3)	\$	1,373.73	-	\$	674.40	-
3745	12084	542 N LEWIS RD	19	King Road	TRINLEY (5)	\$	112.65	-	\$	168.60	-
3411	70011	70 BUCKWALTER RD/1350/APPLEB	20	King Road	SOUTHEAST (6)	\$	3,375.47	-	\$	84.30	-
5389	11771	206 JONES BLVD/MICROCOAX	20	Possum Hollow	BROOKE EVANS (16)	\$	14,938.23	-	\$	84.30	-
3445	12040	70 BUCKWALTER RD/1250/TEXAS	21	King Road	SOUTHEAST (6)	\$	2,419.39	-	\$	84.30	-
3707	12113	22 ANCHOR PARKWAY	23	King Road	SOUTHEAST (6)	\$	1,958.79	-	\$	84.30	-
3773	170	77 GRATERFORD RD	23	King Road	282 GRATERFORD RD (20)	\$	1,208.14	-	\$	84.30	-
64	12208	677 ELM ST	24	Royersford	ORCHARD TERRACE (OT)	-	-	-	\$	2,023.20	-
3863	2573	430 W LINFIELD TRAPPE RD	24	King Road	TRINLEY (5)	\$	4,782.46	-	\$	84.30	-
794	10679	1101 ENTERPRISE DR	28	King Road	TRINLEY (5)	\$	1,182.95	-	\$	84.30	-
2502	12214	196 W RIDGE PK/FLEA MKRT	29	King Road	RIDGE PIKE (10)	\$	629.07	-	\$	1,686.00	1.80
3869	11727	420 LINFIELD TRAPPE RD	30	King Road	TRINLEY (5)	\$	852.20	-	\$	84.30	-
5410	70032	14 W LIGHTCAP RD	34	Possum Hollow	POSSUM HOLLOW (17)	\$	7,741.14	-	\$	84.30	-
3401	216	19 W LINFIELD TRAPPE RD	36	King Road	SOUTHEAST (6)	\$	5,421.59	-	\$	84.30	-
107	12101	475 N LEWIS RD	52	King Road	SOUTHEAST (6)	\$	3,921.34	-	\$	84.30	-
3761	10357	88 ANCHOR PARKWAY	52	King Road	SOUTHEAST (6)	\$	3,746.92	-	\$	84.30	-
2292	282	420 W LINFIELD TRAPPE RD	59	King Road	TRINLEY (5)	\$	5,568.64	-	\$	84.30	-
167	10630	350 S LEWIS RD	60	King Road	SOUTHEAST (6)	\$	3,791.50	-	\$	84.30	-
2465	11378	827 N LEWIS RD	80	King Road	SOUTH LIMERICK (3)	-	-	-	\$	6,744.00	-
3091	70019	FOX RIDGE APTS	97	King Road	SOUTH LIMERICK (3)	\$	2,050.04	-	\$	8,177.10	-
2885	5397	165 W RIDGE PIKE/TRLR PK	115	King Road	SOUTHEAST (6)	\$	6,018.69	-	\$	9,694.50	-
5400	70022	EXELON LIM GEN STA	137	Possum Hollow	POSSUM HOLLOW (17)	N	-	-	\$	84.30	1,041.07
		18 LIGHTCAP RD	200	Possum Hollow	POSSUM HOLLOW (17)	\$	4,006.31	1,348,000.00	\$	7,418.40	-
5416	8402					\$	299,707.92	89,160.697	\$	600,843.05	1,169.98
						\$	25,039.14	7,288,556	\$	14,296.74	

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 ("KRWWTTP") 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 & JESSIT\	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

Report Criteria:

Customer.Final bill date = {IS NULL}

Customer #	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
11115.01	BUSY BEAVER	23 WESNER LN	0053635505	Commercial	1.5
11123.01	MEADOWS COMM.	77 TOWER VIEW CIRCLE	0051583844	Commercial	1.5
11127.01	SHANER HOTEL GRP	43 PINE BARN PLACE	1832339361	Commercial	1.5
11170.01	HAWKINS CHEVROLET	1856 MONTOUR BLVD.	1852732193	Commercial	1.5
11183.01	GEORGE HEIM CAR WASH	1802 MONTOUR BLVD	1541551330	Commercial	1.5
Total 1.5:					5
11126.01	ATLANTIC EQUIP	15 ENTERPRISE DR	0048304212	Commercial	2
11162.01	EMMANUEL NAZARETH	1707 MONTOUR BLVD. 11108	1007034764	Commercial	2
11172.01	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
11101.01	NAILS TO TAILS GROOMING SALON	938 BLOOM RD.	1810172132	Commercial	3/4
11109.01	BROKESHIRE 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

5/30/18

Commercial
Water Meters
70

Residential
Water Meters
1116

2" + 1" = 15 Wesner Lane
added 5/24/18

Total Meters
= 1186

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



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 McKeesport 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

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	2015-2 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	2014-1
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	2015-2 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



Home > News / Events > Press Releases > The PA PUC Approves First Wastewater Sale Under New Act 12

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

1 interest in discussing the potential acquisition of the System and the use of Section 1329,
2 the fair market value approach. TOS's representatives executed the Letter of Interest on
3 December 6 and 7, 2016 and returned it to PAWC. This "Letter of Interest" was extended
4 through amendments on March 9, 2017, May 2, 2017, June 6, 2017, and July 5, 2017 to
5 allow the parties to enter into a definitive agreement. Through these extensions, PAWC
6 and TOS jointly retained the services of Herbert E. MacCombie, Jr., P.E., of Media
7 Pennsylvania to complete the Engineer's Assessment of Tangible Assets pursuant to
8 Section 1329. The Engineer's Assessment of Tangible Assets is included as **Schedule 1.1**
9 of the APA and included with the UVE fair market valuation reports at **Appendix A-5**.
10 PAWC, pursuant to Section 1329, retained the services of AUS Consultants of Greenfield
11 Wisconsin to complete an appraisal of the System. TOS retained the services of Herbert,
12 Rowland & Grubic, Inc. of Harrisburg, Pennsylvania to also complete an appraisal of the
13 System. These appraisals accompany the Application at **Appendix A-5** (together with
14 electronic working documents at **Appendix A-4**) and are included as **Schedule 2.2** of the
15 APA. After receipt of the two appraisals and subsequent arms-length negotiations, on May
16 1, 2018 TOS's Board of Supervisors approved the APA, which was subsequently executed
17 by PAWC and TOS that day too. This APA includes a negotiated purchase price of
18 \$9,250,000.

19
20 **Q. CAN YOU PLEASE PROVIDE AN OVERVIEW OF THE APA?**

21 **A.** Yes. The APA is attached as **Appendix A-24-a** to the Application (**PAWC Exhibit KEG-**
22 **1**). The APA sets forth the terms and conditions pursuant to which the TOS will sell, and
23 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.

1

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.



Borough of Royersford

Table Lists - Master Billing List - Numeric

Page: 3
Feb 12, 2019 10:23am

Cust No	Name	Customer Type	Group Code	Service No	Description	Unit/Share
I33438358	Morath, Christina	Commercial	None	1	SEWER	1
I33453937	Baeder, William	Commercial	None	1	SEWER	1
I33521786	Sanders, Debra	Commercial	None	1	SEWER	1
I33757653	Advanced Auto Parts	Commercial	None	1	SEWER	1
I34016546	Nelson's Ice Cream	Commercial	None	1	SEWER	1
I34030702	Pitcher, Paul	Commercial	None	1	SEWER	1
I34083232	Beck, Katharine G	Commercial	None	1	SEWER	1
I34862572	LK Miller Properties LLC	Commercial	None	1	SEWER	1
I02939458	Fuhrman, Steve	Commercial	None	1	SEWER	1
I03198199	Sarangpur Realty LLC	Commercial	None	1	SEWER	1
I03373167	Wilhelm, Rosemarie	Commercial	None	1	SEWER	1
I04397982	Pragi Enterprises LLC	Commercial	None	1	SEWER	1
I06085025	Plank Jr, Robert E	Commercial	None	1	SEWER	1
I06197065	LD Hedge Associates LLC	Commercial	None	1	SEWER	1
I06197096	LD Hedge Associates LLC	Commercial	None	1	SEWER	1
I07394708	Fissingner, Matthew	Commercial	None	1	SEWER	1
I07425268	Snyder, Joseph	Commercial	None	1	SEWER	1
I07461417	Varlotta, Michael	Commercial	None	1	SEWER	1
I07487679	CG Complex LLC	Commercial	None	1	SEWER	1
I07519040	Bristol Road Partners Inc.	Commercial	None	1	SEWER	1
I08908308	Superior Credit Union	Commercial	None	1	SEWER	1
I09217890	Hoff Properties LLC	Commercial	None	1	SEWER	1
I10722804	AMA Realty Properties LLC	Commercial	None	1	SEWER	1
I11184863	Attilio, Thomas	Commercial	None	1	SEWER	1
I12032330	310 Chestnut Street LLC	Commercial	None	1	SEWER	1
I13068080	Branch Banking & Trust Company	Commercial	None	1	SEWER	1
I13286185	White, Elaine & Bruce	Commercial	None	1	SEWER	1
I15089717	C&R Property Management LLC	Commercial	None	1	SEWER	1
I15089748	C&R Property Management LLC	Commercial	None	1	SEWER	1
I15292810	Preston, Aaron	Commercial	None	1	SEWER	1
I16240812	Shalom, Jan	Commercial	None	1	SEWER	1
I16276750	Copenhafer, Fay	Commercial	None	1	SEWER	1
I16612479	Donohue, Patrick R	Commercial	None	1	SEWER	1
I17470098	Lewis Group Ltd Partnership	Commercial	None	1	SEWER	1
I17961983	Qawasmy, John	Commercial	None	1	SEWER	1
I18085592	Christman, Lewis	Commercial	None	1	SEWER	1
I18305104	Tarquini Herrera, Rachel	Commercial	None	1	SEWER	1
I18888302	Florence Attilio Rental Acct.	Commercial	None	1	SEWER	1
I18888319	Attilio, Thomas	Commercial	None	1	SEWER	1
I19364687	Conigliaro, Vito	Commercial	None	1	SEWER	1
I21630875	Chesterview Apartments	Commercial	None	1	SEWER	1
I22621041	Main Street Royersford LLC	Commercial	None	1	SEWER	1
I22621096	Spring Mountain Brewing Co	Commercial	None	1	SEWER	1
I23796115	Kassam, Tashir	Commercial	None	1	SEWER	1
I26295581	JD Arnold LLC	Commercial	None	1	SEWER	1
I26393133	Ostebo, Kurt	Commercial	None	1	SEWER	1
		158				

Report Criteria:

Billing.Service No = 1

Customer.Customer Type = Commercial, Industrial, Residential

Borough of Royersford

Table Lists - Master Billing List - Numeric

Page: 1
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Report Criteria:

Billing.Service No = 1

Customer.Customer Type = Industrial, Residential

Cust No	Name	Customer Type	Group Code	Service No	Description	Unit/Share
128611137	Lewis Group Ltd. Partnership	Industrial	None	1	SEWER	1
128619292	Giftwares Co Inc	Industrial	None	1	SEWER	1
128619407	Specialty Chemical Systems Inc	Industrial	None	1	SEWER	1
128619759	Accumetrics Limited	Industrial	None	1	SEWER	1
128619773	Accumetrics Limited	Industrial	None	1	SEWER	1
128620339	Nelson's Ice Cream Inc.	Industrial	None	1	SEWER	1
128620858	American Machine & Tool Co.	Industrial	None	1	SEWER	1
129486532	A.C. Miller Concrete Company	Industrial	None	1	SEWER	1
129651213	Borough of Royersford	Industrial	None	1	SEWER	1
129709754	Royersford Spring Company	Industrial	None	1	SEWER	1
129784885	Advanced Fluid Systems Inc	Industrial	None	1	SEWER	1
11						

Borough of Royersford

Table Lists - Master Billing List - Numeric

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Cust No	Name	Customer Type	Group Code	Service No	Description	Unit/Share
J25581487	Sakal, Brian J	Residential	None	1	SEWER	1
J25581852	Barbara Berman Ricci	Residential	None	1	SEWER	1
J25590276	Tallman, William	Residential	None	1	SEWER	1
J25596441	Tarantino, Joseph	Residential	None	1	SEWER	1
J25635087	Benson, Merrill G	Residential	None	1	SEWER	1
J25760044	Blamey, Chad & Katrin	Residential	None	1	SEWER	1
J25762972	Whitmore, Andrew	Residential	None	1	SEWER	1
J25807684	Mecca, Jessica	Residential	None	1	SEWER	1
J25824139	Gerber, Jenna	Residential	None	1	SEWER	1
J25859012	Creciun, Peter	Residential	None	1	SEWER	1
J25869156	Seiders, Lester & Monica	Residential	None	1	SEWER	1
J25879108	Chesterview Apartments	Residential	None	1	SEWER	1
J25930898	US Bank NA	Residential	None	1	SEWER	1
J25948684	Findley, Nicole M	Residential	None	1	SEWER	1
J25987108	Craft, Elena	Residential	None	1	SEWER	1
J26021179	John McDonald & Karlyn Eyre	Residential	None	1	SEWER	1
J26043841	Blanche, Camile	Residential	None	1	SEWER	1
J26160869	Hirst, Sharon A	Residential	None	1	SEWER	1
J26161459	John Marlatt & Rebecca Gardner	Residential	None	1	SEWER	1
J26204967	Niemczuk, Joseph W	Residential	None	1	SEWER	1
J26223333	Weiss, Joseph	Residential	None	1	SEWER	1
J26239376	C&R Property Management LLC	Residential	None	1	SEWER	1
J26300278	Millard, Barry & Sheryl	Residential	None	1	SEWER	1
J26310954	Nevin, Sean	Residential	None	1	SEWER	1
J26326843	Davis, Jeff	Residential	None	1	SEWER	1
J26340238	Jacobs, Jamie	Residential	None	1	SEWER	1
J26352002	Slifer, Richard	Residential	None	1	SEWER	1
J26353432	Lynch, Heather	Residential	None	1	SEWER	1
J26380250	Tallman, William	Residential	None	1	SEWER	1
J26381130	Stem, Matt & Heather	Residential	None	1	SEWER	1
J26403078	Petaccio, Andrea	Residential	None	1	SEWER	1
J26630702	O'Donnell, Kaitlyn	Residential	None	1	SEWER	1
J26660253	Ilyas, Asif	Residential	None	1	SEWER	1
J26713911	Hernandez, S & Murphy, M	Residential	None	1	SEWER	1
J26746591	Gieske and Niemann LLC	Residential	None	1	SEWER	1
J26875659	Speck, Erin	Residential	None	1	SEWER	1
J26880804	Raser, Randy	Residential	None	1	SEWER	1
J26909682	Perez, Waldemar & Aracelis	Residential	None	1	SEWER	1
J26969219	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

Borough of Pottstown

Table Lists - Customer EDU Count Sewer UP

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:				40
22				
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:				26
7				
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:				32
3				
UP Residential				
10140863.02	MILLS, LUCAS	863 FARMINGTON AVE	UP Residential	1
10140871.01	POLLOCK, ANTHONY FILLMAN & BRENDA	871 FARMINGTON AVE	UP Residential	1

Borough of Pottstown

Table Lists - Customer EDU Count Sewer UP

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	JORGENSEN, 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	SEETER, DANIEL	1052 FALLBROOK LN	UP Residential	1
42071513.04	ROMANO, DANIEL & SARA	1513 CLOVER HILL RD	UP Residential	1
42081600.02	GOMEZ, ODETTE	1600 APPLGATE LN	UP Residential	1
42081601.01	RODRIGUEZ, RUTH & JUAN	1601 APPLGATE LN	UP Residential	1
42081602.02	EGARIAN, CHRISTOPHER	1602 APPLGATE LN	UP Residential	1
42081604.01	LAWLOR, CARL & LORETTA	1604 APPLGATE LN	UP Residential	1
42081606.01	COHEN, SIDNEY & RUTH	1606 APPLGATE LN	UP Residential	1
42081608.01	ROCHA, WILL & CARMEN	1608 APPLGATE LN	UP Residential	1
42081609.01	EVANS, GARETH	1609 APPLGATE LN	UP Residential	1
42081610.01	DUNKEL, CAROL	1610 APPLGATE LN	UP Residential	1
42081611.02	SORG, GREGORY & TRICIA	1611 APPLGATE LN	UP Residential	1
42081612.01	MANCINI, MICHAEL & AMIE	1612 APPLGATE 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

Borough of Pottstown

Table Lists - Customer EDU Count Sewer UP

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.pottsmmerc.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 POTTS GROVE — 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, Supporting local journalism PFM, insisted during Monday's meeting that the firm "did not make a recommendation. We're not trying to sell this system."

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.

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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. Only 99¢ for the first 3 months!

"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 senior 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.

Paretti pointed 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."

— 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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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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V₂ 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 *Penalty

Billing Summary By Class

Class	# of Units	# of Accounts	Consumption charges	Fixed charges	Special charges	Unit charges	Taxes	Prior Due	Total Billed	*Penalty
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

	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

Billing Report - 1

Valley 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	
		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
01	98	\$31,793.07	\$0.00	\$0.00	\$0.00	\$0.00	\$7,493.77	\$39,286.84	1,308.00
02	227	\$89,098.00	\$0.00	\$0.00	\$0.00	\$0.00	\$11,780.00	\$100,878.00	5,375.00
03	180	\$66,337.00	\$0.00	\$0.00	\$0.00	\$0.00	\$7,045.26	\$73,382.26	3,734.00
04	373	\$140,804.30	\$0.00	\$0.00	\$0.00	\$0.00	\$12,388.59	\$153,192.89	8,152.00
05	128	\$45,371.52	\$0.00	\$0.00	\$0.00	\$0.00	\$3,462.92	\$48,834.44	2,402.00
06	79	\$29,618.51	\$0.00	\$0.00	\$0.00	\$0.00	\$1,527.02	\$31,145.53	1,676.00
A	507	\$168,878.38	\$0.00	\$0.00	\$0.00	\$0.00	-\$1,009.62	\$167,868.76	7,332.00
B	522	\$156,120.45	\$0.00	\$0.00	\$0.00	\$0.00	\$53,216.98	\$209,337.43	1,346.00
C	662	\$191,212.44	\$0.00	\$0.00	\$0.00	\$0.00	\$96,144.83	\$287,357.27	1,172.00
EF	364	\$92,570.36	\$0.00	\$0.00	\$0.00	\$0.00	\$36,930.04	\$129,500.40	436.00
WC	9	\$3,446.52	\$0.00	\$0.00	\$0.00	\$0.00	\$91.36	\$3,537.88	218.00
	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

Bill ID: 20-3-30 Bill Date: 03/30/2020 Due Date: 04/30/2020

Service Charge

Rate

Current Charge

Prior Due

Total Billed

*Penalty

Billing Summary By Class

Class	# of Units # of Accounts	Consumption charges	Fixed charges	Special charges	Unit charges	Taxes	Prior Due	Total Billed	*Penalty
CH	0.00	6	\$1,903.57	\$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	\$4,543.43	\$62,377.91	1,636.00
DAY	0.00	2	\$2,006.87	\$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	-\$967.10	\$10,817.99	27.00
MH	0.00	4	\$1,087.76	\$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	\$224,214.75	\$1,168,156.69	31,458.00
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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

Billing Report - 1

Valley 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	
District	Accounts	Metered Sewer		Sewer		Trash		Water		Total			
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SCH	0.00 2 \$2026.80 169.00	0.00 1 \$627.00 0.00	0.00 1 \$627.00 0.00	0.00 1 \$627.00 0.00	0.00 1 \$627.00 0.00	0.00 0 \$0.00 0.00	0.00 0 \$0.00 0.00	0.00 2 \$1420.30 169.00	0.00 2 \$1420.30 169.00	0.00 3 \$4074.10 338.00	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	0.00 1,459 \$332476.82 526.00	0.00 1,459 \$332476.82 526.00	0.00 1,459 \$332476.82 526.00	1.00 2,770 \$180883.59 0.00	1.00 2,770 \$180883.59 0.00	0.00 1,671 \$171213.53 16,491.00	0.00 1,671 \$171213.53 16,491.00	1.00 3,169 \$1022633.81 33,459.00	1.00 3,169 \$1022633.81 33,459.00		

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03	180	\$66,337.00	\$0.00	\$0.00	\$0.00	\$0.00	\$7,045.26	\$73,382.26	3,734.00
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B	522	\$156,120.45	\$0.00	\$0.00	\$0.00	\$0.00	\$53,216.98	\$209,337.43	1,346.00
C	662	\$191,212.44	\$0.00	\$0.00	\$0.00	\$0.00	\$96,144.83	\$287,357.27	1,172.00
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	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

**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.

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.

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").











Brewster Road PS-306 East Brewster Rd.



Brewster Road PS-306 East Brewster Rd.



Brewster Road Booster PS-171 East Brewster Rd.



Brewster Road Booster PS-171 East Brewster Rd.



Fisher Heights PS-2019 William Flynn Highway



Fisher Heights PS-2019 William Flynn Highway



Center Avenue PS-120 Center Ave.



Center Avenue PS-120 Center Ave.











Pullman Center PS-1A Armco Dr.



Pullman Center PS-1A Armco Dr.



Pullman Center PS-1A Armco Dr.



Pullman Center PS-1A Armco Dr.

BUTLER AREA SEWER AUTHORITY

STATEMENTS OF NET POSITION

JULY 31, 2019 AND 2018

	2019	2018
Assets		
Current assets:		
Cash and cash equivalents	\$ 7,042,419	\$ 7,215,921
Investments:		
Trusteed accounts	6,330,647	9,735,505
Other	2,912,000	2,931,000
Accounts receivable	1,965,646	1,980,962
Unbilled sewer receivable	896,600	881,700
Total current assets	19,147,312	22,745,088
Non-current assets:		
Unamortized bond insurance, net of accumulated amortization of \$0 and \$191,382, respectively	-	65,618
Capital assets, not being depreciated	1,104,902	5,120,163
Capital assets, net of accumulated depreciation	65,468,112	60,624,883
Total capital assets	66,573,014	65,745,046
Total non-current assets	66,573,014	65,810,664
Total Assets	85,720,326	88,555,752
Deferred Outflows of Resources		
Deferred charge on refunding	1,141,032	1,234,161
Liabilities		
Current liabilities:		
Vouchers payable	464,040	630,703
Accrued expenses	934,263	945,966
Current maturities of bonds payable	1,765,000	1,710,000
Current portion of notes payable	612,762	601,533
Total current liabilities	3,776,065	3,888,202
Non-current liabilities:		
Bonds payable, net of unamortized discount and premium	36,195,719	37,955,761
Notes payable	8,438,293	9,051,055
OPEB liability	4,708,844	4,524,282
Total non-current liabilities	49,342,856	51,531,098
Total Liabilities	53,118,921	55,419,300
Net Position		
Net investment in capital assets	21,450,874	22,641,176
Restricted	5,582,045	4,820,805
Unrestricted	6,709,518	6,908,632
Total Net Position	\$ 33,742,437	\$ 34,370,613

See accompanying notes to financial statements.

BUTLER AREA SEWER AUTHORITY

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

YEARS ENDED JULY 31, 2019 AND 2018

	2019	2018
Operating Revenues:		
Sewer charges - non-industrial waste	\$ 9,867,981	\$ 9,926,794
Sewer charges - industrial waste	308,999	344,806
Other operating fees and charges	128,446	144,851
Total operating revenues	10,305,426	10,416,451
Operating Expenses:		
Operations and maintenance	5,863,067	5,443,823
Administration	1,026,650	1,114,692
Depreciation	3,476,093	3,293,913
Total operating expenses	10,365,810	9,852,428
Operating Income (Loss)	(60,384)	564,023
Non-Operating Revenues (Expenses):		
Interest income	437,487	385,688
Interest expense	(1,348,163)	(1,415,565)
Bond issuance costs	-	(158,390)
Unrealized gain (loss) on investments	8,978	(3,174)
Loss on disposal of capital assets	(10,918)	-
Amortization	(70,576)	(70,575)
Total non-operating revenues (expenses)	(983,192)	(1,262,016)
Income (Loss) Before Capital Contributions	(1,043,576)	(697,993)
Capital Contributions:		
Tap-in fees	125,406	195,156
Developer contribution revenue	289,994	-
Total capital contributions	415,400	195,156
Net Income (Loss)	(628,176)	(502,837)
Net Position:		
Beginning of year	34,370,613	34,873,450
End of year	\$ 33,742,437	\$ 34,370,613

See accompanying notes to financial statements.

BUTLER AREA SEWER AUTHORITY

STATEMENTS OF CASH FLOWS

YEARS ENDED JULY 31, 2019 AND 2018

	2019	2018
Cash Flows From Operating Activities:		
Sewer charges and fees	\$ 10,305,842	\$ 10,498,330
Operations and maintenance	(5,856,871)	(4,807,949)
Administrative expenses	(1,026,650)	(1,114,692)
Net cash provided by (used in) operating activities	3,422,321	4,575,689
Cash Flows From Capital and Related Financing Activities:		
Tap-in fees	125,406	195,156
Proceeds from bonds payable	-	11,320,000
Principal paid on capital debt	(2,311,533)	(13,404,251)
Interest paid on capital debt	(1,255,034)	(1,489,949)
Payments related to the acquisition, construction, or improvement of capital assets	(4,024,985)	(3,773,677)
Net cash provided by (used in) capital and related financing activities	(7,466,146)	(7,152,721)
Cash Flows From Investing Activities:		
Interest and dividends	437,487	385,688
Proceeds from sale (purchase) of long-term investments	3,432,836	2,554,056
Net cash provided by (used in) investing activities	3,870,323	2,939,744
Net Increase (Decrease) in Cash and Cash Equivalents	(173,502)	362,712
Cash and Cash Equivalents:		
Beginning of year	7,215,921	6,853,209
End of year	\$ 7,042,419	\$ 7,215,921
Reconciliation of Operating Income (Loss) to Net Cash and Cash Equivalents Provided by (Used in) Operating Activities:		
Operating income (loss)	\$ (60,384)	\$ 564,023
Adjustments to reconcile operating income (loss) to cash and cash equivalents provided by (used in) operating activities:		
Depreciation	3,476,093	3,293,913
Change in assets and liabilities:		
Accounts and unbilled sewer receivables	416	81,879
Vouchers payable and accrued expenses	(178,366)	462,117
OPEB liability	184,562	173,757
Total adjustments	3,482,705	4,011,666
Net cash provided by (used in) operating activities	\$ 3,422,321	\$ 4,575,689
Non-Cash Items:		
Developer contributions	\$ 289,994	\$ -

See accompanying notes to financial statements.

BUTLER AREA SEWER AUTHORITY

NOTES TO FINANCIAL STATEMENTS

YEARS ENDED JULY 31, 2019 AND 2018

assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs.

The Authority has the following recurring fair value measurements as of July 31, 2019 and 2018:

- U.S. Treasury securities of \$0 and \$1,773,634 are valued using quoted market prices (Level 1 inputs), respectively.

4. Capital Assets

A summary of changes in capital assets for the years ended July 31, 2019 and 2018 follows:

	Balance at August 1, 2018	Additions/ Transfers	Deletions/ Transfers	Balance at July 31, 2019
Land	\$ 821,425	\$ -	\$ -	\$ 821,425
Construction in progress	4,298,738	126,068	(4,141,329)	283,477
Capital assets, not being depreciated	<u>\$ 5,120,163</u>	<u>\$ 126,068</u>	<u>\$ (4,141,329)</u>	<u>\$ 1,104,902</u>
Vehicles	\$ 878,276	\$ -	\$ -	\$ 878,276
Sewer system	58,963,698	802,588	-	59,766,286
Pump stations	37,655,954	695,268	(87,344)	38,263,878
Plant	30,640,188	6,832,384	(871,980)	36,600,592
Capital assets, being depreciated	128,138,116	8,330,240	(959,324)	135,509,032
Less: accumulated depreciation	<u>(67,513,233)</u>	<u>(3,476,093)</u>	<u>948,406</u>	<u>(70,040,920)</u>
Capital assets, net of accumulated depreciation	<u>\$ 60,624,883</u>	<u>\$ 4,854,147</u>	<u>\$ (10,918)</u>	<u>\$ 65,468,112</u>

BUTLER AREA SEWER AUTHORITY

NOTES TO FINANCIAL STATEMENTS

YEARS ENDED JULY 31, 2019 AND 2018

	Balance at August 1, 2017	Additions/ Transfers	Deletions/ Transfers	Balance at July 31, 2018
Land	\$ 821,425	\$ -	\$ -	\$ 821,425
Construction in progress	741,153	3,590,676	(33,091)	4,298,738
Capital assets, not being depreciated	<u>\$ 1,562,578</u>	<u>\$ 3,590,676</u>	<u>\$ (33,091)</u>	<u>\$ 5,120,163</u>
Vehicles	\$ 836,280	\$ 41,996	\$ -	\$ 878,276
Sewer system	58,955,538	8,160	-	58,963,698
Pump stations	37,570,737	98,817	(13,600)	37,655,954
Plant	30,609,469	67,119	(36,400)	30,640,188
Capital assets, being depreciated	127,972,024	216,092	(50,000)	128,138,116
Less: accumulated depreciation	<u>(64,269,320)</u>	<u>(3,293,913)</u>	<u>50,000</u>	<u>(67,513,233)</u>
Capital assets, net of accumulated depreciation	<u>\$ 63,702,704</u>	<u>\$ (3,077,821)</u>	<u>\$ -</u>	<u>\$ 60,624,883</u>

The \$126,068 and \$3,590,676 of additions to construction in progress at July 31, 2019 and 2018, respectively, relates to recent Authority projects, which include the Negley Avenue Pump Station Replacement Project, Grit Building MCC Replacement Project, Headworks Improvement Project, Sludge Dewatering Improvement Project, Primary Tank 1 and 2 Improvements, the South Traveling Bridge Improvements, Center Avenue Pump Station Improvement, Rocklick Pump Station Replacement Project, and the North Traveling Bridge Improvements.

5. Debt

Bonds Payable

During 2010, the Authority issued Sewer Revenue Bonds, Series of 2010 (2010 Bonds), in the amount of \$20,200,000 to finance various projects of the Authority, fund a deposit to the Debt Service Reserve Fund, and pay costs related to issuance of the bonds. A portion of these bonds was defeased during the year ended July 31, 2013; and \$9,345,000 was refunded during the year ended July 31, 2016. The 2010 Bonds matured in 2019.

During 2013, the Authority issued Sewer Revenue Bonds, Series of 2013 (2013 Bonds) in the amount of \$10,000,000, the proceeds of which were used to partially advance refund the 2010 Bonds. As a result, \$8,315,000 of the 2010 Bonds were considered defeased and the liability for these bonds has been removed from the statement of net position. In July 2016,

BUTLER AREA SEWER AUTHORITY

STATEMENTS OF NET POSITION

JULY 31, 2021 AND 2020

	2021	2020
Assets		
Current assets:		
Cash and cash equivalents	\$ 9,682,187	\$ 7,160,047
Investments:		
Trusteed accounts	7,490,655	6,555,331
Other	-	2,699,000
Accounts receivable	2,139,656	2,093,796
Unbilled sewer receivable	944,700	906,400
Total current assets	20,257,198	19,414,574
Non-current assets:		
Capital assets, not being depreciated	1,181,850	1,031,065
Capital assets, net of accumulated depreciation	59,258,482	62,139,662
Total capital assets	60,440,332	63,170,727
Total non-current assets	60,440,332	63,170,727
Total Assets	80,697,530	82,585,301
Deferred Outflows of Resources		
Deferred charge on refunding	954,774	1,047,903
Liabilities		
Current liabilities:		
Vouchers payable	178,832	73,500
Accrued expenses	955,663	931,434
Current maturities of bonds payable	1,760,000	1,805,000
Current portion of notes payable	635,854	624,201
Total current liabilities	3,530,349	3,434,135
Non-current liabilities:		
Bonds payable, net of unamortized discount and premium	33,520,787	34,688,602
Notes payable	7,178,238	7,814,092
OPEB liability	4,264,068	4,169,524
Total non-current liabilities	44,963,093	46,672,218
Total Liabilities	48,493,442	50,106,353
Deferred Inflows of Resources		
Deferred inflows of resources for OPEB	411,269	514,086
Net Position		
Net investment in capital assets	18,300,227	19,633,450
Restricted	7,490,655	6,208,616
Unrestricted	6,956,711	7,170,699
Total Net Position	\$ 32,747,593	\$ 33,012,765

See accompanying notes to financial statements.

BUTLER AREA SEWER AUTHORITY

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

YEARS ENDED JULY 31, 2021 AND 2020

	2021	2020
Operating Revenues:		
Sewer charges - non-industrial waste	\$ 10,352,097	\$ 10,069,349
Sewer charges - industrial waste	340,654	304,051
Other operating fees and charges	144,273	203,150
Total operating revenues	10,837,024	10,576,550
Operating Expenses:		
Operations and maintenance	5,026,355	5,372,404
Administration	1,113,770	1,105,996
Depreciation	3,685,849	3,695,178
Total operating expenses	9,825,974	10,173,578
Operating Income (Loss)	1,011,050	402,972
Non-Operating Revenues (Expenses):		
Interest income	196,049	281,165
Interest expense	(1,251,394)	(1,252,308)
Bond issuance costs	(423,655)	(244,628)
Loss on disposal of capital assets	(3,275)	(3,292)
Amortization	74,282	73
Total non-operating revenues (expenses)	(1,407,993)	(1,218,990)
Income (Loss) Before Capital Contributions	(396,943)	(816,018)
Capital Contributions:		
Tap-in fees	131,771	86,346
Total capital contributions	131,771	86,346
Net Income (Loss)	(265,172)	(729,672)
Net Position:		
Beginning of year	33,012,765	33,742,437
End of year	\$ 32,747,593	\$ 33,012,765

See accompanying notes to financial statements.

BUTLER AREA SEWER AUTHORITY

STATEMENTS OF CASH FLOWS

YEARS ENDED JULY 31, 2021 AND 2020

	2021	2020
Cash Flows From Operating Activities:		
Sewer charges and fees	\$ 10,752,864	\$ 10,438,600
Operations and maintenance	(4,905,067)	(5,791,007)
Administrative expenses	(1,113,770)	(1,105,996)
Net cash provided by (used in) operating activities	4,734,027	3,541,597
Cash Flows From Capital and Related Financing Activities:		
Tap-in fees	131,771	86,346
Proceeds from bonds payable	16,825,000	9,910,000
Principal paid on capital debt	(19,579,201)	(12,062,762)
Interest paid on capital debt	(590,453)	(1,330,851)
Payments related to the acquisition, construction, or improvement of capital assets	(958,729)	(296,183)
Net cash provided by (used in) capital and related financing activities	(4,171,612)	(3,693,450)
Cash Flows From Investing Activities:		
Interest and dividends	196,049	281,165
Proceeds from sale (purchase) of long-term investments	1,763,676	(11,684)
Net cash provided by (used in) investing activities	1,959,725	269,481
Net Increase (Decrease) in Cash and Cash Equivalents	2,522,140	117,628
Cash and Cash Equivalents:		
Beginning of year	7,160,047	7,042,419
End of year	\$ 9,682,187	\$ 7,160,047
Reconciliation of Operating Income (Loss) to Net Cash and Cash Equivalents Provided by (Used in) Operating Activities:		
Operating income (loss)	\$ 1,011,050	\$ 402,972
Adjustments to reconcile operating income (loss) to cash and cash equivalents provided by (used in) operating activities:		
Depreciation	3,685,849	3,695,178
Change in assets and liabilities:		
Accounts and unbilled sewer receivables	(84,160)	(137,950)
Vouchers payable and accrued expenses	129,561	(393,369)
OPEB liability	94,544	(539,320)
Deferred inflows of resources - OPEB	(102,817)	514,086
Total adjustments	3,722,977	3,138,625
Net cash provided by (used in) operating activities	\$ 4,734,027	\$ 3,541,597

See accompanying notes to financial statements.

BUTLER AREA SEWER AUTHORITY

NOTES TO FINANCIAL STATEMENTS

YEARS ENDED JULY 31, 2021 AND 2020

significant unobservable inputs. The Authority has no assets as of July 31, 2021 and 2020 requiring such valuation.

4. Capital Assets

A summary of changes in capital assets for the years ended July 31, 2021 and 2020 are as follows:

	Balance at August 1, 2020	Additions/ Transfers	Deletions/ Transfers	Balance at July 31, 2021
Land	\$ 821,425	\$ -	\$ -	\$ 821,425
Construction in progress	209,640	150,785	-	360,425
Capital assets, not being depreciated	<u>\$ 1,031,065</u>	<u>\$ 150,785</u>	<u>\$ -</u>	<u>\$ 1,181,850</u>
Vehicles	\$ 864,336	\$ 34,318	\$ (47,502)	\$ 851,152
Sewer system	59,740,751	69,024	(221,188)	59,588,587
Pump stations	38,323,993	76,156	-	38,400,149
Plant	36,584,219	628,446	(18,228)	37,194,437
Capital assets, being depreciated	135,513,299	807,944	(286,918)	136,034,325
Less: accumulated depreciation	<u>(73,373,637)</u>	<u>(3,685,849)</u>	<u>283,643</u>	<u>(76,775,843)</u>
Capital assets, net of accumulated depreciation	<u>\$ 62,139,662</u>	<u>\$ (2,877,905)</u>	<u>\$ (3,275)</u>	<u>\$ 59,258,482</u>
Total capital assets, net	<u>\$ 63,170,727</u>	<u>\$ (2,727,120)</u>	<u>\$ (3,275)</u>	<u>\$ 60,440,332</u>

BUTLER AREA SEWER AUTHORITY

NOTES TO FINANCIAL STATEMENTS

YEARS ENDED JULY 31, 2021 AND 2020

	Balance at August 1, 2019	Additions/ Transfers	Deletions/ Transfers	Balance at July 31, 2020
Land	\$ 821,425	\$ -	\$ -	\$ 821,425
Construction in progress	283,477	124,548	(198,385)	209,640
Capital assets, not being depreciated	<u>\$ 1,104,902</u>	<u>\$ 124,548</u>	<u>\$ (198,385)</u>	<u>\$ 1,031,065</u>
Vehicles	\$ 878,276	\$ 42,113	\$ (56,053)	\$ 864,336
Sewer system	59,766,286	6,907	(32,442)	59,740,751
Pump stations	38,263,878	60,115	-	38,323,993
Plant	36,600,592	260,885	(277,258)	36,584,219
Capital assets, being depreciated	135,509,032	370,020	(365,753)	135,513,299
Less: accumulated depreciation	<u>(70,040,920)</u>	<u>(3,695,178)</u>	<u>362,461</u>	<u>(73,373,637)</u>
Capital assets, net of accumulated depreciation	<u>\$ 65,468,112</u>	<u>\$ (3,325,158)</u>	<u>\$ (3,292)</u>	<u>\$ 62,139,662</u>
Total capital assets, net	<u><u>\$ 66,573,014</u></u>	<u><u>\$ (3,200,610)</u></u>	<u><u>\$ (201,677)</u></u>	<u><u>\$ 63,170,727</u></u>

5. Debt

Bonds Payable

During 2013, the Authority issued Sewer Revenue Bonds, Series of 2013 (2013 Bonds) in the amount of \$10,000,000, the proceeds of which were used to partially advance refund the 2010 Bonds. The interest rates of the 2013 Bonds vary between 2.00% and 3.50% and mature from 2016 to 2034. The refunding of the 2010 Bonds generated a deferred charge on refunding of \$1,323,253, which is amortized over the life of the 2013 Bonds. These Bonds were refunded during the year ended July 31, 2020.

During October 2015, the Authority issued Sewer Revenue Bonds, Series of 2015 (2015 Bonds), in the amount of \$9,965,000 to advance refund \$9,345,000 of the 2010 Bonds, and pay costs related to the issuance and sale of the bonds. The interest rates vary between 2.00% and 4.00% and mature from 2016 to 2031. The refunding of the 2010 Bonds generated a deferred charge on refunding of \$399,230, which is amortized over the life of the 2015 Bonds. These Bonds were refunded during the year ended July 31, 2021.

BUTLER AREA SEWER AUTHORITY

STATEMENTS OF NET POSITION

JULY 31, 2022 AND 2021

	2022	2021
Assets		
Current assets:		
Cash and cash equivalents	\$ 9,469,165	\$ 9,682,187
Investments:		
Trusteed accounts	7,683,343	7,490,655
Accounts receivable	2,249,088	2,139,656
Unbilled sewer receivable	1,047,100	944,700
Total current assets	20,448,696	20,257,198
Non-current assets:		
Capital assets, not being depreciated	1,798,610	1,181,850
Capital assets, net of accumulated depreciation	56,591,725	59,258,482
Total capital assets	58,390,335	60,440,332
Total non-current assets	58,390,335	60,440,332
Total Assets	78,839,031	80,697,530
Deferred Outflows of Resources		
Deferred charge on refunding	861,645	954,774
Liabilities		
Current liabilities:		
Vouchers payable	316,085	178,832
Accrued expenses	782,037	955,663
Current maturities of bonds payable	1,825,000	1,760,000
Current portion of notes payable	647,724	635,854
Total current liabilities	3,570,846	3,530,349
Non-current liabilities:		
Bonds payable, net of unamortized discount and premium	31,621,505	33,520,787
Notes payable	6,530,514	7,178,238
OPEB liability	3,849,049	4,264,068
Total non-current liabilities	42,001,068	44,963,093
Total Liabilities	45,571,914	48,493,442
Deferred Inflows of Resources		
Deferred inflows of resources for OPEB	703,541	411,269
Net Position		
Net investment in capital assets	18,627,237	18,300,227
Restricted	7,683,343	7,490,655
Unrestricted	7,114,641	6,956,711
Total Net Position	\$ 33,425,221	\$ 32,747,593

See accompanying notes to financial statements.

BUTLER AREA SEWER AUTHORITY

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

YEARS ENDED JULY 31, 2022 AND 2021

	2022	2021
Operating Revenues:		
Sewer charges - non-industrial waste	\$ 10,561,806	\$ 10,352,097
Sewer charges - industrial waste	328,749	340,654
Other operating fees and charges	260,786	144,273
Total operating revenues	11,151,341	10,837,024
Operating Expenses:		
Operations and maintenance	5,330,364	5,026,355
Administration	920,487	1,113,770
Depreciation	3,725,042	3,685,849
Total operating expenses	9,975,893	9,825,974
Operating Income (Loss)	1,175,448	1,011,050
Non-Operating Revenues (Expenses):		
Interest income	213,880	196,049
Interest expense	(1,081,722)	(1,251,394)
Bond issuance costs	-	(423,655)
Loss on disposal of capital assets	-	(3,275)
Amortization	74,282	74,282
Total non-operating revenues (expenses)	(793,560)	(1,407,993)
Income (Loss) Before Capital Contributions	381,888	(396,943)
Capital Contributions:		
Tap-in fees	295,740	131,771
Total capital contributions	295,740	131,771
Net Income (Loss)	677,628	(265,172)
Net Position:		
Beginning of year	32,747,593	33,012,765
End of year	\$ 33,425,221	\$ 32,747,593

See accompanying notes to financial statements.

BUTLER AREA SEWER AUTHORITY

STATEMENTS OF CASH FLOWS

YEARS ENDED JULY 31, 2022 AND 2021

	2022	2021
Cash Flows From Operating Activities:		
Sewer charges and fees	\$ 10,939,509	\$ 10,752,864
Operations and maintenance	(5,489,484)	(4,905,067)
Administrative expenses	(920,487)	(1,113,770)
Net cash provided by (used in) operating activities	4,529,538	4,734,027
Cash Flows From Capital and Related Financing Activities:		
Tap-in fees	295,740	131,771
Proceeds from bonds payable	-	16,825,000
Principal paid on capital debt	(2,395,854)	(19,579,201)
Interest paid on capital debt	(988,593)	(590,453)
Payments related to the acquisition, construction, or improvement of capital assets	(1,675,045)	(958,729)
Net cash provided by (used in) capital and related financing activities	(4,763,752)	(4,171,612)
Cash Flows From Investing Activities:		
Interest and dividends	213,880	196,049
Proceeds from sale (purchase) of long-term investments	(192,688)	1,763,676
Net cash provided by (used in) investing activities	21,192	1,959,725
Net Increase (Decrease) in Cash and Cash Equivalents	(213,022)	2,522,140
Cash and Cash Equivalents:		
Beginning of year	9,682,187	7,160,047
End of year	\$ 9,469,165	\$ 9,682,187
Reconciliation of Operating Income (Loss) to Net Cash and Cash Equivalents Provided by (Used in) Operating Activities:		
Operating income (loss)	\$ 1,175,448	\$ 1,011,050
Adjustments to reconcile operating income (loss) to cash and cash equivalents provided by (used in) operating activities:		
Depreciation	3,725,042	3,685,849
Change in assets and liabilities:		
Accounts and unbilled sewer receivables	(211,832)	(84,160)
Vouchers payable and accrued expenses	(36,373)	129,561
OPEB liability	(415,019)	94,544
Deferred inflows of resources - OPEB	292,272	(102,817)
Total adjustments	3,354,090	3,722,977
Net cash provided by (used in) operating activities	\$ 4,529,538	\$ 4,734,027

See accompanying notes to financial statements.

BUTLER AREA SEWER AUTHORITY

NOTES TO FINANCIAL STATEMENTS

YEARS ENDED JULY 31, 2022 AND 2021

4. Capital Assets

A summary of changes in capital assets for the years ended July 31, 2022 and 2021 are as follows:

	Balance at August 1, 2021	Additions/ Transfers	Deletions/ Transfers	Balance at July 31, 2022
Land	\$ 821,425	\$ -	\$ -	\$ 821,425
Construction in progress	360,425	724,357	(107,597)	977,185
Capital assets, not being depreciated	1,181,850	724,357	(107,597)	1,798,610
Vehicles	851,152	534,043	(22,070)	1,363,125
Sewer system	59,588,587	7,242	(302,685)	59,293,144
Pump stations	38,400,149	94,140	(12,960)	38,481,329
Plant	37,194,437	422,860	(62,235)	37,555,062
Capital assets, being depreciated	136,034,325	1,058,285	(399,950)	136,692,660
Less: accumulated depreciation	(76,775,843)	(3,725,042)	399,950	(80,100,935)
Capital assets, net of accumulated depreciation	59,258,482	(2,666,757)	-	56,591,725
Total capital assets, net	\$ 60,440,332	\$ (1,942,400)	\$ (107,597)	\$ 58,390,335
	Balance at August 1, 2020	Additions/ Transfers	Deletions/ Transfers	Balance at July 31, 2021
Land	\$ 821,425	\$ -	\$ -	\$ 821,425
Construction in progress	209,640	150,785	-	360,425
Capital assets, not being depreciated	1,031,065	150,785	-	1,181,850
Vehicles	864,336	34,318	(47,502)	851,152
Sewer system	59,740,751	69,024	(221,188)	59,588,587
Pump stations	38,323,993	76,156	-	38,400,149
Plant	36,584,219	628,446	(18,228)	37,194,437
Capital assets, being depreciated	135,513,299	807,944	(286,918)	136,034,325
Less: accumulated depreciation	(73,373,637)	(3,685,849)	283,643	(76,775,843)
Capital assets, net of accumulated depreciation	62,139,662	(2,877,905)	(3,275)	59,258,482
Total capital assets, net	\$ 63,170,727	\$ (2,727,120)	\$ (3,275)	\$ 60,440,332

BUTLER AREA SEWER AUTHORITY
COMPARISON OF PROJECTED REVENUES AND EXPENSES FOR THE FISCAL YEAR
ENDED JULY 31, 2022 WITH THE AMENDED 2022-2023 BUDGET SUMMARY
(\$5 INCREASE PER EDU PER MONTH EFFECTIVE JULY 1, 2022, LAST RATE INCREASE EFFECTIVE 1/1/2020)

DESCRIPTIONS	(cash basis) ADOPTED 2021-2022 BUDGET SUMMARY	(Unaudited - cash basis) PROJECTED 7/31/22 REVENUES & EXPENSES	(cash basis) AMENDED 2022-2023 BUDGET SUMMARY
OPERATING REVENUES:			
Sewer Service Charges	\$ 10,194,250	\$ 10,442,240	\$ 11,791,250
Debt Surcharges	3,600	3,020	3,000
Industrial Waste Billing	320,200	343,480	365,900
Interest & Penalty Income	165,900	187,880	226,900
Sewer Tapping Fees	264,900	287,400	184,100
Inspection Fees	8,600	5,000	6,300
Sewer Connection Fees	1,650	4,050	2,850
Realty Transfer Inspection Fees	82,500	87,600	82,500
Other Income	174,300	180,490	89,200
TOTAL OPERATING REVENUES	11,215,900	11,541,160	12,752,000
OPERATING EXPENSES:			
Plant Wages	955,500	896,300	824,300
Plant Operation & Maintenance	1,038,400	984,950	1,050,900
Pump Station & Tank Wages	153,600	198,600	162,200
Pump Station & Tank Operation & Maintenance	302,780	308,960	322,900
Sewer Wages	651,200	651,400	668,100
Sewer Operation & Maintenance	156,800	82,240	139,300
Realty Transfer Inspections Wages	341,700	344,200	357,600
Realty Transfer Inspections Operation & Maintenance	11,700	9,830	12,000
Transportation	52,300	56,040	64,500
Pretreatment Wages	57,300	56,600	59,000
Pretreatment Expenses	9,800	12,290	8,900
Office Wages	343,700	342,500	355,500
Office Expenses	144,600	101,350	134,000
Administrative Wages	321,500	316,200	289,200
Administrative Expenses	184,250	152,560	233,150
Employment Benefits	1,275,400	1,206,660	1,283,300
Professional Services	187,200	166,530	229,120
TOTAL OPERATING EXPENSES	6,187,730	5,887,210	6,193,970
NET OPERATING REVENUES	5,028,170	5,653,950	6,558,030
OTHER EXPENSES & TRANSFERS:			
Capital Expenditures	1,382,870	1,202,780	1,468,260
Debt Service on Bonds	2,609,300	2,608,800	4,053,570
PENNVEST Principal & Interest	775,100	775,100	775,100
Transfer to Bond Improvement & Redemption Fund	260,900	812,350	261,100
TOTAL OTHER EXPENSES & TRANSFERS	5,028,170	5,399,030	6,558,030
INCREASE (DECREASE) IN REVENUE FUND BALANCE	\$ -	\$ 254,920	\$ -

Schedule 7.11

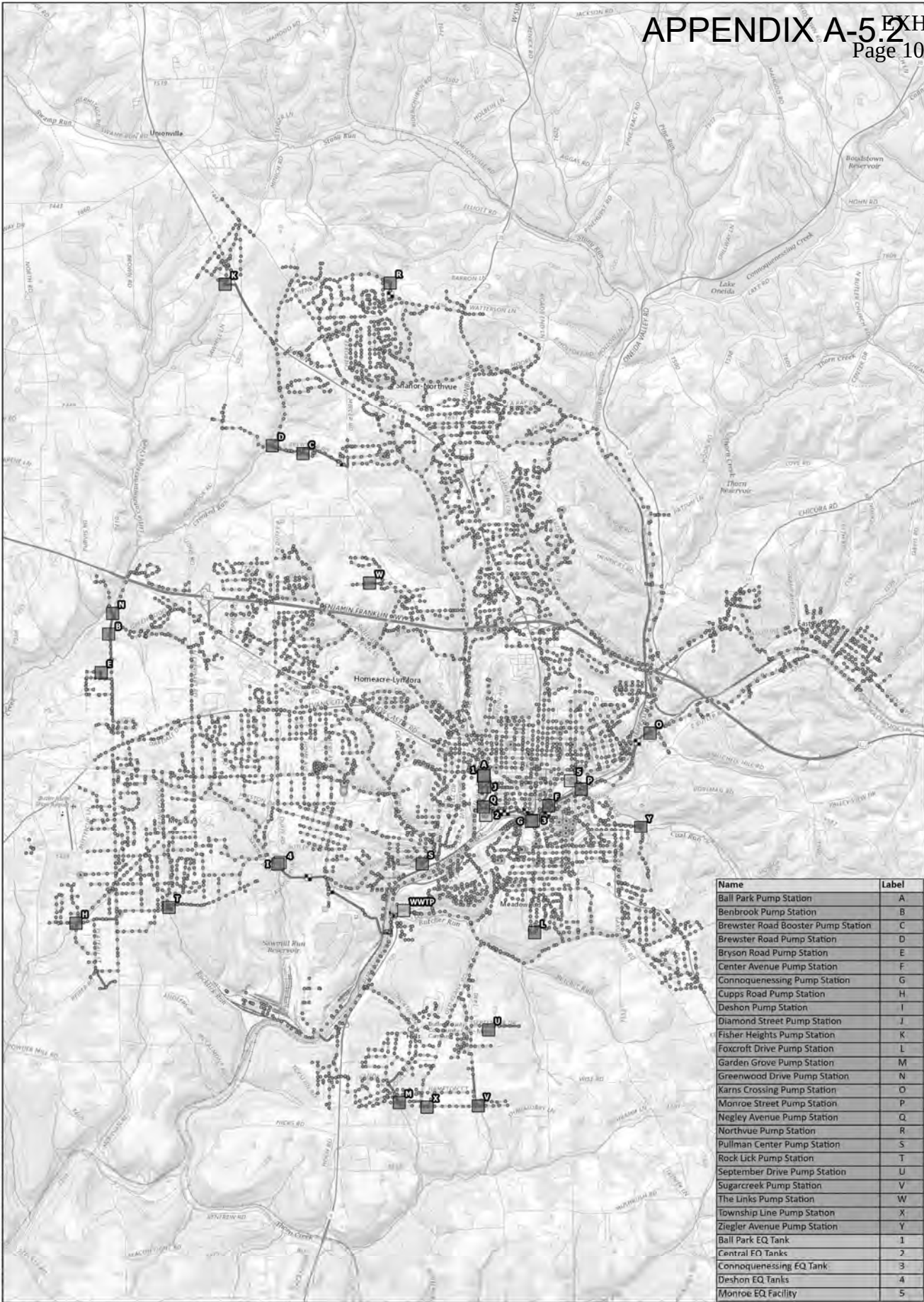
Capital Projects

Investment Project (IP) Budget Estimate

Project Name	2024	2025	2026	2027	2028
Collection System					
Arc Flash at Pumping Stations	\$300,000	\$0	\$0	\$0	\$0
Safety Improvements at Pumping Stations	\$250,000	\$500,000	\$0	\$0	\$0
Electrical, SCADA & Emergency Generator Improvements	\$0	\$0	\$1,500,000	\$1,500,000	\$1,500,000
NASSCO CCTV Entire System	\$0	\$0	\$1,500,000	\$1,500,000	\$0
NASSCO Manhole Inspection Entire System	\$0	\$0	\$300,000	\$250,000	\$0
Systemwide I/I Study	\$0	\$0	\$100,000	\$250,000	\$0
Rock Lick Pump Station Replacement	\$0	\$0	\$150,000	\$2,500,000	\$1,000,000
FBB System Improvements	\$4,500,000	\$2,500,000	\$0	\$0	\$0
GBB System Improvements	\$2,000,000	\$2,500,000	\$2,500,000	\$0	\$0
September Dr. Pumping Station Improvements	\$0	\$0	\$100,000	\$750,000	\$250,000
Major Pumping Station Improvements	\$0	\$0	\$1,000,000	\$2,000,000	\$2,000,000
Treatment Plant					
Flood Study & Flood Hazard Reinforcement	\$0	\$0	\$300,000	\$1,500,000	\$1,500,000
Arc Flash at Plant Facility	\$50,000	\$0	\$0	\$0	\$0
Pipe Tunnel Improvements	\$0	\$0	\$100,000	\$250,000	\$250,000
Primary tanks 3-4-5 Improvements	\$100,000	\$100,000	\$100,000	\$0	\$0
Safety Improvements	\$250,000	\$400,000	\$0	\$0	\$0
Electrical Improvements	\$0	\$0	\$1,000,000	\$1,000,000	\$0
Effluent Flow Metering	\$0	\$0	\$0	\$0	\$750,000
UV Disinfection	\$0	\$0	\$250,000	\$2,000,000	\$5,000,000
Secondary Clarifier Improvements	\$0	\$0	\$200,000	\$1,000,000	\$2,500,000
Trickling Filter Media Replacement	\$0	\$0	\$100,000	\$1,500,000	\$500,000
Compressed Air System Replacement	\$0	\$0	\$0	\$0	\$400,000
Site Security Improvement	\$0	\$50,000	\$700,000	\$0	\$0
IP Total	\$7,450,000	\$4,050,000	\$9,900,000	\$16,000,000	\$15,450,000
IP Grand Total					\$55,050,000

Recurring Project (RP) Budget Estimate

Capital Improvement	DSIC	2024	2025	2026	2027	2028
Mains - New		\$50,000	\$100,000	\$100,000	\$100,000	\$100,000
Mains - Replaced / Restored	YES	\$350,000	\$1,000,000	\$3,000,000	\$3,000,000	\$3,000,000
Mains - Unscheduled	YES	\$50,000	\$100,000	\$100,000	\$100,000	\$100,000
Mains - Relocated	YES	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Hydrants, Valves, and Manholes - New		\$10,000	\$100,000	\$100,000	\$100,000	\$100,000
Hydrants, Valves, and Manholes - Replaced	YES	\$20,000	\$500,000	\$500,000	\$500,000	\$500,000
Services and Laterals - New		\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Services and Laterals - Replaced	YES	\$50,000	\$200,000	\$200,000	\$200,000	\$200,000
ITS Equipment and Systems		\$10,000	\$50,000	\$50,000	\$50,000	\$50,000
SCADA Equipment and Systems		\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Security Equipment and Systems		\$25,000	\$100,000	\$100,000	\$100,000	\$25,000
Offices and Operations Centers		\$50,000	\$150,000	\$150,000	\$200,000	\$200,000
Vehicles		\$50,000	\$50,000	\$150,000	\$150,000	\$150,000
Tools, Equipment, and Safety		\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Process Plant Facilities and Equipment		\$250,000	\$750,000	\$750,000	\$750,000	\$750,000
RP Total		\$1,140,000	\$3,125,000	\$5,425,000	\$5,475,000	\$5,400,000
RP Grand Total						\$ 20,765,000



Name	Label
Ball Park Pump Station	A
Benbrook Pump Station	B
Brewster Road Booster Pump Station	C
Brewster Road Pump Station	D
Bryson Road Pump Station	E
Center Avenue Pump Station	F
Connoquenessing Pump Station	G
Cupps Road Pump Station	H
Deshon Pump Station	I
Diamond Street Pump Station	J
Fisher Heights Pump Station	K
Foxcroft Drive Pump Station	L
Garden Grove Pump Station	M
Greenwood Drive Pump Station	N
Karns Crossing Pump Station	O
Monroe Street Pump Station	P
Negley Avenue Pump Station	Q
Northvue Pump Station	R
Pullman Center Pump Station	S
Rock Lick Pump Station	T
September Drive Pump Station	U
Sugarcreek Pump Station	V
The Links Pump Station	W
Township Line Pump Station	X
Ziegler Avenue Pump Station	Y
Ball Park EQ Tank	1
Central EQ Tanks	2
Connoquenessing EQ Tank	3
Deshon EQ Tanks	4
Monroe EQ Facility	5

00.751.5

Miles

Mapping derived from data provided by Esri, USGS, BASA.

1/6/2023PM: CEHGIS: RBGQA: ALBR001358.0600

HRG

Herbert, Rowland & Grubb, Inc.

Engineering & Survey Services

An Employee-Owned Company

220 West Kensingers Drive
Suite 100
Cranberry Township, PA 16066
724.779.4777
hr-g-inc.com

EQ Tanks

Pump Station

WWTP

Air Release Valve

Effluent chamber

Flush Tank

Laundry

Manhole

Other

Wet Well

All Other Values

Private Sanitary Sewer

Public Sanitary Force Main

Public Sanitary Service

Butler Area Sewer Authority
Collection and Conveyance System
Butler County, Pennsylvania

Schedule 7.04(a)-1

Seller Effective Date Rates

BUTLER AREA SEWER AUTHORITY NOTICE OF CHANGE IN RATES EFFECTIVE JULY 1, 2022						
BILLING DISTRICT		ANNUAL BASE SEWER SERVICE RATE # (\$/EDU)	ANNUAL AREA SEWER DEBT SURCHARGE RATE (\$/EDU)	TOTAL PER YEAR (\$/EDU)	TOTAL PER QUARTER (\$/EDU)	TOTAL PER MONTH (\$/EDU)
BUTLER CITY	BC	516.00		516.00	129.00	43.00
BUTLER/SUMMIT	BS	516.00		516.00	129.00	43.00
BUTLER TOWNSHIP	BT	516.00		516.00	129.00	43.00
CENTER/LAGOON	CL	516.00		516.00	129.00	43.00
CENTER TOWNSHIP	CT	516.00		516.00	129.00	43.00
DESHON AREA	DA	516.00		516.00	129.00	43.00
EAST BUTLER	EB	516.00		516.00	129.00	43.00
HULL PLAN	HP	516.00		516.00	129.00	43.00
MERIDIAN AREA	MA	516.00		516.00	129.00	43.00
MERIDIAN/HEATHER	MH	516.00		516.00	129.00	43.00
NORTHWEST AREA	NW	516.00		516.00	129.00	43.00
OAK HILLS AREA	OH	516.00		516.00	129.00	43.00
Dutchtown Opt 1		516.00		516.00	129.00	43.00
Dutchtown Opt 2		516.00	432.00 *	948.00	237.00	79.00
Dutchtown Opt 3		516.00	576.00 **	1,092.00	273.00	91.00
SOUTH BUTLER	SB	516.00		516.00	129.00	43.00

Base rate increased by \$5.00 per month per EDU effective July 1, 2022 (last increase 1/1/2020).

* Surcharge effective January 1, 2011 (surcharge anticipated to be applied until December 31, 2035).

** Surcharge effective January 1, 2011 (surcharge anticipated to be applied until December 31, 2035).

For sewer services effective July 1, 2011, interest will be applied at 10% APR (5% APR on liens).

EDU = Equivalent Dwelling Unit (or Unit) average water usage of 4,000 gallons per month.

BASE SEWER SERVICE RATE FOR MULTI-FAMILY RESIDENTIAL UNITS:	TOTAL PER YEAR # (\$/EDU)	TOTAL PER QUARTER # (\$/EDU)	TOTAL PER MONTH # (\$/EDU)
For the first 25 Units or any part thereof	516.00	129.00	43.00
For the next 25 Units or any part thereof	505.60	126.40	42.13
For the next 25 Units or any part thereof	495.20	123.80	41.27
For the next 25 Units or any part thereof	484.80	121.20	40.40
For the next 25 Units or any part thereof	474.40	118.60	39.53
For the next 25 Units or any part thereof	464.00	116.00	38.67
For all Units over 150 or any part thereof	453.60	113.40	37.80

Schedule 7.04(a)-2

Seller Closing Rates

**BUTLER AREA SEWER AUTHORITY
NOTICE OF CHANGE OF RATES EFFECTIVE [CLOSING DATE]**

BILLING DISTRICT		ANNUAL BASE SEWER SERVICE RATE # (\$/EDU)	ANNUAL AREA SEWER DEBT SURCHARGE RATE (\$/EDU)	TOTAL PER YEAR (\$/EDU)	TOTAL PER QUARTER (\$/EDU)	TOTAL PER MONTH (\$/EDU)
BUTLER CITY	BC	546.00		546.00	136.50	45.50
BUTLER/SUMMIT	BS	546.00		546.00	136.50	45.50
BUTLER TOWNSHIP	BT	546.00		546.00	136.50	45.50
CENTER/LAGOON	CL	546.00		546.00	136.50	45.50
CENTER TOWNSHIP	CT	546.00		546.00	136.50	45.50
DESHON AREA	DA	546.00		546.00	136.50	45.50
EAST BUTLER	EB	546.00		546.00	136.50	45.50
HULL PLAN	HP	546.00		546.00	136.50	45.50
MERIDIAN AREA	MA	546.00		546.00	136.50	45.50
MERIDIAN/HEATHER	MH	546.00		546.00	136.50	45.50
NORTHWEST AREA	NW	546.00		546.00	136.50	45.50
OAK HILLS AREA	OH	546.00		546.00	136.50	45.50
Dutchtown Opt 1		546.00		546.00	136.50	45.50
Dutchtown Opt 2		546.00	432.00 *	978.00	244.50	81.50
Dutchtown Opt 3		546.00	576.00 **	1,122.00	280.50	93.50
SOUTH BUTLER	SB	546.00		546.00	136.50	45.50

Base rate increased by \$2.50 per month per EDU effective on [the Closing Date] (last increase July 1, 2022)

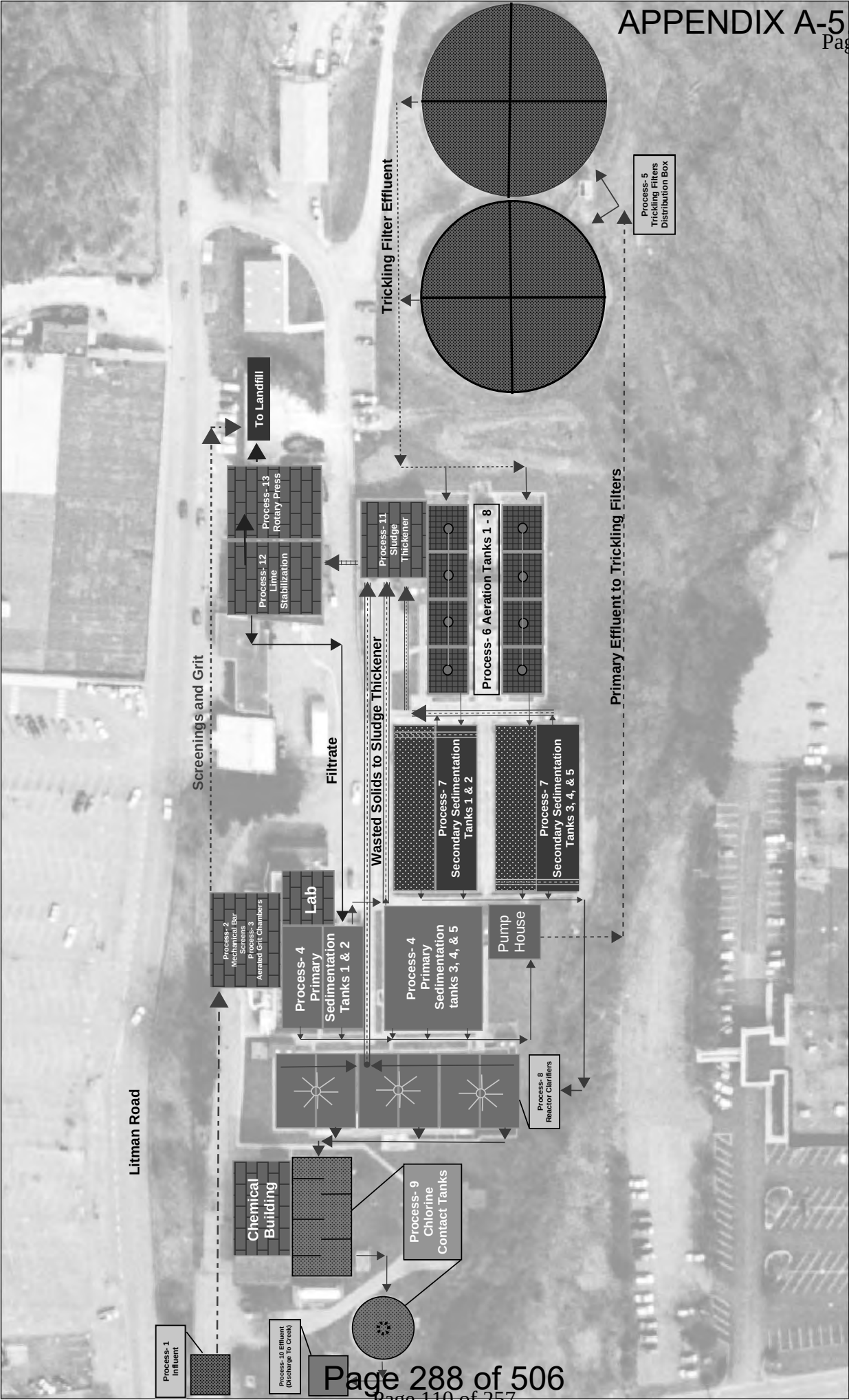
* Surcharge effective January 1, 2011 (surpassed anticipated to be applied until December 31, 2035)

** Surcharge effective January 1, 2011 (surpassed anticipated to be applied until December 31, 2035)

For sewer services effective July 1, 2011, interest will be applied at 10% APR (5% APR on liens)

EDU = Equivalent Dwelling Unit (or Unit) average water usage of 4,000 gallons per month

BASE SEWER SERVICE RATE FOR MULTI-FAMILY RESIDENTIAL UNITS:	TOTAL PER YEAR (\$/EDU)	TOTAL PER QUARTER (\$/EDU)	TOTAL PER MONTH (\$/EDU)
For the first 25 Units or any part thereof	546.00	136.50	45.50
For the next 25 Units or any part thereof	535.20	133.80	44.60
For the next 25 Units or any part thereof	524.40	131.10	43.70
For the next 25 Units or any part thereof	513.60	128.40	42.80
For the next 25 Units or any part thereof	502.80	125.70	41.90
For the next 25 Units or any part thereof	492.00	123.00	41.00
For all Units over 150 or any part thereof	481.20	120.30	40.10



	Butler, PA Data & Demographics (As of July 1, 2022)	Township Of Butler Data & Demographics (As of July 1, 2022)	Township Of Center Data & Demographics (As of July 1, 2022)	Township Of Summit Data & Demographics (As of July 1, 2022)	East Butler, PA Data & Demographics (As of July 1, 2022)	Township Of Oakland Data & Demographics (As of July 1, 2022)	Connoquenessing, PA Data & Demographics (As of July 1, 2022)	Township Of Penn Data & Demographics (As of July 1, 2022)
POPULATION								
Total Population	13,556	17,250	7,984	4,501	764	2,784	669	4,991
Population in Households	13,256	16,852	7,967	4,349	764	2,779	669	4,957
Population in Families	9,030	13,474	6,387	3,608	591	2,405	577	4,231
Population in Group Quarters ¹	300	398	17	152	0	5	0	34
Population Density	4,986	798	327	201	733	118	494	206
Diversity Index ²	29	15	14	16	12	9	10	11
INCOME								
Median Household Income	35,471	71,666	78,158	62,814	46,179	83,672	87,021	91,536
Average Household Income	56,239	97,062	100,769	74,304	59,676	110,559	140,598	119,807
% of Income for Mortgage ⁴	17%	15%	18%	16%	14%	16%	19%	20%
Per Capita Income	25,772	42,726	45,578	30,321	27,855	45,194	58,584	46,722
Wealth Index ⁵	35	100	104	51	40	121	198	158
HOUSING								
Total HU (Housing Units)	7,160	8,121	3,846	2,001	332	1,220	331	2,105
Owner Occupied HU	2,637	5,870	2,947	1,329	216	1,032	257	1,838
Renter Occupied HU	3,567	1,717	664	533	107	106	26	108
Vacant Housing Units	956	534	235	138	10	82	48	159
Median Home Value	110,987	199,790	260,444	186,972	125,463	247,152	319,048	343,917
Average Home Value	162,249	246,346	308,042	211,447	152,558	270,276	310,254	383,338
Housing Affordability Index ³	124	153	127	149	181	144	133	117
HOUSEHOLDS								
Total Households	6,204	7,587	3,611	1,863	322	1,138	283	1,946
Average Household Size	2	2	2	2	2	2	2	3
Family Households	2,997	4,793	2,263	1,283	190	844	210	1,408
Average Family Size	3	3	3	3	3	3	3	3

Golden State Water CO (Filer) CIK: 0000092116

AMERICAN STATES WATER CO (Filer) CIK: 0001056903

[Print Document](#) [View Excel Document](#)

10-K

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Summary of Significant Accounting Policies

12 Months Ended
Dec. 31, 2021

Accounting Policies [Abstract]

Summary of Significant Accounting Policies

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 262,800 customers, while BVESI distributes electricity in several San Bernardino County mountain communities in California serving approximately 24,700 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.

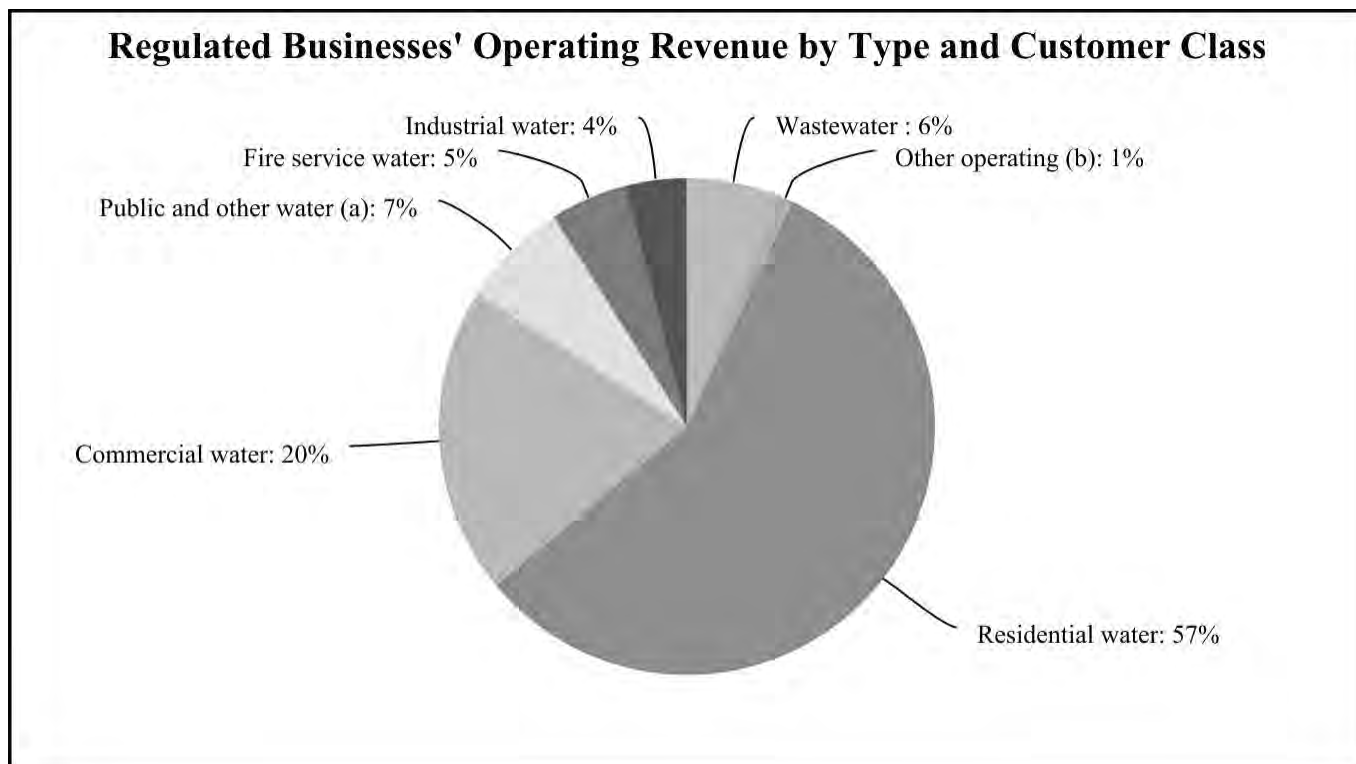
There is no direct regulatory oversight by the CPUC over AWR or the operations, rates or services provided by ASUS or the Military Utility Privatization Subsidiaries.

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 BVESI and ASUS using

The following chart depicts the allocation of the Company's Regulated Businesses' operating revenue of \$3,384 million by type, including a breakout of the total water services revenues by class of customer, for the year ended December 31, 2021:



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

Presented in the table below is the number of water and wastewater customers the Company served by class as of December 31, 2021, 2020 and 2019, which represents approximately 14 million people served as of December 31, 2021:

(In thousands)	2021		2020		2019	
	Water	Wastewater	Water	Wastewater	Water	Wastewater
Residential	2,972	245	2,948	236	2,914	215
Commercial	225	15	225	15	222	13
Fire service	52	—	50	—	49	—
Industrial	4	—	4	—	4	—
Public and other (a)	16	1	17	1	16	1
Total	3,269	261	3,244	252	3,205	229

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

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

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Artesian Water has two water service interconnection agreements with a neighboring utility, Chester Water Authority. One agreement, that expired on December 31, 2021, had a “take or pay” clause requiring us to purchase 3 million gallons per day. The other agreement is effective from January 1, 2022 through December 31, 2026, includes automatic five year renewal terms, unless terminated by either party, and has a “take or pay” clause requiring us to purchase water on a step down schedule through July 5, 2022, thereafter requiring us to purchase a minimum of 0.5 million gallons per day. Rates charged under this agreement are subject to change.

Artesian Water Maryland has one interconnection agreement with the Town of North East that has a “take or pay” clause requiring us to purchase a minimum of 35,000 gallons per day. The agreement extends through June 2024.

The minimum annual purchase commitments for all interconnection agreements for 2022 through 2026, calculated at the noticed rates, are as follows:

In thousands

2022	\$ 1,518
2023	759
2024	730
2025	702
2026	701
	<u>\$ 4,410</u>

Expenses for purchased water were \$4.3 million, \$4.3 million and \$4.2 million for 2021, 2020 and 2019, respectively.

Other Commitments

In March 2017, Artesian Water entered into a 3-year agreement with Worldwide Industries Corporation to clean and paint tanks in 2017, 2018 and 2019. Pursuant to the 3-year agreement, the expenditure committed in total for the years 2017 through 2019 was \$1.3 million. In 2020, Artesian Water entered into a short term agreement with Worldwide Industries Corporation to clean and paint a tank in 2020. Pursuant to the agreement, the expenditure in 2020 was \$0.1 million. In April 2021, Artesian Water entered into a 3-year agreement with Worldwide Industries Corporation effective July 1, 2021 to paint elevated water storage tanks. Pursuant to the agreement, the total expenditure for the three years is \$1.2 million. Tank painting expense for 2021, 2020 and 2019 was \$222,000, \$155,000, and \$447,000, 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 2022 through 2024 are as follows:

In thousands

2022	\$ 4,820
2023	8,430
2024	2,420
	<u>\$ 15,670</u>

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, 2021, Artesian Water was serving approximately 91,700 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, 2021, Artesian Wastewater was serving

approximately 3,200 customers, including one large industrial customer. Effective January 14, 2022, following the acquisition of T&E, the number of wastewater customers served more than doubled. All wastewater customers are located in Sussex County, Delaware.



For immediate release

Artesian Resources Corporation declares its 1st Quarter Common Stock Dividend for 2022

Newark, DE, January 25, 2022 – Artesian Resources Corporation (NASDAQ: ARTNA) announced today that its Board of Directors has declared a regular quarterly dividend on the company's Class A and Class B Common Stock. The quarterly dividend of \$0.2675 is payable February 23, 2022 to shareholders of record at the close of business on February 9, 2022, providing a \$1.07 annualized dividend rate. This is Artesian's 117th consecutive quarterly dividend paid to shareholders.

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 1,368 miles of water main to nearly a third of Delaware residents.

Contact:

Nicholle R. Taylor

Investor Relations

(302) 453-6900

ntaylor@artesianwater.com

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(rounded to the nearest hundred)

	2021	2020
Visalia	47,400	46,700
Selma	6,600	6,500
Kern River Valley	4,000	4,000
	176,600	175,500
LOS ANGELES AREA		
East Los Angeles	27,000	26,900
Hermosa Redondo (serving Hermosa Beach, Redondo Beach and a portion of Torrance)	27,200	27,100
Dominguez (Carson and portions of Compton, Harbor City, Long Beach, Los Angeles and Torrance)	34,400	34,300
Los Angeles County Region (including Palos Verdes Estates, Rancho Palos Verdes, Rolling Hills Estates, Rolling Hills, Fremont Valley, Lake Hughes, Lancaster and Leona Valley)	25,800	25,700
Westlake (a portion of Thousand Oaks)	7,100	7,100
Hawthorne and Commerce (leased municipal systems)	7,600	7,700
	129,100	128,800
CALIFORNIA TOTAL	494,500	492,600
HAWAII	6,200	5,300
NEW MEXICO	8,600	8,500
WASHINGTON	36,400	36,600
TEXAS	1,900	—
COMPANY TOTAL	547,600	543,000

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, having 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 (except Grand Oaks) 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 filed its most recent GRC application in July of 2021 requesting rate changes effective January 1, 2023.

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.

In pursuit of the State of California's water conservation goals, the CPUC decoupled Cal Water's revenue requirement from customer consumption levels in 2008 by authorizing a Water Revenue Adjustment Mechanism (WRAM) and Modified Cost Balancing Account (MCBA) for each district. The WRAM and MCBA ensure that Cal Water recovers revenues authorized by the CPUC regardless of customer consumption. This has removed the historical disincentive against promoting

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- 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;
- risks associated with expanding our business and operations geographically; 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 seven 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), TWSC, Inc. (Texas 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. Texas Water holds regulated and contracted wastewater 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 (see Non-Regulated Activities below for more details). 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 the provision of domestic and municipal fire protection services. 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, 2021, 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 494,500 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 90.3% of our total customer connections and 91.9% 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 outside of the CPUC's jurisdiction. We report revenue and expenses for the City of

Table of Contents**Customers**

Our water utility customer base is diversified among residential water, commercial water, fire protection, industrial water, other water, wastewater customers, and other utility customers (consisting of contracted services that are associated with the utility operations). Residential water and wastewater customers make up the largest component of our water utility customer base, with these customers representing approximately 69%, 71%, and 69%, of our water and wastewater revenues for 2021, 2020, and 2019, respectively. Substantially all of our water utility customers are metered, which allows us to measure and bill for our customers' water consumption. Water consumption per customer is affected by local weather conditions during the year, especially during late spring, summer, and early fall. In general, during these seasons, an extended period of dry weather increases consumption, while above-average rainfall decreases consumption. Also, an increase in the average temperature generally causes an increase in water consumption. On occasion, abnormally dry weather in our service areas can result in governmental authorities declaring drought warnings and imposing water use restrictions in the affected areas, which could reduce water consumption. See "Business – *Water Utility Supplies, and Facilities and Wastewater Utility Facilities*" for a discussion of water use restrictions that may impact water consumption during abnormally dry weather. The geographic diversity of our water utility customer base reduces the effect of our exposure to extreme or unusual weather conditions in any one area of our service territories. Water usage is also affected by changing consumption 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, which 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. Substantially all of our natural gas utility customers are metered, which allows us 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.

The Company's 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
2021	1.2%
2020	42.9%
2019	2.1%
2018	2.3%
2017	1.1%

In 2021, 2020, and 2019, our customer count increased by 21,246, 772,099, and 21,108 customers, respectively, primarily due to the water and wastewater utility systems that we acquired, organic growth, and in 2020, due to the Peoples Gas Acquisition that resulted to the addition of approximately 750,000 natural gas utility customers. Overall, for the five year period of 2017 through 2021, 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, 2021, our utility customer base including customers associated with utility system acquisitions and dispositions increased from 972,265 at January 1, 2017 to 1,820,049 at December 31, 2021.

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. These factors are not necessarily all of the important factors that could cause actual results to differ materially from those expressed in any of our forward-looking statements. Other unknown or unpredictable factors could also have material adverse effects on future results.

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, Essential, 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, Aqua Pennsylvania, Inc., (Aqua Pennsylvania) accounted for approximately 55% of operating revenues and approximately 68% of income for our Regulated Water segment in 2021. As of December 31, 2021, 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 or wastewater utility subsidiaries provide similar services in seven additional states. Additionally, pursuant to the Company’s 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. Other non-regulated subsidiaries of Peoples provide utility service line protection services to households and operate gas marketing and production businesses.

[Index](#)**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) and Utility Service Affiliates (Perth Amboy) Inc., (USA-PA).

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

Located in New Jersey, the Middlesex System provides water services to approximately 61,000 retail customers, primarily in eastern Middlesex County and 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 2021 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 0.1% of our 2021 consolidated operating revenues.

[Index](#)***Tidewater System***

Tidewater, together with its wholly-owned subsidiary, Southern Shores, provides water services to approximately 55,000 retail customers for residential, commercial and fire protection purposes in over 450 separate communities in New Castle, Kent and Sussex Counties, Delaware. The Tidewater System produced approximately 29% of our 2021 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 2021 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 2021 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 2021 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 June 2022. USA expects to participate in the public proposal process for a new ten-year contract. There are 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 service 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. There are approximately 3,300 mostly retail customers in Highland Park. The contract commenced July 1, 2020.

USA also provides water and wastewater services to several other New Jersey municipalities under contracts that are not regulated by a public utility commission as to rates and service.

Under a marketing agreement with HomeServe USA Corp. (HomeServe) expiring in 2031, USA offers residential customers in New Jersey and Delaware various water and wastewater related home maintenance programs. USA receives a service fee for the billing, cash collection and other administrative matters associated with HomeServe's service contracts.

USA produced approximately 3% of our 2021 consolidated operating revenues.

White Marsh

White Marsh operates or maintains water and/or wastewater systems that serve approximately 4,500 service connections under 35 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 2021 consolidated operating revenues.

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., January 27, 2022 – Middlesex Water Company (NASDAQ:MSEX) announced today that its Board of Directors has declared a cash dividend of \$0.29 per share on its common stock, payable March 1, 2022 to shareholders of record as of February 14, 2022. Middlesex Water Company has paid cash dividends in varying amounts continually since 1912.

Middlesex Water Company is an investor-owned water and wastewater utility, serving customers primarily in central and southern New Jersey and Delaware. The Company is currently offering a 3% discount on all Common Stock purchases made under its Investment Plan whether by optional cash payment or by dividend reinvestment. The discount will continue until 200,000 shares are purchased at the discounted price or August 1, 2022, whichever event occurs first. To learn more visit <https://shareholder.broadridge.com/middlesexwater>

ABOUT MIDDLESEX WATER COMPANY

Established in 1897, 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. 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>

Item 1. Business**General Development of Business**

SJW Group was initially incorporated as SJW Corp. in the state of California on February 8, 1985. SJW Group is a holding company with four wholly-owned subsidiaries:

- San Jose Water Company (“SJWC”) with its headquarters located at 110 West Taylor Street in San Jose, California 95110, was originally incorporated under the laws of the State of California in 1866. As part of a reorganization on February 8, 1985, SJWC became a wholly owned subsidiary of SJW Group. SJWC is a public utility in the business of providing water service to approximately 231,000 connections that serve a population of approximately one million people in an area comprising approximately 139 square miles in the metropolitan San Jose, California area.
- SJWNE LLC, a Delaware limited liability company, was formed in 2019, and is a wholly-owned subsidiary of SJW Group. SJWNE LLC is a special purpose entity established to hold SJW Group’s investment in Connecticut Water Service, Inc. Connecticut Water Service, Inc. with its headquarters located in Clinton, Connecticut was incorporated in 1974 in the State of Connecticut. As part of the merger transaction between SJW Group and Connecticut Water Service, Inc. on October 9, 2019, Connecticut Water Service, Inc. and its subsidiaries (“CTWS”) became a wholly-owned subsidiary of SJWNE LLC. Connecticut Water Service, Inc. is a holding company with four wholly-owned subsidiaries. The Connecticut Water Company (“Connecticut Water”) and The Maine Water Company (“Maine Water”) are public utilities in the business of providing water service to approximately 140,000 connections that serve a population of approximately 456,000 people in 81 municipalities throughout Connecticut and Maine and more than 3,000 wastewater connections in Southbury, Connecticut. The remaining two subsidiaries are Chester Realty, Inc., a real estate company in Connecticut, and New England Water Utility Services, Inc. (“NEWUS”), which provides contract water and sewer operations and other water related services.
- SJWTX, Inc. was incorporated in the State of Texas in 2005. SJWTX, Inc. is doing business as Canyon Lake Water Service Company (“CLWSC”). CLWSC is a public utility in the business of providing water service to approximately 24,000 service connections that serve approximately 70,000 people. CLWSC’s service area comprises more than 266 square miles in the southern region of the Texas Hill Country in Bandera, Blanco, Comal, Hays, Kendall, Medina and Travis counties, the growing region between San Antonio and Austin, Texas. SJWTX, Inc. has a 25% interest in Acequia Water Supply Corporation (“Acequia”). Acequia has been determined to be a variable interest entity within the scope of Financial Accounting Standards Board (“FASB”) Accounting Standard Codification (“ASC”) Topic 810, “Consolidation” with SJWTX, Inc. as the primary beneficiary. As a result, Acequia has been consolidated with SJWTX, Inc. On December 17, 2021, CLWSC completed its acquisition of Kendall West Utility and Bandera East Utility, companies that provide water services, including wastewater and recycled water services in Kendall, Bandera and Medina counties which are located in south central Texas. Kendall West Utility and Bandera East Utility, together, added approximately 1,600 service connections that serve a population of approximately 5,000 people in a service area approximately 19 square miles to CLWSC’s operations. SJWTX, Inc. is undergoing a corporate reorganization to separate regulated operations from non-tariffed activities. In November 2021, SJWTX Holdings, Inc. (“SJWTX Holdings”) and Texas Water Operation Services LLC (“TWOS”) were formed for the purpose of effecting a corporate reorganization of our water services organization in Texas. TWOS was created for non-tariffed operations and is wholly-owned by SJWTX Holdings. SJWTX Holdings is a wholly-owned subsidiary of SJW Group, incorporated to hold the investments in SJWTX, Inc. and TWOS. In addition, in 2022, SJWTX Holdings intends to create a new subsidiary to hold future wholesale water supply assets.
- SJW Land Company was incorporated in 1985. SJW Land Company owns undeveloped land in California and Tennessee and operates commercial buildings in Tennessee.

Together, SJWC, Connecticut Water, CLWSC, Maine Water and NEWUS, are referred to as “Water Utility Services.”

SJW Land Company and Chester Realty, Inc. are collectively referred to as “Real Estate Services.”

Regulation and Rates

Water Utility Services are subject to rate regulation based on cost recovery and meets the criteria of accounting guidance for rate-regulated operations, which considers the timing of the recognition of certain revenues and expenses. SJW Group’s consolidated financial statements reflect the effects of the rate-making process. The rate-making process is intended to provide revenues sufficient to recover normal operating expenses, provide funds for replacement of water infrastructure and produce a fair and reasonable return on stockholder common equity. SJW Group’s regulated operations financing activity is designed to

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 2021.

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, the 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 finalized its plans in 2021 and will begin construction in 2022 at a total cost of approximately \$32 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, 2021, the Company increased its number of customers from 72,681 to 73,144. 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, 2021, the Company installed an additional 62,375 feet of water distribution mains and acquired an additional 171,587 feet of wastewater collection mains resulting in 999 miles of water mains and 73 miles of wastewater mains as of December 31, 2021.

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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 three 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, 2021, the Company's average daily availability was 39.6 million gallons, and average daily consumption was approximately 20.1 million gallons. The Company's service territory had an estimated population of 204,000 as of December 31, 2021. 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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Consensus Forecast of U.S. Interest Rates and Key Assumptions

Interest Rates	History								Consensus Forecasts-Quarterly Avg.					
	Average For Week Ending				Average For Month			Latest Qtr	1Q	2Q	3Q	4Q	1Q	2Q
	Dec 23	Dec 16	Dec 9	Dec 2	Nov	Oct	Sep	4Q 2022*	2023	2023	2023	2023	2024	2024
Federal Funds Rate	4.33	3.83	3.83	3.83	3.78	3.08	2.56	3.59	4.7	5.0	4.9	4.7	4.4	4.0
Prime Rate	7.50	7.00	7.00	7.00	6.95	6.25	5.73	6.76	7.8	8.1	8.0	7.8	7.5	7.2
SOFR	4.30	4.01	3.80	3.81	3.73	3.04	2.50	3.55	4.6	4.9	4.8	4.6	4.4	4.1
Commercial Paper, 1-mo.	4.28	4.23	4.15	4.00	3.88	3.28	2.80	3.71	4.8	5.1	4.9	4.6	4.4	4.0
Treasury bill, 3-mo.	4.35	4.34	4.32	4.37	4.32	3.87	3.22	4.17	4.8	4.9	4.8	4.6	4.3	3.9
Treasury bill, 6-mo.	4.68	4.71	4.72	4.69	4.61	4.31	3.71	4.53	4.9	5.0	4.8	4.5	4.3	4.0
Treasury bill, 1 yr.	4.64	4.66	4.72	4.73	4.73	4.43	3.89	4.61	4.9	4.9	4.7	4.4	4.2	3.9
Treasury note, 2 yr.	4.25	4.25	4.33	4.37	4.50	4.38	3.86	4.39	4.5	4.4	4.2	3.9	3.8	3.5
Treasury note, 5 yr.	3.78	3.67	3.72	3.79	4.06	4.18	3.70	4.00	4.0	4.0	3.9	3.7	3.6	3.4
Treasury note, 10 yr.	3.67	3.51	3.52	3.63	3.89	3.98	3.52	3.82	3.8	3.8	3.7	3.6	3.6	3.5
Treasury bond, 30 yr.	3.73	3.53	3.51	3.71	4.00	4.04	3.56	3.89	4.0	4.0	3.9	3.9	3.8	3.8
Corporate Aaa bond	4.88	4.66	4.68	4.87	5.23	5.41	4.87	5.15	5.1	5.2	5.2	5.1	4.9	4.8
Corporate Baa bond	5.56	5.34	5.38	5.57	5.95	6.22	5.64	5.90	6.1	6.3	6.2	6.1	5.9	5.8
State & Local bonds	4.24	4.18	4.19	4.26	4.50	4.62	4.31	4.46	4.3	4.4	4.3	4.3	4.3	4.2
Home mortgage rate	6.27	6.31	6.33	6.49	6.81	6.90	6.11	6.69	6.5	6.5	6.3	6.2	6.0	5.8

Key Assumptions	History								Consensus Forecasts-Quarterly					
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
	2021	2021	2021	2021	2022	2022	2022	2022**	2023	2023	2023	2023	2024	2024
Fed's AFE Index	103.4	102.9	105.0	107.0	108.4	113.7	119.0	120.6	118.7	118.1	117.6	117.1	116.8	116.9
Real GDP	6.3	7.0	2.7	7.0	-1.6	-0.6	3.2	1.0	-0.2	-0.7	0.3	0.9	1.3	1.7
GDP Price Index	5.2	6.3	6.2	6.8	8.3	9.0	4.4	4.3	3.6	3.0	2.7	2.5	2.3	2.2
Consumer Price Index	4.1	8.2	6.7	7.9	9.2	10.5	5.7	4.5	3.4	3.1	2.9	2.6	2.4	2.3
PCE Price Index	4.5	6.4	5.6	6.2	7.5	7.3	4.3	4.2	3.2	2.8	2.6	2.5	2.4	2.2

*Interest rate data for 4Q 2022 based on historical data through the week ended December 23.

**Data for 4Q 2022 for the Fed's AFE \$ Index based on data through the week ended December 23. Figures for 4Q 2022 Real GDP, GDP Chained Price Index, Consumer Price Index, and PCE Price Index are consensus forecasts from the December 2022 survey.

Blue Chip Financial Forecasts, January 1, 2023. Copyright © 2022 CCH Incorporated. All Rights Reserved.

INDEX	Month	Company Name																							
		0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18	-19	-20	-21	-22	
Month End	12/31/2022	11/30/2022	10/31/2022	9/30/2022	8/31/2022	7/31/2022	6/30/2022	5/31/2022	4/30/2022	3/31/2022	2/28/2022	1/31/2022	12/31/2021	11/30/2021	10/31/2021	9/30/2021	8/31/2021	7/31/2021	6/30/2021	5/31/2021	4/30/2021	3/31/2021	2/28/2021		
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AMERICAN STATES WATER COMP	2.378	2.371	2.536	2.357	2.086	2.239	2.310	2.185	2.166	2.146	2.378	2.312	2.486	2.742	2.569	2.489	2.366	2.567	2.454	2.247	2.249	2.229	2.144		
AMERICAN WATER WORKS COMP	1.722	1.740	1.776	1.723	1.589	1.796	1.855	1.757	1.804	1.828	1.938	1.857	1.948	2.194	2.053	2.099	2.053	2.204	2.081	1.936	1.964	1.958	1.903		
ESSENTIAL UTILITIES, INC.	1.719	1.748	1.807	1.679	1.609	1.834	1.869	1.718	1.752	1.692	1.848	1.786	1.807	1.932	1.814	1.784	1.760	1.875	1.850	1.762	1.826	1.812	1.751		
ARTESIAN RESOURCES CORPORA	1.153	1.116	1.090	1.056	1.000	1.130	1.055	1.013	1.060	1.025	1.056	1.039	1.065	1.037	0.991	0.946	0.911	0.945	0.933	0.899	0.981	0.972	0.960		
CALIFORNIA WATER SERVICE GR	1.466	1.462	1.569	1.515	1.342	1.473	1.503	1.397	1.381	1.347	1.482	1.465	1.543	1.727	1.589	1.458	1.524	1.648	1.631	1.475	1.517	1.554	1.494		
MIDDLESEX WATER COMPANY	1.925	1.902	2.238	2.160	1.904	2.182	2.304	2.142	2.071	2.148	2.467	2.401	2.421	2.807	2.499	2.643	2.478	2.678	2.515	2.075	2.213	2.115	2.050		
SSW GROUP	1.506	1.559	1.506	1.459	1.297	1.395	1.411	1.359	1.373	1.339	1.464	1.430	1.451	1.503	1.461	1.443	1.427	1.487	1.407	1.446	1.460	1.443			
THE YORK WATER COMPANY	1.882	1.931	1.831	1.649	1.902	1.995	1.960	1.866	1.921	1.823	1.925	1.962	1.981	2.136	2.080	2.103	1.949	2.292	2.150	2.040	2.271	2.326	2.224		

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1/19/2023

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Company Name	2/28/2021	1/31/2021	12/31/2020	11/30/2020	10/31/2020	9/30/2020	8/31/2020	7/31/2020	6/30/2020	5/31/2020	4/30/2020	3/31/2020	2/29/2020	1/31/2020	12/31/2019	11/30/2019	10/31/2019	9/30/2019	8/31/2019	7/31/2019	6/30/2019	5/31/2019	4/30/2019	3/31/2019	2/28/2019
	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	2.165	2.259	2.314	2.207	2.228	2.235	2.299	2.313	2.357	2.434	2.349	2.407	2.372	2.672	2.622	2.632	2.894	2.753	2.898	2.453	2.391	2.392	2.321	2.324	2.379
AMERICAN WATER WORKS COMP	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	1.849	1.717	1.732	1.755	1.762	1.810	1.682	1.684	1.610	1.569	1.574	1.574
ESSENTIAL UTILITIES, INC.	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	1.978	1.804	1.735	1.766	1.748	1.756	1.958	1.937	1.904	1.863	1.538	1.572
ARTESIAN RESOURCES CORPORA	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	0.954	0.943	0.953	0.941	0.941	0.944	0.921	0.939	0.928	0.931	0.954	0.999
CALIFORNIA WATER SERVICE GR	1.500	1.417	1.449	1.393	1.288	1.267	1.352	1.383	1.360	1.366	1.324	1.410	1.393	1.468	1.448	1.470	1.565	1.505	1.607	1.524	1.465	1.470	1.495	1.525	1.525
MIDDLESEX WATER COMPANY	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	2.070	2.028	2.078	2.013	1.957	1.934	1.975	1.852	1.900	1.848	1.794	1.907
SIW GROUP	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	1.557	1.512	1.531	1.561	1.476	1.506	1.435	1.335	1.373	1.382	1.366	1.373
THE YORK WATER COMPANY	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	2.302	2.250	2.221	2.191	2.175	1.931	1.862	1.852	1.810	1.790	1.802	1.900

Company Name	2/28/2021	1/31/2021	12/31/2020	11/30/2020	10/31/2020	9/30/2020	8/31/2020	7/31/2020	6/30/2020	5/31/2020	4/30/2020	3/31/2020	2/29/2020	1/31/2020	12/31/2019	11/30/2019	10/31/2019	9/30/2019	8/31/2019	7/31/2019	6/30/2019	5/31/2019	4/30/2019	3/31/2019	2/28/2019
	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	2.754	2.874	2.944	2.805	2.832	2.841	2.955	2.972	3.030	3.224	3.110	3.188	3.061	3.448	3.382	3.426	3.766	3.582	3.881	3.285	3.203	3.201	3.106	3.109	3.200
AMERICAN WATER WORKS COMP	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	2.187	2.030	2.041	2.067	2.075	2.153	2.000	2.002	2.024	1.934	1.885	1.883
ESSENTIAL UTILITIES, INC.	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	1.763	1.608	1.555	1.582	1.567	2.227	2.483	2.456	2.435	2.383	1.968	2.026
ARTESIAN RESOURCES CORPORA	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	1.633	1.615	1.651	1.629	1.630	1.648	1.608	1.639	1.626	1.631	1.671	1.757
CALIFORNIA WATER SERVICE GR	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	1.989	1.962	1.985	2.113	2.032	2.190	2.076	1.996	2.027	2.062	2.138	2.075
MIDDLESEX WATER COMPANY	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	2.484	2.433	2.773	2.686	2.611	2.607	2.662	2.497	2.596	2.525	2.451	2.612
SIW GROUP	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	1.521	1.477	1.482	1.511	1.429	1.459	1.390	1.293	1.320	1.329	1.313	1.883
THE YORK WATER COMPANY	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	3.057	2.988	2.986	2.945	2.923	2.610	2.518	2.503	2.441	2.414	2.431	2.598

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Company Name	2/28/2021	1/31/2021	12/31/2020	11/30/2020	10/31/2020	9/30/2020	8/31/2020	7/31/2020	6/30/2020	5/31/2020	4/30/2020	3/31/2020	2/29/2020	1/31/2020	12/31/2019	11/30/2019	10/31/2019	9/30/2019	8/31/2019	7/31/2019	6/30/2019	5/31/2019	4/30/2019	3/31/2019	2/28/2019
	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	0.910	0.950	0.973	0.928	0.937	0.940	0.967	0.973	1.024	0.988	1.012	0.998	1.124	1.102	1.107	1.158	1.219	1.031	1.006	0.976	0.962	0.951	0.958	1.009	1.001
AMERICAN WATER WORKS COMP	1.086	1.171	1.141	1.159	1.140	1.108	1.110	1.135	1.030	1.040	0.998	0.986	1.013	1.074	0.997	1.006	1.029	1.023	1.051	0.977	0.978	0.935	0.911	0.914	0.915
ESSENTIAL UTILITIES, INC.	0.998	1.051	1.066	1.059	1.004	0.989	1.043	1.063	1.014	1.462	1.049	1.028	1.013	1.151	1.050	1.009	1.027	1.017	1.122	1.139	1.127	1.108	0.895	0.915	0.915
ARTESIAN RESOURCES CORPORA	0.803	0.852	0.801	0.812	0.772	0.761	0.783	0.770	0.785	0.778	0.771	0.808	0.774	0.827	0.827	0.827	0.816	0.817	0.819	0.799	0.814	0.805	0.808	0.827	0.867
CALIFORNIA WATER SERVICE GR	1.023	0.996	0.988	0.950	0.879	0.864	0.922	0.943	0.927	0.932	0.903	0.962	0.950	1.002	0.988	1.003	1.068	1.027	1.097	1.039	1.000	1.002	1.020	1.057	1.040
MIDDLESEX WATER COMPANY	0.987	1.110	1.027	1.007	0.955	0.929	0.978	0.976	1.007	1.045	0.947	0.944	0.974	1.076	1.053	1.080	1.046	1.017	1.095	1.026	0.962	0.987	0.960	0.932	0.991
SIW GROUP	0.949	0.964	0.990	0.977	0.929	0.931	0.950	0.943	0.941	0.963	0.925	0.910	1.458	1.034	1.004	1.017	1.037	0.981	1.000	0.953	0.887	0.912	0.918	0.908	0.912
THE YORK WATER COMPANY	1.046	1.084	1.150	1.148	1.082	1.083	1.172	1.183	1.219	1.155	1.063	1.132	1.111	1.223	1.196	1.180	1.164	1.155	1.026	0.990	0.984	0.962	0.951	0.958	1.009

Company Name	2/28/2021	1/31/2021	12/31/2020	11/30/2020	10/31/2020	9/30/2020	8/31/2020	7/31/2020	6/30/2020	5/31/2020	4/30/2020	3/31/2020	2/29/2020	1/31/2020	12/31/2019	11/30/2019	10/31/2019	9/30/2019	8/31/2019	7/31/2019	6/30/2019	5/31/2019	4/30/2019	3/31/2019	2/28/2019
	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	0.936	0.977	1.001	0.954	0.963	0.966	1.005	1.011	1.030	1.096	1.058	1.084	1.041	1.172	1.150	1.165	1.280	1.218	1.320	1.117	1.089	1.088	1.056	1.057	1.088
AMERICAN WATER WORKS COMP	1.053	1.135	1.106	1.124	1.105	1.074	1.078	1.102	1.000	1.054	1.012	0.999	1.037	1.100	1.021	1.026	1.040	1.044	1.083	1.006	1.007	1.018	0.973	0.948	0.947
ESSENTIAL UTILITIES, INC.	1.004	1.058	1.073	1.056	1.001	0.986	1.021	1.052	1.003	1.456	1.045	1.045	1.037	1.122	1.023	0.989	1.007	0.997	1.417	1.579	1.562	1.549	1.516	1.252	1.289
ARTESIAN RESOURCES CORPORA	0.758	0.804	0.756	0.781	0.742	0.732	0.758	0.744	0.760	0.751	0.744	0.780	0.751	0.802	0.794	0.811	0.800	0.801	0.810	0.790	0.805	0.799	0.801	0.821	0.863
CALIFORNIA WATER SERVICE GR	1.033	1.006	0.998	0.989	0.915	0.900	0.958	0.980	0.963	1.018	0.987	1.051	1.038	1.094	1.079	1.092	1.117	1.124	1.204	1.141	1.098	1.114	1.134	1.175	1.141
MIDDLESEX WATER COMPANY	1.012	1.139	1.054	1.013	0.961	0.935	0.979	0.977	1.009	1.054	0.956	0.953	0.963	1.064	1.042	1.187	1.150	1.118	1.116	1.140	1.069	1.112	1.081	1.050	1.119
SIW GROUP	0.938	0.952	0.978	0.963	0.916	0.917	0.941	0.934	0.931	0.954	0.917	0.902	1.463	1.038	1.008	1.012	1.031	0.975	0.995	0.949	0.901	0.907	0.896	1.285	1.185
THE YORK WATER COMPANY	1.044	1.083	1.149	1.191	1.123	1.124	1.218	1.230	1.268	1.203	1.107	1.179	1.162	1.279	1.250	1.249	1.232	1.223	1.092	1.053	1.047	1.010	1.017	1.017	1.087

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	2/28/2021	1/31/2021	12/31/2020	11/30/2020	10/31/2020	9/30/2020	8/31/2020	7/31/2020	6/30/2020	5/31/2020	4/30/2020	3/31/2020	2/29/2020	1/31/2020	12/31/2019	11/30/2019	10/31/2019	9/30/2019	8/31/2019	7/31/2019	6/30/2019	5/31/2019	4/30/2019	3/31/2019	2/28/2019
Enterprise value to Net PPE	99%	102%	101%	99%	95%	94%	97%	97%	100%	103%	97%	97%	97%	107%	103%	103%	104%	102%	102%	101%	98%	98%	95%	92%	95%
Enterprise value to Inv Cap	101%	103%	103%	100%	96%	95%	99%	100%	100%	100%	105%	100%	101%	104%	103%	106%	109%	108%	110%	109%	106%	105%	103%	103%	110%

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Company Name	1/31/2018	12/31/2018	11/30/2018	10/31/2018	9/30/2018	8/31/2018	7/31/2018	6/30/2018	5/31/2018	4/30/2018	3/31/2018	2/28/2018	1/31/2018	12/31/2017	11/30/2017	10/31/2017	9/30/2017	8/31/2017	7/31/2017	6/30/2017	5/31/2017	4/30/2017	3/31/2017	2/28/2017	1/31/2017
AMERICAN STATES WATER COMF	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	2,088	2,128	2,004	1,863	1,894	1,944	1,879	1,805	1,760	1,752	1,800	1,756
AMERICAN WATER WORKS COMP	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	1,511	1,540	1,497	1,418	1,442	1,433	1,396	1,411	1,419	1,396	1,443	1,367
ESSENTIAL UTILITIES, INC.	1,505	1,479	1,535	1,453	1,453	1,626	1,606	1,549	1,550	1,555	1,519	1,558	1,609	1,710	1,707	1,621	1,536	1,574	1,556	1,553	1,549	1,553	1,519	1,535	1,479
ARTESIAN RESOURCES CORPORA	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	1,036	1,138	1,102	1,040	1,044	1,072	1,053	1,009	1,070	0,943	0,957	0,919
CALIFORNIA WATER SERVICE GR	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	1,463	1,510	1,420	1,322	1,332	1,369	1,294	1,267	1,294	1,271	1,316	1,239
MIDDLESEX WATER COMPANY	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	1,476	1,697	1,601	1,474	1,459	1,486	1,497	1,384	1,467	1,430	1,481	1,486
SIW GROUP	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	1,373	1,480	1,334	1,276	1,288	1,243	1,184	1,195	1,209	1,211	1,221	1,230
THE YORK WATER COMPANY	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	1,832	2,006	1,910	1,852	1,859	1,932	1,934	1,883	2,079	1,963	2,043	2,034

Company Name	1/31/2018	12/31/2018	11/30/2018	10/31/2018	9/30/2018	8/31/2018	7/31/2018	6/30/2018	5/31/2018	4/30/2018	3/31/2018	2/28/2018	1/31/2018	12/31/2017	11/30/2017	10/31/2017	9/30/2017	8/31/2017	7/31/2017	6/30/2017	5/31/2017	4/30/2017	3/31/2017	2/28/2017	1/31/2017
AMERICAN STATES WATER COMF	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	2,782	2,820	2,656	2,468	2,371	2,434	2,352	2,312	2,254	2,243	2,303	2,246
AMERICAN WATER WORKS COMP	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	1,824	1,846	1,794	1,699	1,732	1,721	1,677	1,706	1,716	1,688	1,733	1,642
ESSENTIAL UTILITIES, INC.	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	2,258	2,240	2,127	2,016	2,088	2,064	2,061	2,061	2,067	2,023	2,039	1,964
ARTESIAN RESOURCES CORPORA	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	1,805	1,961	1,899	1,792	1,794	1,842	1,809	1,734	1,838	1,620	1,657	1,592
CALIFORNIA WATER SERVICE GR	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	2,016	2,068	1,946	1,810	1,878	1,930	1,824	1,780	1,818	1,787	1,882	1,772
MIDDLESEX WATER COMPANY	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	2,066	2,395	2,260	2,081	2,054	2,093	2,108	1,953	2,069	2,017	2,060	2,067
SIW GROUP	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	1,948	2,116	1,907	1,825	1,825	1,761	1,678	1,623	1,642	1,645	1,686	1,700
THE YORK WATER COMPANY	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	2,518	2,771	2,638	2,557	2,551	2,652	2,655	2,545	2,810	2,654	2,701	2,688

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Company Name	1/31/2018	12/31/2018	11/30/2018	10/31/2018	9/30/2018	8/31/2018	7/31/2018	6/30/2018	5/31/2018	4/30/2018	3/31/2018	2/28/2018	1/31/2018	12/31/2017	11/30/2017	10/31/2017	9/30/2017	8/31/2017	7/31/2017	6/30/2017	5/31/2017	4/30/2017	3/31/2017	2/28/2017	1/31/2017
AMERICAN STATES WATER COMF	0,952	0,944	0,962	0,890	0,889	0,895	0,888	0,851	0,850	0,841	0,807	0,823	0,843	0,878	0,895	0,843	0,793	0,796	0,818	0,790	0,759	0,740	0,737	0,757	0,738
AMERICAN WATER WORKS COMP	0,871	0,841	0,884	0,841	0,837	0,849	0,834	0,816	0,813	0,832	0,797	0,809	0,823	0,878	0,895	0,869	0,823	0,838	0,832	0,811	0,819	0,824	0,811	0,838	0,794
ESSENTIAL UTILITIES, INC.	0,876	0,860	0,893	0,845	0,927	0,946	0,934	0,901	0,902	0,905	0,884	0,906	0,936	0,995	0,993	0,943	0,893	0,916	0,905	0,903	0,901	0,903	0,884	0,893	0,860
ARTESIAN RESOURCES CORPORA	0,804	0,797	0,836	0,834	0,838	0,843	0,850	0,880	0,898	0,875	0,844	0,804	0,875	0,895	0,987	0,956	0,902	0,906	0,930	0,913	0,875	0,928	0,818	0,830	0,797
CALIFORNIA WATER SERVICE GR	1,001	0,973	0,969	0,906	0,920	0,913	0,913	0,863	0,903	0,879	0,837	0,876	0,921	0,998	1,030	0,969	0,902	0,909	0,934	0,883	0,864	0,883	0,867	0,898	0,845
MIDDLESEX WATER COMPANY	0,954	0,914	0,921	0,815	0,865	0,850	0,814	0,783	0,827	0,782	0,707	0,699	0,733	0,767	0,882	0,832	0,766	0,758	0,772	0,778	0,719	0,762	0,743	0,770	0,772
SIW GROUP	1,083	1,022	1,019	0,877	0,875	0,857	0,928	0,934	0,916	0,887	0,797	0,802	0,869	0,912	0,983	0,886	0,848	0,855	0,826	0,787	0,794	0,803	0,804	0,811	0,817
THE YORK WATER COMPANY	0,927	0,908	0,942	0,897	0,879	0,880	0,897	0,916	0,944	0,933	0,904	0,836	0,920	0,973	1,066	1,015	0,984	0,988	1,027	1,028	1,001	1,105	1,043	1,086	1,081

Company Name	1/31/2018	12/31/2018	11/30/2018	10/31/2018	9/30/2018	8/31/2018	7/31/2018	6/30/2018	5/31/2018	4/30/2018	3/31/2018	2/28/2018	1/31/2018	12/31/2017	11/30/2017	10/31/2017	9/30/2017	8/31/2017	7/31/2017	6/30/2017	5/31/2017	4/30/2017	3/31/2017	2/28/2017	1/31/2017
AMERICAN STATES WATER COMF	1,035	1,026	1,035	0,958	0,957	0,964	0,956	0,916	0,916	0,906	0,870	0,887	0,908	0,946	0,959	0,903	0,859	0,886	0,827	0,800	0,786	0,766	0,763	0,783	0,764
AMERICAN WATER WORKS COMP	0,902	0,871	0,911	0,866	0,862	0,900	0,884	0,865	0,873	0,893	0,855	0,845	0,860	0,917	0,928	0,902	0,854	0,871	0,866	0,843	0,858	0,863	0,849	0,872	0,826
ESSENTIAL UTILITIES, INC.	1,234	1,212	1,253	1,185	1,300	1,337	1,289	1,297	1,291	1,301	1,271	1,308	1,351	1,436	1,425	1,353	1,282	1,328	1,313	1,311	1,311	1,286	1,297	1,249	1,249
ARTESIAN RESOURCES CORPORA	0,801	0,794	0,831	0,829	0,833	0,833	0,840	0,870	0,896	0,873	0,842	0,793	0,863	0,887	0,963	0,933	0,881	0,881	0,905	0,889	0,852	0,903	0,982	0,814	0,782
CALIFORNIA WATER SERVICE GR	1,098	1,068	1,087	1,017	1,032	1,038	1,037	0,980	0,985	0,958	0,913	0,973	1,023	1,108	1,137	1,070	0,995	1,033	1,061	1,003	0,979	1,000	0,982	1,035	0,975
MIDDLESEX WATER COMPANY	1,076	1,031	1,049	0,929	0,985	0,987	0,945	0,909	0,952	0,901	0,815	0,806	0,845	0,885	1,025	0,968	0,891	0,880	0,896	0,903	0,836	0,886	0,864	0,882	0,885
SIW GROUP	15,26	1,441	1,449	1,248	1,245	1,233	1,335	1,349	1,309	1,268	1,138	1,170	1,267	1,330	1,444	1,302	1,246	1,245	1,202	1,145	1,108	1,121	1,123	1,151	1,160
THE YORK WATER COMPANY	0,999	0,978	1,010	0,961	0,942	0,951	0,969	0,989	1,011	0,999	0,969	0,905	0,996	1,053	1,159	1,104	1,070	1,067	1,109	1,111	1,065	1,176	1,110	1,130	1,125

1/19/2023

Company Name	1/31/2018	12/31/2018	11/30/2018	10/31/2018	9/30/2018	8/31/2018	7/31/2018	6/30/2018	5/31/2018	4/30/2018	3/31/2018	2/28/2018	1/31/2018	12/31/2017	11/30/2017	10/31/2017	9/30/2017	8/31/2017	7/31/2017	6/30/2017	5/31/2017	4/30/2017	3/31/2017	2/28/2017	1/31/2017
Enterprise value to Net PPE	94%	91%	93%	86%	88%	87%	89%	87%	90%	88%	82%	82%	87%	91%	98%	91%	87%	88%	87%	85%	84%	85%	81%	83%	81%
Enterprise value to Inv Cap	106%	103%	104%	95%	97%	96%	95%	95%	97%	93%	93%	90%	95%	100%	108%	102%	94%	96%	96%	98%	95%	92%	95%	96%	93%

NetPlant Advances CIAC DefTax ITC

	2021 Net Property, Plant & Equipment	Advances for construction	Contributions in aid of construction	Deferred income taxes, net	Deferred investment tax credits	2021 Known "Cost Free" Capital	2021 Percentage of Known "Cost Free" Capital
	(Millions of \$)						
<u>Comparable Group</u>							
1 American States Water Co	\$1,626.004	\$66.727	\$147.482	\$140.290	\$1.153	\$355.652	22%
2 American Water Works Co Inc	\$21,084.000	\$284.000	\$1,442.000	\$2,421.000	\$0.000	\$4,147.000	20%
3 Artesian Resources -CL A	\$590.431	\$4.295	\$176.656	\$53.133	\$0.456	\$234.540	40%
4 California Water Service Gp	\$2,846.862	\$198.086	\$285.665	\$298.945	\$0.000	\$782.696	27%
5 Essential Utilities, Inc.	\$10,251.866	\$103.619	\$596.110	\$1,406.537	\$0.000	\$2,106.266	21%
6 Middlesex Water Co	\$865.368	\$23.529	\$127.863	\$69.500	\$0.000	\$220.892	26%
7 SJW Corp	\$2,497.499	\$130.693	\$316.479	\$200.451	\$0.000	\$647.623	26%
8 York Water Co	\$383.626	\$12.820	\$41.876	\$49.590	\$0.000	\$104.286	27%
Median							26%

CONSOLIDATED BALANCE SHEETS - USD (\$)		Dec. 31, 2021	Dec. 31, 2020
\$ in Thousands			
Regulated utility plant, at cost			
Water	\$1,898,817	\$1,784,402	
Electric	116,472	112,507	
Total	2,015,289	1,896,909	
Non-regulated utility property, at cost	37,064	33,315	
Total utility plant, at cost	2,052,353	1,930,224	
Less — accumulated depreciation	-594,264	-568,326	
Utility plant before construction work in progress	1,458,089	1,361,898	
Construction work in progress	167,915	150,145	
Net utility plant	1,626,004	1,512,043	
Other Property and Investments			
Goodwill	1,116	1,116	
Other property and investments	40,806	35,318	
Total other property and investments	41,922	36,434	
Current Assets			
Cash and cash equivalents	4,963	36,737	
Accounts receivable — customers, less allowance for doubtful accounts	34,416	29,162	
Unbilled revenue — receivable (Note 2)	27,147	25,836	
Receivable from U.S. government, less allowance for doubtful accounts (Note 2)	27,827	25,182	
Other accounts receivable, less allowance for doubtful accounts	6,510	3,960	
Income taxes receivable	236	103	
Materials and supplies	12,163	8,619	
Regulatory assets — current	8,897	13,088	
Prepayments and other current assets	5,317	5,555	
Contract assets (Note 2)	6,135	8,873	
Unrealized gain on purchased power contracts	4,441	0	
Total current assets	138,052	157,115	
Regulatory and Other Assets			
Unbilled revenue, receivable from U.S government	9,671	9,945	
Receivable from U.S. government (Note 2)	51,991	49,488	
Contract assets (Note 2)	3,452	1,384	
Operating lease right-of-use assets	10,479	11,146	
Regulatory assets	3,182	3,451	
Other	16,230	10,597	
Total other assets	95,005	86,011	
Total Assets	1,900,983	1,791,603	
Capitalization			
Common shareholder's equity	685,947	641,673	
Long-term debt	412,176	440,348	
Total capitalization	1,098,123	1,082,021	
Current Liabilities			
Notes payable to banks	31,000	0	
Long-term debt — current	377	358	
Accounts payable	65,902	63,788	
Income taxes payable	4,662	6,783	
Accrued other taxes	17,137	11,902	
Accrued employee expenses	16,256	15,122	
Accrued interest	4,545	4,832	
Unrealized loss on purchased power contracts	0	1,537	
Regulatory liabilities	1,896	0	
Contract liabilities (Note 2)	257	1,800	
Operating lease liabilities	2,044	2,013	
Other	11,498	10,437	
Total current liabilities	155,574	118,572	
Other Credits			
Notes payable to banks	174,500	134,200	
Advances for construction	66,727	63,374	
Contributions in aid of construction — net	147,482	140,332	
Deferred income taxes	140,290	131,172	
Regulatory liabilities	32,979	0	
Unamortized investment tax credits	1,153	1,224	
Accrued pension and other post-retirement benefits	61,365	95,639	
Operating lease liabilities	8,920	9,636	
Other	13,870	15,433	
Total other credits	647,286	591,010	
Commitments and Contingencies			
Liabilities and Equity, Total	\$1,900,983	\$1,791,603	

NetPlant	1,626,004	1,512,043
Advances	66,727	63,374
CIAC	147,482	140,332
DefTax	140,290	131,172
ITC	1,153	1,224

Consolidated Balance Sheets - USD (\$)

Dec. 31, 2021 Dec. 31, 2020

\$ in Millions

ASSETS

Property, plant and equipment	\$27,413	\$25,614
Accumulated depreciation	-6,329	-5,904
Property, plant and equipment, net	21,084	19,710
Current assets:		
Cash and cash equivalents	116	547
Restricted funds	20	29
Accounts receivable, net of allowance for uncollectible accounts of \$75 and \$60, respectively	271	321
Unbilled revenues	248	206
Materials and supplies	57	47
Assets held for sale	683	629
Other	159	127
Total current assets	1,554	1,906
Regulatory and other long-term assets:		
Regulatory assets	1,051	1,127
Seller promissory note from the sale of the Homeowner Services Group	720	0
Operating lease right-of-use assets	92	95
Goodwill	1,139	1,504
Postretirement benefit assets	193	173
Intangible assets	0	55
Other	242	196
Total regulatory and other long-term assets	3,437	3,150
Total assets	26,075	24,766
Capitalization:		
Common stock (\$0.01 par value; 500,000,000 shares authorized; 186,880,413 and 186,466,707 shares outstanding, respectively)	2	2
Paid-in-capital	6,781	6,747
Retained earnings	925	102
Accumulated other comprehensive loss	-45	-49
Treasury stock, at cost (5,269,324 and 5,168,215 shares, respectively)	-365	-348
Total common shareholders' equity	7,298	6,454
Long-term debt	10,341	9,329
Redeemable preferred stock at redemption value	3	4
Total long-term debt	10,344	9,333
Total capitalization	17,642	15,787
Current liabilities:		
Short-term debt	584	1,282
Current portion of long-term debt	57	329
Accounts payable	235	189
Accrued liabilities	701	591
Accrued taxes	176	50
Accrued interest	88	88
Liabilities related to assets held for sale	83	137
Other	217	215
Total current liabilities	2,141	2,881
Regulatory and other long-term liabilities:		
Advances for construction	284	270
Deferred income taxes and investment tax credits	2,421	2,113
Regulatory liabilities	1,600	1,770
Operating lease liabilities	80	81
Accrued pension expense	285	388
Other	180	83
Total regulatory and other long-term liabilities	4,850	4,705
Contributions in aid of construction	1,442	1,393
Commitments and contingencies		
Total capitalization and liabilities	\$26,075	\$24,766

NetPlant	21,084	19,710
Advances	284	270
CIAC	1,442	1,393
DefTax	2,421	2,113
ITC	0	0

CONSOLIDATED BALANCE SHEETS - USD (\$)	Dec. 31, 2021	Dec. 31, 2020
\$ in Thousands		
ASSETS		
Utility plant, at original cost (less accumulated depreciation - 2021 - \$159,385,; 2020 - \$147,469)	\$590,431	\$559,561
Current assets		
Cash and cash equivalents	92	28
Accounts receivable (less allowance for doubtful accounts 2021 - \$429; 2020-\$862)	8,863	10,162
Income tax receivable	2,234	629
Unbilled operating revenues	1,080	1,166
Materials and supplies	1,933	1,535
Prepaid property taxes	2,306	1,891
Prepaid expenses and other	2,652	2,208
Total current assets	19,160	17,619
Other assets		
Non-utility property (less accumulated depreciation - 2021- \$919; 2020 - \$865)	3,751	3,796
Other deferred assets	5,097	5,309
Operating lease right of use assets	451	460
Total other assets	9,299	9,565
Regulatory assets, net	6,321	6,473
Total assets	625,211	593,218
Stockholders' equity		
Common stock	9,414	9,357
Preferred stock	0	0
Additional paid-in capital	104,989	103,463
Retained earnings	63,607	56,606
Total stockholders' equity	178,010	169,426
Long-term debt, net of current portion	143,259	142,333
Total stockholders' equity and long-term debt	321,269	311,759
Current liabilities		
Lines of credit	26,703	26,813
Current portion of long-term debt	1,591	1,757
Accounts payable	10,206	6,341
Accrued expenses	4,534	3,414
Overdraft payable	30	105
Accrued interest	917	930
Income taxes payable	0	237
Customer and other deposits	2,273	2,060
Other	1,448	2,067
Total current liabilities	47,702	43,724
Commitments and contingencies (Note 11)		
Deferred credits and other liabilities		
Net advances for construction	4,295	4,578
Operating lease liabilities	440	432
Regulatory liabilities	21,260	21,681
Deferred investment tax credits	456	473
Deferred income taxes	53,133	50,313
Total deferred credits and other liabilities	79,584	77,477
Net contributions in aid of construction	176,656	160,258
Total Liabilities and Stockholders' Equity	\$625,211	\$593,218
NetPlant	\$590,431	\$559,561
Advances	4,295	4,578
CIAC	176,656	160,258
DefTax	53,133	50,313
ITC	456	473

Consolidated Balance Sheets - USD (\$)	Dec. 31, 2021	Dec. 31, 2020
\$ in Thousands		
Utility plant:		
Land	\$45,047	\$45,672
Depreciable plant and equipment	3,899,629	3,645,770
Construction work in progress	222,713	171,414
Intangible assets	29,955	27,567
Total utility plant	4,197,344	3,890,423
Less accumulated depreciation and amortization	-1,350,482	-1,239,865
Net utility plant	2,846,862	2,650,558
Current assets:		
Cash and cash equivalents	78,380	44,555
Receivables:		
Customers, net	60,785	44,025
Regulatory balancing accounts	78,597	96,241
Other, net	18,452	20,331
Unbilled revenue, net	32,760	34,069
Materials and supplies at weighted average cost	9,511	8,831
Taxes, prepaid expenses, and other assets	21,973	17,964
Total current assets	300,458	266,016
Other assets:		
Regulatory assets	285,692	325,376
Goodwill	36,814	31,842
Other	153,445	120,456
Total other assets	475,951	477,674
TOTAL ASSETS	3,623,271	3,394,248
Capitalization:		
Common stock, \$0.01 par value; 68,000 shares authorized, 53,716 and 50,334 outstanding in 2021 and 2020, respectively	537	503
Additional paid-in capital	651,121	448,632
Retained earnings	525,936	472,209
Noncontrolling interests	5,386	0
Total equity	1,182,980	921,344
Long-term debt, net	1,055,794	781,100
Total capitalization	2,238,774	1,702,444
Current liabilities:		
Current maturities of long-term debt, net	5,192	5,127
Short-term borrowings	35,000	370,000
Accounts payable	144,369	131,725
Regulatory balancing accounts	17,547	34,636
Accrued other taxes	5,379	4,477
Accrued interest	6,542	6,178
Other accrued liabilities	42,547	36,563
Total current liabilities	256,576	588,706
Deferred income taxes	298,945	276,032
Regulatory liabilities	180,428	180,718
Pension	92,287	115,581
Total refunds	198,086	195,625
Contributions in aid of construction	285,665	268,050
Other long-term liabilities	72,510	67,092
Commitments and contingencies (Note 15)		
TOTAL CAPITALIZATION AND LIABILITIES	\$3,623,271	\$3,394,248
NetPlant	2,846,862	2,650,558
Advances	198,086	195,625
CIAC	285,665	268,050
DefTax	298,945	276,032
ITC	0	0

Consolidated Balance Sheets - USD (\$)	Dec. 31, 2021	Dec. 31, 2020
\$ in Thousands		
Assets		
Property, plant and equipment, at cost	\$12,610,376	\$11,620,019
Less: accumulated depreciation	2,358,510	2,107,142
Net property, plant and equipment	10,251,866	9,512,877
Current assets:		
Cash and cash equivalents	10,567	4,827
Accounts receivable, net	141,025	154,775
Unbilled revenues	119,896	118,538
Inventory - materials and supplies	33,756	21,669
Inventory - gas stored	75,804	36,732
Prepayments and other current assets	36,597	38,594
Regulatory assets	20,150	5,085
Total current assets	437,795	380,220
Regulatory assets	1,429,840	1,362,788
Deferred charges and other assets, net	141,955	56,002
Funds restricted for construction activity	1,313	1,268
Goodwill	2,340,815	2,324,547
Operating lease right-of-use assets	48,930	60,334
Intangible assets	5,764	7,241
Total assets	14,658,278	13,705,277
Essential Utilities stockholders' equity:		
Common stock at \$0.50 par value, authorized 600,000,000 shares, issued 248,571,355 and 223,871,284 as of Dec. 31, 2021 and Dec. 31, 2020	128,050	124,285
Capital in excess of par value	3,705,814	3,379,057
Retained earnings	1,434,201	1,261,862
Treasury stock, at cost, 3,180,887 and 3,112,565 shares as of December 31, 2020 and December 31, 2019	-83,615	-81,327
Total stockholders' equity	5,184,450	4,683,877
Long-term debt, excluding current portion	5,815,211	5,545,890
Less: debt issuance costs	35,707	38,146
Long-term debt, excluding current portion, net of debt issuance costs	5,779,504	5,507,744
Commitments and contingencies (See Note 9)		
Current liabilities:		
Current portion of long-term debt	132,146	84,353
Loans payable	65,000	78,198
Accounts payable	192,932	177,489
Book overdraft	81,722	44,003
Accrued interest	40,815	39,408
Accrued taxes	37,924	37,172
Regulatory liabilities	384	19,866
Other accrued liabilities	124,140	123,384
Total current liabilities	675,063	603,873
Deferred credits and other liabilities:		
Deferred income taxes and investment tax credits	1,406,537	1,258,098
Customers' advances for construction	103,619	99,014
Regulatory liabilities	769,617	773,310
Asset retirement obligations	1,256	1,336
Operating lease liabilities	48,230	55,642
Pension and other postretirement benefit liabilities	50,226	91,896
Other	43,666	56,713
Total deferred credits and other liabilities	2,423,151	2,336,009
Contributions in aid of construction	596,110	573,774
Total liabilities and equity	14,658,278	\$ 13,705,277
NetPlant	10,251,866	9,512,877
Advances	103,619	99,014
CIAC	596,110	573,774
DefTax	1,406,537	1,258,098
ITC	0	0

CONSOLIDATED BALANCE SHEETS - USD (\$)	Dec. 31, 2021	Dec. 31, 2020
\$ in Thousands		
UTILITY PLANT:		
Water Production	\$247,286	\$168,080
Transmission and Distribution	697,200	648,763
General	95,658	85,056
Construction Work in Progress	24,947	80,055
TOTAL	1,065,091	981,954
Less Accumulated Depreciation	199,723	185,356
UTILITY PLANT - NET	865,368	796,598
CURRENT ASSETS:		
Cash and Cash Equivalents	3,533	4,491
Accounts Receivable, net of allowance for uncollectible accoun	15,311	14,569
Unbilled Revenues	7,273	7,065
Materials and Supplies (at average cost)	5,358	5,112
Prepayments	2,880	2,886
TOTAL CURRENT ASSETS	34,355	34,123
Operating Lease Right of Use Asset	4,503	5,209
Preliminary Survey and Investigation Charges	3,540	5,192
Regulatory Assets	100,738	118,144
Restricted Cash		5,913
Non-utility Assets - Net	11,428	11,207
Other	83	84
TOTAL OTHER ASSETS	120,292	145,749
TOTAL ASSETS	1,020,015	976,470
CAPITALIZATION:		
Common Stock, No Par Value	221,919	217,451
Retained Earnings	145,807	128,757
TOTAL COMMON EQUITY	367,726	346,208
Preferred Stock	2,084	2,084
Long-term Debt	306,520	273,244
TOTAL CAPITALIZATION	676,330	621,536
CURRENT LIABILITIES:		
Current Portion of Long-term Debt	6,731	7,255
Notes Payable	13,000	2,000
Accounts Payable	21,125	30,443
Accrued Taxes	8,621	10,138
Accrued Interest	1,986	2,137
Unearned Revenues and Advanced Service Fees	1,330	1,255
Other	3,826	3,620
TOTAL CURRENT LIABILITIES	56,619	56,848
COMMITMENTS AND CONTINGENT LIABILITIES (Note 4)		
OTHER LIABILITIES:		
Customer Advances for Construction	23,529	23,404
Lease Obligations	4,367	5,042
Accumulated Deferred Income Taxes	69,500	61,297
Employee Benefit Plans	11,290	34,426
Regulatory Liabilities	49,431	60,792
Other	1,086	1,135
TOTAL OTHER LIABILITIES	159,203	186,096
CONTRIBUTIONS IN AID OF CONSTRUCTION	127,863	111,990
TOTAL CAPITALIZATION AND LIABILITIES	\$1,020,015	\$976,470
NetPlant	865,368	796,598
Advances	23,529	23,404
CIAC	127,863	111,990
DefTax	69,500	61,297
ITC	0	0

Consolidated Balance Sheets - USD (\$)	Dec. 31, 2021	Dec. 31, 2020
\$ in Thousands		
Utility plant:		
Land	\$39,004	\$36,845
Depreciable plant and equipment	3,381,908	3,198,060
Construction in progress	176,427	109,976
Intangible assets	36,276	35,167
Property, plant, and equipment, gross	3,633,615	3,380,048
Less accumulated depreciation and amortization	1,136,116	1,045,136
Public utilities, property, plant and equipment, net	2,497,499	2,334,912
Real estate investments and nonutility properties	57,632	58,129
Less accumulated depreciation and amortization	15,951	14,783
Real estate investments, net	41,681	43,346
Cash and cash equivalents:		
Cash	10,908	5,269
Restricted cash	1,211	4,000
Accounts receivable:		
Customers, net of allowances for uncollectible accounts of \$4,600 and \$3,891 in 2021 and 2020, respectively	53,699	46,832
Income tax	2,308	7,041
Other	4,735	4,269
Accrued unbilled utility revenue	44,026	44,950
Current regulatory assets, net	2,629	1,748
Prepaid expenses	9,667	8,097
Other current assets	4,902	5,125
Total current assets	134,085	127,331
Other assets:		
Net regulatory assets, less current portion	151,992	156,482
Investments	15,784	14,367
Goodwill	640,471	628,144
Other	10,883	6,883
Total other assets	819,130	805,876
Total assets	3,492,395	3,311,465
Stockholders' equity:		
Common stock, \$0.001 par value; authorized 70,000,000 shares in 2021 and 2020; issued and outstanding 30,181,348 shares in 2021 and 28,556,605 shares in 2020	30	29
Additional paid-in capital	606,392	510,158
Retained earnings	428,260	408,037
Accumulated other comprehensive (loss)	-163	-1,064
Total stockholders' equity	1,034,519	917,160
Long-term debt, less current portion	1,492,935	1,287,580
Capitalization, long-term debt and equity	2,527,454	2,204,740
Current liabilities:		
Lines of credit	62,996	175,094
Current portion of long-term debt	39,106	76,241
Accrued groundwater extraction charges, purchased water and power	17,200	19,184
Accounts payable	30,391	34,200
Accrued interest	14,174	12,861
Accrued payroll	11,583	14,012
Other current liabilities	27,821	19,203
Total current liabilities	203,271	350,795
Deferred income taxes	200,451	191,415
Advances for construction	130,693	125,027
Contributions in aid of construction	316,479	296,105
Postretirement benefit plans	89,998	121,597
Other noncurrent liabilities	24,049	21,786
Total equity and liabilities	\$3,492,395	\$3,311,465
NetPlant	2,497,499	2,334,912
Advances	130,693	125,027
CIAC	316,479	296,105
DefTax	200,451	191,415
ITC	0	0

Balance Sheets - USD (\$)	Dec. 31, 2021	Dec. 31, 2020
\$ in Thousands		
ASSETS		
UTILITY PLANT, at original cost	\$485,750	\$438,670
Plant acquisition adjustments	-3,637	-3,707
Accumulated depreciation	-99,204	-91,340
Net utility plant	382,909	343,623
OTHER PHYSICAL PROPERTY, net of accumulated depreciation of \$483 in 2021 and \$458 in 2020	717	742
CURRENT ASSETS:		
Cash and cash equivalents	1	2
Restricted cash	0	5,000
Accounts receivable, net of reserves of \$855 in 2021 and \$655 in 2020	4,634	5,184
Unbilled revenues	2,784	2,847
Recoverable income taxes	894	721
Materials and supplies inventories, at cost	1,917	1,010
Prepaid expenses	1,032	1,526
Total current assets	11,262	16,290
OTHER LONG-TERM ASSETS:		
Prepaid pension cost	14,054	2,209
Note receivable	255	255
Deferred regulatory assets	45,280	39,893
Other assets	4,376	3,945
Total other long-term assets	63,965	46,302
Total Assets	458,853	406,957
COMMON STOCKHOLDERS' EQUITY:		
Common stock, no par value, authorized 46,500,000 shares, issued and outstanding 13,112,948 shares in 2021 and 13,060,817 shares in 2020	88,230	85,935
Retained earnings	64,392	57,317
Total common stockholders' equity	152,622	143,252
PREFERRED STOCK, authorized 500,000 shares, no shares issued	0	0
LONG-TERM DEBT, excluding current portion	138,869	123,573
COMMITMENTS		
CURRENT LIABILITIES:		
Current portion of long-term debt	7,500	0
Accounts payable	6,712	6,540
Dividends payable	2,293	2,192
Accrued compensation and benefits	1,575	1,417
Accrued interest	959	959
Deferred regulatory liabilities	607	525
Other accrued expenses	440	360
Total current liabilities	20,086	11,993
DEFERRED CREDITS:		
Customers' advances for construction	12,820	10,326
Deferred income taxes	49,590	43,538
Deferred employee benefits	4,530	4,793
Deferred regulatory liabilities	36,374	25,444
Other deferred credits	2,086	2,731
Total deferred credits	105,400	86,832
Contributions in aid of construction	41,876	41,307
Total Stockholders' Equity and Liabilities	\$458,853	\$406,957
NetPlant	383,626	344,365
Advances	12,820	10,326
CIAC	41,876	41,307
DefTax	49,590	43,538
ITC	0	0

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	296.276	296.171	296.808	298.012	297.711	296.797	288.347	296.963

Geocode	County	Municipality	2010	2020	Change		Munic. Rank
					Numeric	Percent	
019	Butler County	Butler County	183,862	193,763	9,901	5.4%	
01910464	Butler County	Butler city	13757	13502	-255	-1.9%	1,229
01910472	Butler County	Butler township	17248	17230	-18	-0.1%	996
01912024	Butler County	Center township	7898	7899	1	0.0%	981
01915808	Butler County	Connoquenessing borough	528	668	140	26.5%	28
01920904	Butler County	East Butler borough	732	764	32	4.4%	495
01955992	Butler County	Oakland township	2987	2769	-218	-7.3%	1,960
01958792	Butler County	Penn township	5071	4990	-81	-1.6%	1,201
01975184	Butler County	Summit township	4884	4504	-380	-7.8%	2,005

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

WORKING NOTES										WORKING NOTES			
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029		
GROSS Property, plant and equipment													
-	-	-	-	143,771,330	145,019,351	151,415,601	161,169,351	176,150,601	190,770,601	193,646,907	196,566,590		
Accumulated Depreciation													
-	-	-	-	50,362,247	53,876,352	55,420,123	56,512,189	56,897,259	57,614,547	60,581,148	63,592,881		
NET PPE													
-	-	-	-	93,409,083	91,142,999	95,995,478	104,657,162	119,253,342	133,156,054	133,065,759	132,973,709		
Total Debt													
-	-	-	-	-	40,624,743								
Net Equity													
-	-	-	-	-	33,425,221								
Investor Provided Capital													
-	-	-	-	-	74,049,964	-							

Depreciation / GROSS PPE													
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	1.81%							
IOU savings													
CAPX/Prior Yr. GROSS PPE													
CAPX													
Dep rate													
Half yr. Dep													
Dep on CAPX													
Rate of retirement													
Retired property													
Dep on Retired property													
Dep on Prior Yr. GROSS													
Total Dep													
				3,685,849	3,725,042	2,624,850	2,740,622	2,917,165	3,188,326	3,452,948	3,505,009		
				3,734,344	2,672,521	2,013,317	3,028,819	3,297,188		3,474,385	3,526,769		

BUTLER	Depreciation Expense	-	3,695,178	3,685,849	part of OCN
	NET PPE				
	Rev				

BUTLER													
NET PPE													
Rev													
Reg Assessment Fee													
PURTA													
0.001527765													
0.005652534													
2022													
2023													
2024													
2025													
2026													
2027													
2028													
2029													
2030													
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Builer Area Sewer Authority	
Investor Provide	74,049,964
Gross PP&E	143,771,330
Net PP&E	93,409,083
Revenues	12,258,500
EBITDA	6,064,530
EBIT	2,330,186
Customers	14,699
Population	52,499

	2018	2019	2020	2021	2022	2023	2024	
BUTLER								
LESS: EOS - Wages & Benefits	0	0	0	0	0	3,999,200		0.15
LESS: EOS - Professional Services	0	0	0	0	0	229,120		0.5
LESS: EOS - Eliminated Expenses	0	0	0	0	0	0		LESS: EOS - Line Rentals

WORKING NOTES												WORKING NOTES			
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029				
BUTLER															
Wages			0	0	0	3,999,200									
Professional Services				0	0	229,120									
Eliminated Exp		0	0	0	0	0									
BUTLER															
Reported CAPX - from the financials	0	0	296,183	958,729	Included in OCN 1,675,045	= to DepX 1,468,260	2022 CAPX								
GROSS Property, plant and equipment	-	-	-	-	143,771,330										
Accumulated Depreciation	-	-	-	-	50,362,247										
NET PPE	-	-	-	-	93,409,083										
Total Debt	-	-	-	-	40,624,743										
Net Equity	-	-	-	-	33,425,221										
Investor Provided Capital	-	-	-	-	74,049,964										
Depreciation Rate	0.00%	0.00%	0.00%	#DIV/0!	1.81%										
Depreciation Expense	-	-	3,695,178	3,685,849	3,725,042	2,599,685.00									
CAPX		2023 8,070,000	2024 7,525,000	2025 11,475,000	2026 17,625,000	2027 17,200,000									
Is there known CAPX?		BUTLER			XYZ's LTCP	0	0	0	0	0	0				
				State of Good Repair dummy dummy dummy	8,070,000	7,525,000	11,475,000	17,625,000	17,200,000	0	0				
				dummy	0	0	0	0	0	0	0				
				dummy	0	0	0	0	0	0	0				
				dummy	0	0	0	0	0	0	0				
				CAPX	8,070,000	7,525,000	11,475,000	17,625,000	17,200,000	0	0				
				Expand WWTP work area	0	0	0	0	0	0	0				
				State of Good Repair dummy dummy dummy	0	0	0	0	0	0	0				
				dummy	0	0	0	0	0	0	0				
				dummy	0	0	0	0	0	0	0				
				OpEx	0	0	0	0	0	0	0				
				State of Good Repair dummy dummy	0	0	0	0	0	0	0				
				Capital Expenditures - Pre-2024 based on financials/budget. Post-2023 years based on APA's CAPX and are esti	0	0	0	0	0	0	0				

WORKING NOTES					WORKING NOTES						
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
				dummy		dummy					
				CAPX note		Capital Expenditures - Pre-2024 based on financials/budget. Post-2023 years based on APA's CAPX and are esti					
				State of Good Repair		No Additional O&M.					
				dummy		dummy					
				dummy		dummy					
				dummy		dummy					
				Additional OpEx note		No Additional O&M.					

Pre-2024 based on financials/budget. Post-2023 years based on APA's CAPX and are esti

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
GROSS Property, plant and equipment	199,530,273	202,538,651	205,592,387	208,692,165	211,836,680	215,032,636	218,274,748	221,565,741	224,906,354	228,297,335	231,739,442	235,233,447	238,780,132	242,380,292
Accumulated Depreciation	66,649,020	69,752,849	72,902,663	76,099,968	79,345,480	82,639,925	85,984,042	89,378,578	92,824,296	96,321,965	99,872,370	103,476,305	107,134,578	110,848,002
NET PPE	132,880,453	132,785,802	132,689,724	132,592,197	132,493,200	132,392,711	132,290,706	132,187,163	132,082,058	131,975,370	131,867,072	131,757,142	131,645,554	131,532,284

Total Debt														
Net Equity														
Investor Provided Capital														

Depreciation / GROSS PPE														
	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%
	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%
	3,486,698	3,539,268	3,592,631	3,646,798	3,701,782	3,757,595	3,814,249	3,871,757	3,930,133	3,989,389	4,049,538	4,110,594	4,172,571	4,235,482
	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%
	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%
	31,555	32,030	32,513	33,004	33,501	34,006	34,519	35,039	35,568	36,104	36,648	37,201	37,762	38,331
	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%
	523,005	530,890	538,895	547,020	555,267	563,639	572,137	580,764	589,520	598,408	607,431	616,589	625,886	635,322
	9,466	9,609	9,754	9,901	10,050	10,202	10,356	10,512	10,670	10,831	10,995	11,160	11,329	11,499
	3,552,855	3,611,498	3,669,950	3,721,222	3,777,328	3,834,280	3,892,091	3,950,773	4,010,340	4,070,805	4,132,182	4,194,484	4,257,725	4,321,920
BUTLER	2,579,944	2,633,919	2,688,709	2,744,325	2,800,779	2,858,084	2,916,254	2,975,300	3,035,238	3,096,078	3,157,835	3,220,525	3,284,159	3,348,752

Depreciation Expense														
	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$

	394,250.00	394,250.00	394,250.00	394,250.00	399,000.00	399,000.00	399,000.00	403,750.00	403,750.00	403,750.00	403,750.00	408,500.00	408,500.00	408,500.00
Sewer Rental Charges														
EDUs	24366	24449	24532	24615	24699	24783	24867	24952	25037	25122	25207	25293	25379	25465
	83	83	83	83	84	84	84	85	85	85	85	86	86	86

BUTLER														

	2030	2031	2032

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
BUTLER	15,431	15,484	15,536	15,589	15,642	15,695	15,749	15,802	15,856	15,910	15,964	16,018	16,073	16,127
	16,093,643	16,148,362	16,203,266	16,246,108	16,293,045	16,340,175	16,387,505	16,435,035	16,482,765	16,530,495	16,578,225	16,625,955	16,673,685	16,721,415
	103.00%	103.00%	103.00%	103.00%	103.00%	103.00%	103.00%	103.00%	103.00%	103.00%	103.00%	103.00%	103.00%	103.00%
	1,042.92	1,042.92	1,042.92	1,042.92	1,042.92	1,042.92	1,042.92	1,042.92	1,042.92	1,042.92	1,042.92	1,042.92	1,042.92	1,042.92
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	660.50	660.49	660.50	660.50	660.50	660.50	660.50	660.50	660.50	660.50	660.50	660.50	660.50	660.50
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	15,598,424	16,121,002	16,175,814	16,230,812	16,274,576	16,318,340	16,362,104	16,405,868	16,449,632	16,493,396	16,537,160	16,580,924	16,624,688	16,668,452

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
	1,044.69	1,044.69	1,044.69	1,044.69	1,044.69	1,044.69	1,044.69	1,044.69	1,044.69	1,044.69	1,044.69	1,044.69	1,044.69	1,044.69
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	26,472	27,359	27,452	27,546	28,468	28,565	28,662	29,623	29,723	30,421	30,524	30,934	31,039	31,830
	16,093,643	16,148,362	16,203,266	16,246,108	16,293,045	16,340,175	16,387,505	16,435,035	16,482,765	16,530,495	16,578,225	16,625,955	16,673,685	16,721,415
	-	-	486,098	-	-	505,805	-	349,685	-	179,554	-	401,687	-	450,895

	190,418	190,285	190,149	190,012	189,876	189,730	189,586	189,440	189,292	189,142	188,989	188,834	188,676	188,516
	91,822	92,132	92,444	92,756	93,068	93,380	93,692	94,004	94,316	94,628	94,940	95,252	95,564	95,876
	282,240	282,417	282,593	282,769	282,945	283,121	283,297	283,473	283,649	283,825	284,001	284,177	284,353	284,529

BUTLER														
LESS: EOS - Wages & Benefits	15% savings													
LESS: EOS - Professional Services	50% savings													
LESS: EOS - Eliminated Expenses	10% savings													

[illegible]

mates at 1.77% of prior year-end GROSS Property, plant and equipment.

	WORKING NOTES												WORKING NOTES		
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029			
GROSS Property, plant and equipment	-	-	-	-	143,771,330	145,019,351	151,415,601	161,169,351	176,150,601	190,770,601	193,646,907	196,566,580			
Accumulated Depreciation	-	-	-	-	50,362,247	53,876,352	55,420,123	56,512,189	56,897,259	57,614,547	60,581,348	63,592,881			
NET PPE	-	-	-	-	93,409,083	91,142,999	95,995,478	104,657,162	119,253,342	133,156,054	133,065,559	132,973,699			
Total Debt	-	-	-	-	-	-	40,624,743								
Net Equity	-	-	-	-	-	-	33,425,221								
Investor Provided Capital	-	-	-	-	-	-	74,049,964	-							

[illegible][illegible][illegible][illegible]

[illegible]

Bulter Area Sewer Authority	
Investor Provide	74,049,964
Gross PP&E	143,771,330
Net PP&E	93,409,083
Revenues	12,258,500
EBITDA	6,778,970
EBIT	3,044,626
Customers	14,699
Population	52,499

	2018	2019	2020	2021	2022	2023	2024	
BUTLER								
LESS: EOS - Wages & Benefits	0	0	0	0	0	3,999,200		LESS: EOS - Wa Wages & Benefits
LESS: EOS - Professional Services	0	0	0	0	0	229,120		LESS: EOS - Pro Net Professional Service
								0.15
								0.5
LESS: EOS - Eliminated Expenses	0	0	0	0	0	0		LESS: EOS - Line Remarks

[illegible]

WORKING NOTES						WORKING NOTES					
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
				dummy		dummy					
				CAPX note		Capital Expenditures - Pre-2024 based on financials/budget, Post-2023 years based on APA's CAPX and are esti					
				State of Good Repair		No Additional O&M.					
				dummy		dummy					
				dummy		dummy					
				dummy		dummy					
				Additional OpEx note		No Additional O&M.					

Pre-2024 based on financials/budget. Post-2023 years based on APA's CAPX and are esti

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
BUTLER	15,431	15,484	15,536	15,589	15,642	15,695	15,749	15,802	15,856	15,910	15,964	16,018	16,073	16,127
	16,093,643	16,148,362	16,203,266	16,246,108	16,803,045	16,860,175	17,425,025	17,484,270	17,894,591	17,955,432	18,196,646	18,258,514	18,723,646	18,787,306
	103.00%													
	1,042.92	1,042.92	1,042.92	1,074.21	1,074.21	1,074.21	1,106.43	1,106.43	1,128.56	1,128.56	1,139.85	1,139.85	1,164.92	1,164.92
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	660.50	660.49	660.50	680.32	680.31	680.31	700.73	700.72	714.73	714.73	721.89	721.88	737.76	737.77
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	15,598,424	16,121,002	16,175,814	16,230,812	16,774,576	16,831,610	16,888,837	17,454,648	17,513,993	17,925,012	17,985,956	18,227,580	18,289,553	18,755,476

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	2.0%	2.0%	1.0%	1.0%	2.2%	2.2%	2.4%
	\$ 1,044.69	\$ 1,044.69	\$ 1,076.03	\$ 1,076.03	\$ 1,076.03	\$ 1,108.31	\$ 1,108.31	\$ 1,130.48	\$ 1,130.48	\$ 1,141.78	\$ 1,141.78	\$ 1,166.90	\$ 1,166.90	\$ 1,194.91
	\$ -	\$ -	\$ 31.34	\$ -	\$ -	\$ 32.28	\$ -	\$ 22.17	\$ -	\$ 11.30	\$ -	\$ 25.12	\$ -	\$ 28.01
	26,472	27,359	27,452	27,546	28,468	28,565	28,662	29,623	29,723	30,421	30,524	30,934	31,039	31,830
	16,093,643	16,148,362	16,203,266	16,746,108	16,803,045	16,860,175	17,425,025	17,484,270	17,894,591	17,955,432	18,196,646	18,258,514	18,723,646	18,787,306
	-	-	486,098	-	-	505,805	-	349,685	-	179,554	-	401,687	-	450,895

190,418	190,285	190,149	190,012	189,872	189,730	189,586	189,440	189,292	189,142	188,989	188,834	188,676	188,516
91,822	92,132	92,444	95,522	95,845	96,169	99,372	99,708	102,035	102,380	103,748	104,099	106,736	107,097
282,240	282,417	282,593	285,534	285,717	285,899	286,958	289,148	291,327	291,522	292,737	292,933	295,412	295,613

BUTLER			
LESS: EOS - Wages & Benefits	15% savings	0.15	
LESS: EOS - Professional Services	50% savings	0.5	
LESS: EOS - Eliminated Expenses	10% savings	100%	1

	2030	2031	2032
BUTLER			
Wages			
Professional Services			
Eliminated Exp			
BUTLER			
Reported CAPX - from the financials			
GROSS Property, plant and equipment			
Accumulated Depreciation			
NET PPE			
Total Debt			
Net Equity			
Investor Provided Capital			
Depreciation Rate			
Depreciation Expense			
CAPX			
Is there known CAPX?			

mates at 1.77% of prior year-end GROSS Property, plant and equipment.

[illegible]

Butler Area Sewer Authority	74,049,964
Investor Provide	143,771,330
Gross PP&E	93,409,083
Net PP&E	12,258,500
Revenues	6,778,970
EBITDA	3,044,626
EBIT	14,699
Customers	52,499
Population	

	2018	2019	2020	2021	2022	2023	2024
BUTLER							
LESS: EOS - Wages & Benefits	0	0	0	0	0	3,999,200	
LESS: EOS - Professional Services	0	0	0	0	0	229,120	
							0.15
							0.5
LESS: EOS - Eliminated Expenses	0	0	0	0	0	0	
							LESS: EOS - Line Rentals

[illegible]

WORKING NOTES					WORKING NOTES						
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
				dummy		dummy					
				CAPX note		Capital Expenditures - Pre-2024 based on financials/budget. Post-2023 years based on APA's CAPX and are esti					
				State of Good Repair		No Additional O&M.					
				dummy		dummy					
				dummy		dummy					
				dummy		dummy					
				Additional OpEx note		No Additional O&M.					

Pre-2024 based on financials/budget. Post-2023 years based on APA's CAPX and are esti

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
GROSS Property, plant and equipment	199,530,273	202,538,651	205,592,387	208,692,165	211,836,680	215,032,636	218,274,748	221,565,741	224,906,354	228,297,335	231,739,442	235,233,447	238,780,132	242,380,292
Accumulated Depreciation	66,649,020	69,752,849	72,902,663	76,099,968	79,345,480	82,639,925	85,984,042	89,378,578	92,824,296	96,321,965	99,872,370	103,476,305	107,134,578	110,848,002
NET PPE	132,880,453	132,785,802	132,689,724	132,592,197	132,493,200	132,392,711	132,290,706	132,187,163	132,082,058	131,975,370	131,867,072	131,757,142	131,645,554	131,532,284
Total Debt														
Net Equity														
Investor Provided Capital														

Depreciation / GROSS PPE	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%
	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%
	3,486,698	3,539,268	3,592,631	3,646,798	3,701,782	3,757,595	3,814,249	3,871,757	3,930,133	3,989,389	4,049,538	4,110,594	4,172,571	4,235,482
	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%	1.81%
	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%	0.91%
	31,555	32,030	32,513	33,004	33,501	34,006	34,519	35,039	35,568	36,104	36,648	37,201	37,762	38,331
	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%
	523,005	530,890	538,895	547,020	555,267	563,639	572,137	580,764	589,520	598,408	607,431	616,589	625,886	635,322
	9,466	9,609	9,754	9,901	10,050	10,202	10,356	10,512	10,670	10,831	10,995	11,160	11,329	11,499
	3,552,855	3,611,498	3,669,950	3,721,222	3,777,328	3,834,280	3,892,091	3,950,773	4,010,340	4,070,805	4,132,182	4,194,484	4,257,725	4,321,920
BUTLER	2,579,944	2,633,919	2,688,709	2,744,325	2,800,779	2,858,084	2,916,254	2,975,300	3,035,238	3,096,078	3,157,835	3,220,525	3,284,159	3,348,752
Depreciation Expense														

	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$
	394,250.00	394,250.00	394,250.00	394,250.00	399,000.00	399,000.00	399,000.00	403,750.00	403,750.00	403,750.00	403,750.00	408,500.00	408,500.00	408,500.00
Sewer Rental Charges														
EDUs	24366	24449	24532	24615	24699	24783	24867	24952	25037	25122	25207	25293	25379	25465
	83	83	83	83	84	84	84	85	85	85	85	86	86	86
BUTLER														

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
BUTLER	15,431	15,484	15,536	15,589	15,642	15,695	15,749	15,802	15,856	15,910	15,964	16,018	16,073	16,127
	25,613,670	25,700,756	26,046,020	26,134,576	26,538,115	26,628,345	27,039,508	27,131,442	27,550,373	27,644,045	28,070,891	28,166,332	28,657,767	28,755,203
102.00%	1,659.85	1,659.85	1,676.45	1,676.45	1,696.56	1,696.56	1,716.92	1,716.92	1,737.53	1,737.53	1,758.38	1,758.38	1,782.99	1,782.99
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1,051.21	1,051.20	1,061.72	1,061.73	1,074.46	1,074.46	1,087.37	1,087.37	1,100.39	1,100.39	1,113.61	1,113.61	1,129.19	1,129.20
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25,068,896	25,657,213	25,744,447	26,090,298	26,179,005	26,583,230	26,673,613	27,085,475	27,177,565	27,597,209	27,691,040	28,118,612	28,214,215	28,706,485

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
	1.662.66	1,679.29	1,679.29	1,699.44	1,699.44	1,719.84	1,719.84	1,740.47	1,740.47	1,761.36	1,761.36	1,786.02	1,786.02	1,812.81
\$	-	\$ 16.63	\$ -	\$ 20.15	\$ -	\$ 20.39	\$ -	\$ 20.64	\$ -	\$ 20.89	\$ -	\$ 24.66	\$ -	\$ 26.75
	42,545	43,543	43,691	44,278	44,429	45,115	45,268	45,967	46,123	46,836	46,995	47,721	47,883	48,718
	25,613,670	25,700,756	26,046,020	26,134,576	26,538,115	26,628,345	27,039,508	27,131,442	27,550,373	27,644,045	28,070,891	28,166,332	28,657,767	28,755,203
	-	257,008	-	313,615	-	319,540	-	325,577	-	331,729	-	394,329	-	431,328

190,418	190,285	190,149	190,012	189,872	189,730	189,586	189,440	189,292	189,142	188,989	188,834	188,676	188,516
145,808	146,301	148,259	148,761	151,050	151,561	153,893	154,414	156,790	157,321	159,742	160,283	163,070	163,622
336,226	336,586	338,408	338,773	340,922	341,291	343,479	343,854	346,082	346,463	348,731	349,117	351,746	352,138

BUTLER			
LESS: EOS - Wages & Benefits	15% savings	0.15	
LESS: EOS - Professional Services	50% savings	0.5	
LESS: EOS - Eliminated Expenses	100% savings	1	

	2030	2031	2032
BUTLER			
Wages			
Professional Services			
Eliminated Exp			
BUTLER			
Reported CAPX - from the financials			
GROSS Property, plant and equipment			
Accumulated Depreciation			
NET PPE			
Total Debt			
Net Equity			
Investor Provided Capital			
Depreciation Rate			
Depreciation Expense			
CAPX			
Is there known CAPX?			

mates at 1.77% of prior year-end GROSS Property, plant and equipment.

	WORKING NOTES						WORKING NOTES						
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
GROSS Property, plant and equipment	-	-	-	-	250,000,000	251,248,021	257,644,271	267,398,021	282,379,271	296,999,271	301,279,298	305,621,004	
Accumulated Depreciation	-	-	-	-	-	3,513,693	6,777,097	9,582,575	11,671,529	14,080,837	18,494,115	22,970,991	
NET PPE	-	-	-	-	250,000,000	247,734,328	250,867,174	257,815,446	270,707,742	282,918,434	282,785,183	282,650,013	
Total Debt	-	-	-	-	-	40,624,743	-	-	-	-	-	-	
Net Equity	-	-	-	-	-	33,425,221	-	-	-	-	-	-	
Investor Provided Capital	-	-	-	-	-	74,049,964	-	-	-	-	-	-	

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WORKING NOTES											WORKING NOTES				
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029				
BUTLER	Customer Growth		1742000												
	Delivered to Customer	-	4.08												
	Customers	14,699	14,699	14,699	14,699	14,699	14,699	14,699	14,699	14,699	14,699	0.34%	4	0.34%	4
	Total Revenue (Less TAP)	10,373,400	10,692,751	10,692,751	10,890,555	12,160,150	12,219,714	12,219,714	12,219,714	12,219,714	12,219,714	15,131	15,275	15,327	15,379
	avg CUST rev	705.72	727.45	727.45	740.90	827.28	823.26	865.77	1,229.02	1,229.08	1,229.08	18,596,309	18,774,134	18,895,114	21,803,260
	avg CUST flow	-	0	0	0	0	0	0	0	0	0	100.00%	100.00%	100.00%	100.00%
	avg EDU rev	#DIV/0!	#DIV/0!	#DIV/0!	469.20	523.90	521.36	548.29	778.35	778.40	778.40	18,895,114	18,895,114	18,895,114	21,803,260
	avg EDU flow	#DIV/0!	#DIV/0!	#DIV/0!	0	0	0	0	0	0	0	2,834,267	2,834,267	2,834,267	2,834,267
	Rev Calculated					10,890,555	12,219,714	12,278,989	13,037,655	18,684,798	18,806,050	18,927,236	18,927,236	18,927,236	18,927,236
	Change														

WORKING NOTES												WORKING NOTES			
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029			
BUTLER															
Wages				0	0	0		3,999,200							
Professional Services					0	0		229,120							
Eliminated Exp				0	0	0		0							
BUTLER															
Reported CAPX - from the financials	0	0	296,483	958,729	included in OCN 1,675,045	= to DepX 1,468,260	2022 CAPX								
GROSS Property, plant and equipment															
Accumulated Depreciation	-	-	-	-	-	250,000,000									
NET PPE	-	-	-	-	-	250,000,000									
Total Debt	-	-	-	-	-	40,624,743									
Net Equity	-	-	-	-	-	33,425,221									
Investor Provided Capital	-	-	-	-	-	74,049,964									
Depreciation Rate	0.00%	0.00%	0.00%	#DIV/0!	1.73%										
Depreciation Expense	-	-	3,695,178	3,685,849	3,725,042	4,325,000.00									
CAPX		2023	2024	2025	2026	2027									
		8,070,000	7,525,000	11,475,000	17,625,000	17,200,000									
Is there known CAPX?															
		BUTLER			XYZ's LTCP	0	0	0	0	0	0	0			
				State of Good Repair dummy	8,070,000	7,525,000	11,475,000	17,625,000	17,200,000	0	0	0			
				dummy	0	0	0	0	0	0	0	0			
				dummy	0	0	0	0	0	0	0	0			
				dummy	0	0	0	0	0	0	0	0			
				dummy											
				CAPX	8,070,000	7,525,000	11,475,000	17,625,000	17,200,000	0	0	0			
				Expand WWTP work area											
				State of Good Repair dummy											
				dummy											
				dummy											
				OpEx	0	0	0	0	0	0	0	0			
				State of Good Repair dummy											
				dummy											
				Capital Expenditures - Pre-2024 based on financials budget - Post-2023 years based on APA's CAPX and are estimates at											

WORKING NOTES					WORKING NOTES						
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
				dummy		dummy					
				CAPX note		Capital Expenditures - Pre-2024 based on financials/budget. Post-2023 years based on APA's CAPX and are estimates at					
				State of Good Repair dummy		No Additional O&M. dummy					
				dummy		dummy					
				Additional OpEx note		No Additional O&M.					

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
BUTLER	15,431	15,484	15,536	15,589	15,642	15,695	15,749	15,802	15,856	15,910	15,964	16,018	16,073	16,127
	21,877,392	21,951,775	24,229,052	24,311,431	24,394,089	24,966,570	25,051,456	25,136,631	25,726,538	25,814,008	26,290,302	26,379,689	26,892,890	26,984,326
100.00%	1,417.73	1,417.73	1,559.50	1,559.50	1,559.50	1,590.69	1,590.69	1,590.69	1,622.50	1,622.50	1,646.84	1,646.84	1,673.19	1,673.19
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	897.87	897.86	987.65	987.67	987.65	1,007.41	1,007.42	1,007.40	1,027.54	1,027.55	1,042.96	1,042.96	1,059.65	1,059.66
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	21,840,326	21,914,584	21,989,093	24,270,241	24,352,760	24,435,559	25,009,013	25,094,043	25,179,363	25,770,273	25,857,892	26,334,996	26,424,534	26,938,608

	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
	\$ 1,420.13	\$ 1,562.14	\$ 1,562.14	\$ 1,562.14	\$ 1,593.39	\$ 1,593.39	\$ 1,593.39	\$ 1,625.25	\$ 1,625.25	\$ 1,649.63	\$ 1,649.63	\$ 1,676.03	\$ 1,676.03	\$ 1,704.52
	-	-	-	-	31.24	-	-	-	-	24.38	-	26.39	-	28.40
	37,066	37,192	37,318	41,189	41,329	41,470	42,443	42,587	42,732	43,735	43,884	44,694	44,845	45,718
	21,877,392	21,951,775	24,229,052	24,311,431	24,394,089	24,966,570	25,051,456	25,136,631	25,726,538	25,814,008	26,290,302	26,379,689	26,892,890	26,984,326
	-	2,195,177	-	-	487,882	-	-	502,733	-	387,210	-	422,075	-	458,734
	404,755	404,538	404,359	404,157	403,952	403,744	403,533	403,319	403,102	402,882	402,659	402,432	402,203	401,969
	124,620	125,042	137,956	138,423	138,892	142,138	142,619	143,102	146,448	146,944	149,645	150,151	153,062	153,580
	529,375	529,600	542,315	542,580	542,844	545,882	546,152	546,421	549,550	549,826	552,304	552,583	555,265	555,549

BUTLER			
LESS: EOS - Wages & Benefits	15% savings	0.15	
LESS: EOS - Professional Services	50% savings	0.5	
LESS: EOS - Eliminated Expenses	10% savings	100%	1

[illegible]

at 1.70% of prior year-end GROSS Property, plant and equipment.

	WORKING NOTES					WORKING NOTES							
	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	
GROSS Property, plant and equipment	-	-	-	-	250,000,000	251,248,021	257,644,271	267,398,021	282,379,271	296,999,271	301,279,298	305,621,004	
Accumulated Depreciation	-	-	-	-	-	3,513,693	6,777,097	9,582,575	11,671,529	14,080,837	18,494,115	22,970,991	
NET PPE	-	-	-	-	250,000,000	247,734,328	250,867,174	257,815,446	270,707,742	282,918,434	282,785,183	282,650,013	
Total Debt	-	-	-	-	-	40,624,743	-	-	-	-	-	-	
Net Equity	-	-	-	-	-	33,425,221	-	-	-	-	-	-	
Investor Provided Capital	-	-	-	-	-	74,049,964	-	-	-	-	-	-	

Depreciation / GROSS PPE	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	1.73%	0	1,468,260	7,525,000	11,475,000	17,625,000	17,200,000	0	0
	IOU savings												
	Muni CAPX												
	0%												
	CAPX Prior Yr. GROSS PPE												
	CAPX												
	Dep rate												
	Half yr. Dep												
	Dep on CAPX												
	Rate of retirement												
BUTLER	Total Dep												
	3,685,849												
	3,685,849												
	3,725,042												
	3,695,178												
	3,685,849												
	part of OCN												
	3,725,042												
	3,685,849												
	3,725,042												

BUTLER	Depreciation Expense												
	3,685,849												
	part of OCN												
	3,725,042												
	3,695,178												
	3,685,849												
	part of OCN												
	3,725,042												
	3,685,849												
	3,725,042												

BUTLER	Depreciation Expense												
	3,685,849												
	part of OCN												
	3,725,042												
	3,695,178												
	3,685,849												
	part of OCN												
	3,725,042												
	3,685,849												
	3,725,042												

BUTLER	Depreciation Expense												
	3,685,849												
	part of OCN												
	3,725,042												
	3,695,178												
	3,685,849												
	part of OCN												
	3,725,042												
	3,685,849												
	3,725,042												

[illegible]

	2018	2019	2020	2021	2022	2023	2024
BUTLER							
LESS: EOS - Wages & Benefits	0	0	0	0	0	3,999,200	
LESS: EOS - Professional Services	0	0	0	0	0	229,120	0.15
							0.5
LESS: EOS - Eliminated Expenses	0	0	0	0	0	0	
							LESS: EOS - Line Rentals

WORKING NOTES												WORKING NOTES			
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029				
BUTLER															
Wages			0	0											
Professional Services				0			3,999,200								
				0			229,120								
Eliminated Exp			0	0	0	0									
BUTLER															
Reported CAPX - from the financials	0	0	296,183	958,729	Included in OCN = to DepX	1,468,260	2022 CAPX								
						1,675,045									
GROSS Property, plant and equipment															
Accumulated Depreciation	-	-	-	-	-	250,000,000		-							
NET PPE	-	-	-	-	-	250,000,000		-	250,000,000						
Total Debt															
Net Equity	-	-	-	-	-	40,624,743									
Investor Provided Capital	-	-	-	-	-	33,425,221									
Depreciation Rate															
Depreciation Expense	-	-	3,695,178	3,685,849	3,725,042	4,325,000.00									
CAPX															
	2023	2024	2025	2026	2027										
	8,070,000	7,525,000	11,475,000	17,625,000	17,200,000										
Is there known CAPX?															
	BUTLER				XYZ's LTCP	0	0	0	0	0	0				
					State of Good Repair	8,070,000	7,525,000	11,475,000	17,625,000	17,200,000	0				
					dummy	0	0	0	0	0	0				
					dummy	0	0	0	0	0	0				
					dummy	0	0	0	0	0	0				
					dummy										
					CAPX	8,070,000	7,525,000	11,475,000	17,625,000	17,200,000	0				
					Expand WWTP work area		0	0	0	0	0				
					State of Good Repair		0	0	0	0	0				
					dummy		0	0	0	0	0				
					dummy		0	0	0	0	0				
					dummy		0	0	0	0	0				
					OpEx	0	0	0	0	0	0				
					State of Good Repair										
					dummy										
					dummy										
					Capital Expenditures - Pre-2024 based on financials/budget. Post-2023 years based on APA's CAPX and are estimates at										

WORKING NOTES					WORKING NOTES						
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
				dummy		dummy					
				CAPX note		Capital Expenditures - Pre-2024 based on financials/budget. Post-2023 years based on APA's CAPX and are estimates at					
				State of Good Repair		No Additional O&M.					
				dummy		dummy					
				dummy		dummy					
				dummy		dummy					
				Additional OpEx note		No Additional O&M.					

[illegible]

[illegible]

at 1.70% of prior year-end GROSS Property, plant and equipment.

Butler Area Sewer Authority Wastewater System Assets

Total Debt	43,094,879	44,931,895	47,011,774
Purchase of Capital Assets	958,729	296,183	4,024,985

	2021	2020	2019
Income (Loss) Before Transfers	420,597	(927,879)	(1,315,418)
Interest paid	590,453	1,330,851	1,255,034
Depreciation	3,685,849	3,695,178	3,476,093
Total Source	\$4,696,899	\$4,098,150	\$3,415,709

Income tax	0	0	0

Principal	2,754,201	2,152,762	2,311,533
Interest paid	590,453	1,330,851	1,255,034
Total Use	\$3,344,654	\$3,483,613	\$3,566,567

W/Out Trans

Debt Service Coverage	1.40	1.18	0.96
Pre-Tax Interest Coverage - Including AFC(3)(x)	1.71	0.30	-0.05
Post-Tax Interest Coverage - Including AFC(3)(x)	1.71	0.30	-0.05
GCF / Interest Coverage(4)(x)	7.95	3.08	2.72
GCF / Tot. Debt(7)(%)	9.53	6.16	4.60
GCF / Construction(6)(%)	428.32	934.32	53.68

Comparable Group

Debt Service Coverage - As Reported						
	2021	2020	2019			
Comparable Group						
AMERICAN STATES WATER COMPANY	3.1	1.6	2.2			
AMERICAN WATER WORKS COMPANY, INC.	3.0	2.3	1.8			
ARTESIAN RESOURCES CORPORATION	3.9	3.8	3.7			
CALIFORNIA WATER SERVICE GROUP	5.1	3.6	0.4			
ESSENTIAL UTILITIES, INC.	1.0	0.4	0.4			
MIDDLESEX WATER COMPANY	1.2	4.5	4.0			
SIW GROUP	1.6	2.5	3.7			
THE YORK WATER COMPANY	0.7	0.7	0.3			
Median	2.3	2.4	2.0			
	2021	2020	2019	2021	2020	2019
Company Name	DEPRECIATION	DEPRECIATION	DEPRECIATION	TOTAL INTERST EXPENSE	TOTAL INTERST EXPENSE	TOTAL INTERST EXPENSE
AMERICAN STATES WATER COMPANY	39.974	37.204	35.713	22.834	22.531	24.586
AMERICAN WATER WORKS COMPANY, INC.	636.000	604.000	582.000	403.000	397.000	386.000
ARTESIAN RESOURCES CORPORATION	11.885	11.143	10.803	7.592	7.619	7.024
CALIFORNIA WATER SERVICE GROUP	111.581	100.935	91.288	44.980	45.047	44.891
ESSENTIAL UTILITIES, INC.	297.952	257.059	156.476	207.709	188.435	149.125
MIDDLESEX WATER COMPANY	26.799	20.838	17.232	8.114	7.493	7.264
SIW GROUP	96.474	91.622	68.489	54.339	54.255	31.796
THE YORK WATER COMPANY	8.859	8.177	7.688	4.926	4.707	5.124
	2021	2020	2019	2021	2020	2019
	INCOME TO PREF+COMM	INCOME TO PREF+COMM	INCOME TO PREF+COMM	REPAY LT DEBT	REPAY LT DEBT	REPAY LT DEBT
AMERICAN STATES WATER COMPANY	22.834	22.531	24.586	28.356	71.136	40.325
AMERICAN WATER WORKS COMPANY, INC.	403.000	397.000	386.000	372.000	342.000	495.000
ARTESIAN RESOURCES CORPORATION	7.592	7.619	7.024	1.825	1.772	1.725
CALIFORNIA WATER SERVICE GROUP	44.980	45.047	44.891	5.353	22.141	405.568
ESSENTIAL UTILITIES, INC.	207.709	188.435	149.125	769.546	1,820.571	1,073.708
MIDDLESEX WATER COMPANY	8.114	7.493	7.264	52.691	7.472	7.343
SIW GROUP	54.339	54.255	31.796	76.113	28.931	1.400
THE YORK WATER COMPANY	4.926	4.707	5.124	37.649	39.628	85.906

Company Name	Pretax Operating Income			Interest expense			Net Income		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
AMERICAN STATES WATER CO	147,604	137,153	133,598	22,834	22,531	24,586	94,347	86,425	84,342
AMERICAN WATER WORKS CO INC	2,043,000	1,321,000	1,219,000	403,000	397,000	386,000	1,263,000	709,000	621,000
ARTESIAN RESOURCES -CL A	30,156	30,120	27,130	7,592	7,619	7,024	16,827	16,817	14,925
CALIFORNIA WATER SERVICE GP	150,197	153,896	125,678	44,980	45,047	44,891	101,125	96,831	63,116
ESSENTIAL UTILITIES, INC.	629,709	453,406	360,651	207,709	188,435	149,125	431,612	284,849	224,543
MIDDLESEX WATER CO	39,169	41,799	38,012	8,114	7,493	7,264	36,543	38,425	33,888
SJW GROUP	123,186	124,150	63,653	54,339	54,255	31,796	60,478	61,515	23,403
YORK WATER CO	23,030	23,323	21,766	4,926	4,707	5,124	16,984	16,598	14,402

Company Name	Gross Cash Flow			Total debt			CAPX		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
AMERICAN STATES WATER CO	137,882	125,872	126,678	629,017	586,555	499,928	144,515	130,423	151,940
AMERICAN WATER WORKS CO INC	2,119,000	1,507,000	1,398,000	11,077,000	11,025,000	9,547,000	1,764,000	1,822,000	1,654,000
ARTESIAN RESOURCES -CL A	30,266	24,401	21,079	172,029	171,460	153,846	40,814	34,277	40,677
CALIFORNIA WATER SERVICE GP	211,586	206,596	168,402	1,111,389	1,171,852	998,102	293,194	298,651	273,770
ESSENTIAL UTILITIES, INC.	700,258	511,439	354,411	6,114,443	5,777,606	3,097,913	1,020,519	835,642	550,273
MIDDLESEX WATER CO	61,981	52,811	46,410	331,418	287,541	263,687	79,378	105,619	89,125
SJW GROUP	149,679	143,507	86,320	1,595,037	1,538,915	1,423,078	233,933	195,323	164,325
YORK WATER CO	25,316	24,333	22,365	148,455	126,304	103,282	46,400	33,299	20,537

Company Name	Pretax Interest Coverage			Posttax Interest Coverage			GCF Interest Coverage		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
AMERICAN STATES WATER CO	6.5	6.1	5.4	5.1	4.8	4.4	7.0	6.6	6.2
AMERICAN WATER WORKS CO INC	5.1	3.3	3.2	4.1	2.8	2.6	6.3	4.8	4.6
ARTESIAN RESOURCES -CL A	4.0	4.0	3.9	3.2	3.2	3.1	5.0	4.2	4.0
CALIFORNIA WATER SERVICE GP	3.3	3.4	2.8	3.2	3.1	2.4	5.7	5.6	4.8
ESSENTIAL UTILITIES, INC.	3.0	2.4	2.4	3.1	2.5	2.5	4.4	3.7	3.4
MIDDLESEX WATER CO	4.8	5.6	5.2	5.5	6.1	5.7	8.6	8.0	7.4
SJW GROUP	2.3	2.3	2.0	2.1	2.1	1.7	3.8	3.6	3.7
YORK WATER CO	4.7	5.0	4.2	4.4	4.5	3.8	6.1	6.2	5.4
Median	4.4	3.7	3.6	3.7	3.2	2.9	5.9	5.2	4.7

Company Name	GCF To Debt			GCF To CAPX		
	2021	2020	2019	2021	2020	2019
AMERICAN STATES WATER CO	21.9	21.5	25.3	95.4	96.5	83.4
AMERICAN WATER WORKS CO INC	19.1	13.7	14.6	120.1	82.7	84.5
ARTESIAN RESOURCES -CL A	17.6	14.2	13.7	74.2	71.2	51.8
CALIFORNIA WATER SERVICE GP	19.0	17.6	16.9	72.2	69.2	61.5
ESSENTIAL UTILITIES, INC.	11.5	8.9	11.4	68.6	61.2	64.4
MIDDLESEX WATER CO	18.7	18.4	17.6	78.1	50.0	52.1
SJW GROUP	9.4	9.3	6.1	64.0	73.5	52.5
YORK WATER CO	17.1	19.3	21.7	54.6	73.1	108.9
Median	18.2	15.9	15.8	73.2	72.2	63.0

	2021	2020	2019
Pre-Tax Interest Coverage - Including AFC(3)(x)	4.4	3.7	3.6
Post-Tax Interest Coverage - Including AFC(3)(x)	3.7	3.2	2.9
GCF / Interest Coverage(4)(x)	5.9	5.2	4.7
GCF / Tot. Debt(7)(%)	18.2	15.9	15.8
GCF / Construction(6)(%)	73.2	72.2	63.0

Bulletin No. 196

1912 to July 1, 2022

The
Handy-Whitman Index®
of
Public Utility
Construction Costs™



Trends of Construction Costs

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Engineers, Architects and Planners
801 South Caroline Street
Baltimore, Maryland 21231
410-235-3450

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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

Line #	Line #	Line #	Line #	Line #	Line #	Line #
8	9	16	34	39	40	

7

1912	0	0	0	9	6	0
1913	0	0	10	8	5	0
1914	0	0	8	9	6	0
1915	0	0	11	16	9	0
1916	0	0	19	20	10	0
1917	0	0	20	22	11	0
1918	0	0	22	22	12	0
1919	0	0	20	12	13	0
1920	0	0	21	12	12	0
1921	0	0	22	13	13	0
1922	0	0	21	12	12	0
1923	0	0	22	13	13	0
1924	0	0	20	13	13	0
1925	18	0	20	14	14	0
1926	19	0	20	14	14	0
1927	18	0	18	13	13	0
1928	18	0	18	11	11	0
1929	18	0	19	12	12	0
1930	17	0	19	13	13	0
1931	16	0	20	13	13	0
1932	15	0	21	14	14	0
1933	15	0	22	14	14	0
1934	16	0	22	14	14	0
1935	16	0	22	14	14	0
1936	16	0	22	14	14	0
1937	18	0	22	14	14	0
1938	18	0	22	14	14	0

Handy-Whitman Handy-Whitman Handy-Whitman Handy-Whitman Handy-Whitman Handy-Whitman Handy-Whitman

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

Line #	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	35	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

Handy-Whitman					Handy-Whitman					Handy-Whitman					Handy-Whitman					Handy-Whitman														
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				

Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Series Title: ppl	Series Id: PCU3372--3372
						industry group data for Office furniture (including fixtures) mfg, not seasonally adjusted	
Line #	Line #	Line #	Line #	Line #	Line #		
8	9	16	34	39	40	Industry: Office furniture (including fixtures) mfg	
						Product: Office furniture (including fixtures) mfg	
						Base Date: 200312	

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	207
2006	466	624	504	499	454	207
2007	496	634	537	530	485	207
2008	538	663	586	588	514	207
2009	544	691	619	614	537	207
2010	560	704	637	624	555	207
2011	584	752	654	648	576	207
2012	604	788	680	687	598	207
2013	614	836	699	701	602	207
2014	631	896	725	731	608	207
2015	647	945	741	740	618	207
2016	661	1017	761	755	624	207
2017	675	1117	785	777	650	207
2018	704	1210	813	803	668	207
2019	716	1332	847	830	688	207
2020	735	1430	893	858	705	207
2021	818	1490	957	922	743	207
2022	899	1739	1052	1012	793	207
2023	905	1787	1065	1021	797	207
SPOT	905	1787	1065	1021	797	207

Series Id: PCU336110336110	Series Id: PCU333120333120	Series Id: PCU334220334220	Series Id: PCU334118334118
Series Title: PPI industry data for Automobile, light truck and utility vehicle mfg, not seasonally adjusted	Series Title: PPI industry data for Construction machinery mfg, not seasonally adjusted	Series Title: PPI industry data for Broadcast and wireless communications equipment mfg, not seasonally adjusted	Series Title: PPI industry data for Computer terminal and other computer peripheral equipment mfg, not seasonally adjusted
Industry: Automobile, light truck and utility vehicle mfg	Industry: Construction machinery mfg	Industry: Broadcast and wireless communications equipment mfg	Industry: Computer terminal and other computer peripheral equipment mfg
Product: Automobile, light truck and utility vehicle mfg	Product: Construction machinery mfg	Product: Broadcast and wireless communications equipment mfg	Product: Computer terminal and other computer peripheral equipment mfg
Base Date: 198206	Base Date: 198012	Base Date: 199112	Base Date: 199312

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Series Id: PCU336110336110	Series Id: PCU333120333120	Series Id: PCU334220334220	Series Id: PCU334118334118
Series Title: PPI industry data for Automobile, light truck and utility vehicle mfg, not seasonally adjusted	Series Title: PPI industry data for Construction machinery mfg, not seasonally adjusted	Series Title: PPI industry data for Broadcast and wireless communications equipment mfg, not seasonally adjusted Industry: Broadcast and wireless	Series Title: PPI industry data for Computer terminal and other computer peripheral equipment mfg, not seasonally Industry: Computer terminal and other
Industry: Automobile, light truck and utility vehicle mfg	Industry: Construction machinery mfg	communications equipment mfg Product: Broadcast and wireless	computer peripheral equipment mfg Product: Computer terminal and other
Product: Automobile, light truck and utility vehicle mfg	Product: Construction machinery mfg	communications equipment mfg	computer peripheral equipment mfg
Base Date: 198206	Base Date: 198012	Base Date: 199112	Base Date: 199312

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Series Id: PCU336110336110	Series Id: PCU333120333120	Series Id: PCU334220334220	Series Id: PCU334118334118
Series Title: PPI	Series Title: PPI	Series Title: PPI	Series Title: PPI
industry data for	industry data for	industry data for	industry data for
Automobile, light truck	Construction	Broadcast and wireless	Computer terminal and
and utility vehicle mfg,	machinery mfg, not	communications	other computer
not seasonally adjusted	seasonally adjusted	equipment mfg, not	peripheral equipment
		seasonally adjusted	mfg, not seasonally
Industry: Automobile,	Industry: Construction	Industry: Broadcast	Industry: Computer
light truck and utility	machinery mfg	and wireless	terminal and other
vehicle mfg		communications	computer peripheral
	Product: Construction	equipment mfg	equipment mfg
Product: Automobile,	machinery mfg	wireless	Product: Computer
light truck and utility		communications	terminal and other
vehicle mfg		equipment mfg	computer peripheral
Base Date: 198206	Base Date: 198012	Base Date: 199112	Base Date: 199312
1999	1999	1999	1999
2000	2000	2000	2000
2001	2001	2001	2001
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2003	2003	2003	2003
2004	2004	2004	2004
2005	2005	2005	2005
2006	2006	2006	2006
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2011	2011	2011	2011
2012	2012	2012	2012
2013	2013	2013	2013
2014	2014	2014	2014
2015	2015	2015	2015
2016	2016	2016	2016
2017	2017	2017	2017
2018	2018	2018	2018
2019	2019	2019	2019
2020	2020	2020	2020
2021	2021	2021	2021
2022	2022	2022	2022
2023	2023	2023	2023
SPOT	SPOT	SPOT	SPOT
137.642	170.833	104.125	80.083
138.767	172.708	101.475	78.842
137.542	173.517	101.717	78.325
134.892	175.942	98.258	78.625
135.083	178.358	95.100	78.083
136.475	183.933	93.267	76.983
135.067	192.367	92.617	76.600
130.817	201.058	92.117	76.125
131.117	206.817	92.483	75.417
132.892	213.375	94.083	74.192
136.742	221.125	94.558	74.375
136.783	220.475	94.808	72.725
137.683	227.800	94.408	72.733
141.250	235.408	93.042	73.333
142.733	239.167	92.400	74.575
145.333	242.375	92.817	76.217
148.883	245.258	93.358	71.108
150.108	247.083	92.508	64.842
152.067	248.408	90.367	65.917
153.250	250.850	89.642	66.775
153.592	262.108	89.767	64.075
153.108	266.758	90.317	62.083
157.532	278.793	90.584	62.106
164.077	307.750	93.368	63.895
167.849	319.002	95.145	62.663
167.849	319.002	95.145	62.663
SPOT	SPOT	SPOT	SPOT

Series Id: PCU333912333912

Series Title: PPI
industry data for Air
and gas compressor
mfg, not seasonally
adjusted

Industry: Air and gas
compressor mfg

Product: Air and gas
compressor mfg

Base Date: 198406

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Series Id: PCU333912333912

Series Title: PPI
industry data for Air
and gas compressor
mfg, not seasonally
adjusted

Industry: Air and gas
compressor mfg

Product: Air and gas
compressor mfg

Base Date: 198406

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Series Id: PCU333912333912

Series Title: PPI
industry data for Air
and gas compressor
mfg, not seasonally
adjusted

Industry: Air and gas
compressor mfg

Product: Air and gas
compressor mfg

Base Date: 198406

1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
													Year	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
														100.486	101.883	103.058	104.133	107.225	113.817	117.675	121.942	125.067	128.508	130.275	132.758	134.975	136.667	137.950

Series Id: PCU333912333912

Series Title: PPI
industry data for Air
and gas compressor
mfg, not seasonally
adjusted

Industry: Air and gas
compressor mfg

Product: Air and gas
compressor mfg

Base Date: 198406

1999	139.983
2000	141.408
2001	144.475
2002	146.317
2003	147.483
2004	151.175
2005	161.017
2006	165.808
2007	171.658
2008	181.017
2009	188.300
2010	190.142
2011	200.250
2012	205.700
2013	212.375
2014	217.925
2015	220.658
2016	221.458
2017	225.358
2018	234.208
2019	241.933
2020	248.092
2021	259.657
2022	304.801
2023	324.978
SPOT	324.978

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Specify search criteria

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

APC	ERP	Size Premium	IRP	DoE	WACC	Summ 17		
				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%)		

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Business Valuation Resources

2	186	\$13,178,743	\$28,808,073	12.82%	1.04	1.01%
3	210	\$6,743,361	\$13,177,829	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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	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%		

* Fiscal year 3/31

Median of Each Year

Median of Each Entity

Conclusion

	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
<u>ASSETS</u>		
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	<u>41,803,052</u>	<u>44,810,465</u>
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	<u>68,270,877</u>	<u>64,766,741</u>
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	<u>457,544,068</u>	<u>453,174,193</u>
Total Non-Current Assets	<u>525,814,945</u>	<u>517,940,934</u>
Total Assets	<u>567,617,997</u>	<u>562,751,399</u>
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	<u>15,230,870</u>	<u>16,269,231</u>
<u>LIABILITIES AND NET POSITION</u>		
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	<u>35,869,351</u>	<u>34,035,978</u>
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	<u>232,549,827</u>	<u>242,759,347</u>
Total Liabilities	<u>268,419,178</u>	<u>276,795,325</u>
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	<u>4,155,346</u>	<u>4,321,619</u>
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	<u>\$ 310,274,343</u>	<u>\$ 297,903,686</u>

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	<u>3,557,822</u>	<u>5,875,885</u>
Total Operating Revenues	<u>89,430,690</u>	<u>92,594,800</u>
Expenses		
Operating Expenses		
Sewage Treatment and Water Procurement		
Sewage Treatment	19,678,584	20,534,850
Water Procurement	<u>5,736,644</u>	<u>5,352,970</u>
Total Sewage Treatment and Water Procurement	<u>25,415,228</u>	<u>25,887,820</u>
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	<u>249,680</u>	<u>256,279</u>
Total Plant Operations	<u>5,448,542</u>	<u>3,881,483</u>
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	<u>216,408</u>	<u>274,544</u>
Total Collection, Transmission and Distribution Service	<u>13,032,229</u>	<u>12,500,210</u>
Total Operating Expenses	<u>43,895,999</u>	<u>42,269,513</u>
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	<u>2,382,465</u>	<u>3,199,536</u>
Total General and Administrative Expense	<u>9,623,244</u>	<u>10,990,679</u>
Total Expenses	<u>53,519,243</u>	<u>53,260,192</u>
Income From Operations Before Depreciation	35,911,447	39,334,608
Depreciation	<u>(17,966,462)</u>	<u>(19,513,044)</u>
Operating Income	<u>17,944,985</u>	<u>19,821,564</u>
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	<u>(253,291)</u>	<u>(218,126)</u>
Total Nonoperating Expense	<u>(5,574,328)</u>	<u>(5,394,650)</u>
Increase In Net Position	<u>12,370,657</u>	<u>14,426,914</u>
Net Position - Beginning of Year	<u>297,903,686</u>	<u>283,476,772</u>
Net Position - End of Year	<u>\$ 310,274,343</u>	<u>\$ 297,903,686</u>

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:

Assets	2019			
	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	<u>304,158,678</u>	<u>142,902,978</u>	<u>6,112,537</u>	<u>453,174,193</u>
Total Assets	<u>374,236,799</u>	<u>184,009,928</u>	<u>4,504,672</u>	<u>562,751,399</u>
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	<u>1,676</u>	<u>296</u>	<u>-</u>	<u>1,972</u>
Total Deferred Outflows of Resources	<u>8,723,865</u>	<u>7,545,366</u>	<u>-</u>	<u>16,269,231</u>
Liabilities and Net Position				
Liabilities				
Current Liabilities	29,501,359	3,745,556	789,063	34,035,978
Non-Current Liabilities	<u>150,796,046</u>	<u>88,247,692</u>	<u>3,715,609</u>	<u>242,759,347</u>
Total Liabilities	<u>180,297,405</u>	<u>91,993,248</u>	<u>4,504,672</u>	<u>276,795,325</u>
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	<u>-</u>	<u>3,967,975</u>	<u>-</u>	<u>3,967,975</u>
Total Deferred Inflows of Resources	<u>135,127</u>	<u>4,186,492</u>	<u>-</u>	<u>4,321,619</u>
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	<u>14,995,576</u>	<u>30,004,441</u>	<u>(6,766,971)</u>	<u>38,233,046</u>
Total Net Position	<u>\$ 202,528,132</u>	<u>\$ 95,375,554</u>	<u>\$ -</u>	<u>\$ 297,903,686</u>

BUCKS COUNTY WATER AND SEWER AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS (CONTINUED)
DECEMBER 31, 2019 AND 2018

NOTE 6: SEGMENT INFORMATION (CONTINUED)

Assets	2018			Totals
	Sewer System	Water System	Administrative Account	
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

<u>ASSETS</u>	<u>2019</u>	<u>2018</u>
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
<u>LIABILITIES AND NET POSITION</u>		
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:

Assets	2018			
	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			Liabilities, Deferred Inflows of Resources, and Net Position		
Assets:	2020	2019	Liabilities:	2020	2019
Current assets:			Current liabilities:		
Cash and cash equivalents	\$ 209,431,473	\$ 175,476,686	Accounts payable	\$ 6,092,972	\$ 7,349,003
Accounts receivable:			Accrued liabilities:		
Billed sewer revenue	20,446,710	16,702,983	Compensated absences	5,950,167	4,994,678
Unbilled sewer revenue	44,044,901	43,666,409	Salaries and wages	1,985,019	1,751,181
Other	4,734	30,225	Accrued interest on bonds	2,592,551	2,638,762
Other current assets	6,634,434	6,604,244	Reserve for litigation	2,371,900	2,371,900
Total current assets	280,562,252	242,480,547	Pretreatment advance payments	2,600	1,850
Restricted/designated assets:			Current maturities of sewer revenue bonds	28,785,000	27,635,000
Cash and cash equivalents	272,815,362	150,150,904	Total current liabilities	47,780,209	46,742,374
Investments	-	84,963,478	Long-term liabilities:		
Accrued interest receivable	-	375,444	Other post-employment benefits	13,901,968	12,087,137
Total restricted/designated assets	272,815,362	235,489,826	Net pension liability	7,266,922	28,684,748
Prepaid bond costs	5,815,062	6,591,319	Sewer revenue bonds - less current maturities	670,495,000	650,300,000
Nondepreciable capital assets:			Unamortized bond premium	67,960,993	50,763,732
Land	5,344,896	5,344,896	Net long-term debt	738,455,993	701,063,732
Construction in progress	94,302,298	81,287,241	Total long-term liabilities	759,624,883	741,835,617
Total nondepreciable capital assets	99,647,194	86,632,137	Total Liabilities	807,405,092	788,577,991
Depreciable capital assets -			Deferred Inflows of Resources:		
at cost, net of accumulated depreciation	543,854,942	542,465,808	Related to pensions	25,133,372	9,341,236
Total	643,502,136	629,097,945	Other post-retirement benefits	3,169,749	1,904,424
Total Assets	1,202,694,812	1,113,659,637	Total Deferred Inflows of Resources	28,303,121	11,245,660
Deferred Outflows of Resources:			Net Position:		
Related to pensions	27,581,534	35,676,281	Net investment in capital assets	154,324,268	142,167,140
Other post-retirement benefits	1,758,333	853,236	Unrestricted	247,249,961	214,476,464
Refunding adjustment	5,247,763	6,278,101	Total Net Position	401,574,229	356,643,604
Total Deferred Outflows of Resources	34,587,630	42,807,618	Total Liabilities, Deferred Inflows of Resources, and Net Position	\$ 1,237,282,442	\$ 1,156,467,255
Total Assets and Deferred Outflows of Resources	\$ 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			Liabilities, Deferred Inflows of Resources, and Net Position		
Assets:	2019	2018		2019	2018
Current assets:			Liabilities:		
Cash and cash equivalents	\$ 175,476,686	\$ 142,482,220	Current liabilities:		
Accounts receivable:			Accounts payable	\$ 7,349,003	\$ 7,180,579
Billed sewer revenue	16,702,983	16,544,587	Accrued liabilities:		
Unbilled sewer revenue	43,666,409	41,408,016	Compensated absences	4,994,678	4,539,483
Other	30,225	4,469	Salaries and wages	1,751,181	1,529,529
Other current assets	6,604,244	6,556,274	Accrued interest on bonds	2,638,762	2,745,875
Total current assets	242,480,547	206,995,566	Reserve for litigation	2,371,900	2,371,900
			Pretreatment advance payments	1,850	24,375
Restricted/designated assets:			Current maturities of sewer revenue bonds	27,635,000	26,630,000
Cash and cash equivalents	150,150,904	83,445,720	Total current liabilities	46,742,374	45,021,741
Investments	84,963,478	167,782,528	Long-term liabilities:		
Accrued interest receivable	375,444	622,842	Other post-employment benefits	12,087,137	13,297,158
Total restricted/designated assets	235,489,826	251,851,090	Net pension liability	28,684,748	6,121,872
Prepaid bond costs	6,591,319	7,187,959	Sewer revenue bonds - less current maturities	650,300,000	677,935,000
Nondepreciable capital assets:			Unamortized bond premium	50,763,732	55,857,500
Land	5,344,896	5,344,896	Net long-term debt	701,063,732	733,792,500
Construction in progress	81,287,241	59,836,813	Total long-term liabilities	741,835,617	753,211,530
Total nondepreciable capital assets	86,632,137	65,181,709	Total Liabilities	788,577,991	798,233,271
Depreciable capital assets - at cost, net of accumulated depreciation	542,465,808	557,161,609	Deferred Inflows of Resources:		
Total	629,097,945	622,343,318	Related to pensions	9,341,236	12,389,471
Net pension asset	-	2,705,577	Other post-retirement benefits	1,904,424	-
Total Assets	1,113,659,637	1,091,083,510	Total Deferred Inflows of Resources	11,245,660	12,389,471
Deferred Outflows of Resources:					
Related to pensions	35,676,281	17,633,917	Net Position:		
Other post-retirement benefits	853,236	932,894	Net investment in capital assets	142,167,140	120,849,236
Refunding adjustment	6,278,101	7,077,328	Unrestricted	214,476,464	185,255,671
Total Deferred Outflows of Resources	42,807,618	25,644,139	Total Net Position	356,643,604	306,104,907
Total Assets and Deferred Outflows of Resources	\$ 1,156,467,255	\$ 1,116,727,649	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	<u>\$ 356,643,604</u>	<u>\$ 306,104,907</u>

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			Liabilities, Deferred Inflows of Resources, and Net Position		
Assets:	2018	2017		2018	2017
Current assets:			Liabilities:		
Cash and cash equivalents	\$ 142,482,220	\$ 119,248,255	Current liabilities:		
Accounts receivable:			Accounts payable	\$ 7,180,579	\$ 7,167,120
Billed sewer revenue	16,544,587	17,185,654	Accrued liabilities:		
Unbilled sewer revenue	41,408,016	40,232,780	Compensated absences	4,539,483	4,689,828
Other	4,469	4,635	Salaries and wages	1,529,529	1,441,024
Other current assets	6,556,274	6,432,263	Accrued interest on bonds	2,745,875	2,260,535
			Reserve for litigation	2,371,900	2,371,900
Total current assets	206,995,566	183,103,587	Pretreatment advance payments	24,375	71,600
			Current maturities of sewer revenue bonds	26,630,000	25,395,000
Restricted/designated assets:					
Cash and cash equivalents	83,445,720	100,289,509	Total current liabilities	45,021,741	43,397,007
Investments	167,782,528	-	Long-term liabilities:		
Accrued interest receivable	622,842	-	Other post-employment benefits	13,297,158	6,199,726
Total restricted/designated assets	251,851,090	100,289,509	Net pension liability	6,121,872	16,421,705
Prepaid bond costs	7,187,959	6,472,479			
			Sewer revenue bonds - less current maturities	677,935,000	547,335,000
Nondepreciable capital assets:			Unamortized bond premium	55,857,500	48,952,220
Land	5,344,896	5,344,896			
Construction in progress	59,836,813	38,371,565	Net long-term debt	733,792,500	596,287,220
			Total long-term liabilities	753,211,530	618,908,651
Total nondepreciable capital assets	65,181,709	43,716,461	Total Liabilities	798,233,271	662,305,658
Depreciable capital assets -					
at cost, net of accumulated depreciation	557,161,609	564,883,734	Deferred Inflows of Resources:		
			Related to pensions	12,389,471	2,935,957
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:			Net Position:		
Related to pensions	17,633,917	21,247,515	Net investment in capital assets	120,849,236	95,281,689
Other post-retirement benefits	932,894	-	Unrestricted	185,255,671	167,264,184
Refunding adjustment	7,077,328	8,074,203			
			Total Net Position	306,104,907	262,545,873
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	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	<u>\$ 306,104,907</u>	<u>\$ 262,545,873</u>

The notes to financial statements are an integral part of this statement.

CAPITAL REGION WATER

BALANCE SHEETS

DECEMBER 31, 2020 AND 2019

	2020	2019
Assets and Deferred Outflows of Resources		
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)

	2019	2018
Assets and Deferred Outflows of Resources		
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	<u>\$ 94,622,873</u>	<u>\$ 76,172,891</u>

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	<u>63,514,228</u>

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	<u>38,863,350</u>

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	<u>178,131,377</u>

Total Assets	<u>280,508,955</u>

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	<u>8,606,318</u>

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
<u>ASSETS</u>				
Cash and Cash Equivalents	\$ 31,413,012	\$ 5,350,729	\$ 245,634	\$ 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
<u>Deferred Outflows of Resources</u>				
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
<u>LIABILITIES</u>				
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
<u>Deferred Inflows of Resources</u>				
Defined Benefit Pensions	\$ 13,641,984	\$ 1,975,668	\$ 0	\$ 0
<u>NET POSITION</u>				
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-ADMINISTRATIVE	
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 & SUBSCRIPTIONS	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	0	0
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:				
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	\$2,440,466

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
<u>Operating Revenues, Securing Revenue Bonds</u>		
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
<u>Operating Expenses - Functional and Departmental</u>		
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
<u>Nonoperating Revenues and (Expenses)</u>		
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
<u>Net Position - January 1</u>	146,894,669	145,962,849
<u>Net Position - December 31</u>	\$ (70,614,343)	\$ 146,894,669

ALTOONA WATER AUTHORITY
STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

	Year Ended December 31,	
	2018	2017
<u>Operating Revenues, Securing Revenue Bonds</u>		
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
<u>Operating Expenses - Functional and Departmental</u>		
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
<u>Nonoperating Revenues and (Expenses)</u>		
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)
<u>Net Position - January 1</u>	(70,614,343)	146,894,669
<u>Net Position - December 31</u>	\$(67,331,156)	\$(70,614,343)

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-ADMINISTRATIVE	
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 & SUBSCRIPTIONS	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 EXPENDITURES	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

Management's Discussion and Analysis
December 31, 2018 and 2017

Financial Information

Net Position - The following schedule presents a summary of net position comparison at December 31, 2018, 2017, and 2016:

	<u>2018</u>	<u>2017</u> (As Restated)	<u>2016</u> (As Restated)
Assets			
Unrestricted current assets	\$ 25,886,197	\$ 24,371,571	\$ 20,614,911
Restricted current assets	9,389,010	11,067,725	19,177,004
Capital assets, net	64,973,550	59,036,648	55,262,527
Other asset	951,810	1,020,000	1,020,000
Deferred Outflow of Resources	<u>1,054,979</u>	<u>1,197,798</u>	<u>1,346,286</u>
Total Assets and Deferred Outflow of Resources	<u>\$ 102,255,546</u>	<u>\$ 96,693,742</u>	<u>\$ 97,420,788</u>
Liabilities			
Current liabilities	\$ 7,496,258	\$ 5,387,837	\$ 5,985,559
Long-term debt	<u>80,796,512</u>	<u>84,017,089</u>	<u>87,200,895</u>
Total Liabilities	<u>\$ 88,292,770</u>	<u>\$ 89,404,926</u>	<u>\$ 93,186,454</u>
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	<u>24,579,597</u>	<u>27,039,772</u>	<u>19,047,312</u>
Total Net Position	<u>\$ 13,962,776</u>	<u>\$ 7,288,816</u>	<u>\$ 4,234,334</u>

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:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
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	<u>20,107</u>	<u>60,907</u>	<u>32,001</u>
Total Operating Revenues	<u>\$ 30,585,831</u>	<u>\$ 30,896,495</u>	<u>\$ 30,918,388</u>

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.

Management's Discussion and Analysis
December 31, 2018 and 2017

Financial Information (continued)

Expenses - The following schedule presents a summary of expenses for the years ended December 31, 2018, 2017, and 2016:

	<u>2018</u>	<u>2017</u> (As Restated)	<u>2016</u> (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	<u>\$ 23,767,518</u>	<u>\$ 22,075,632</u>	<u>\$ 22,678,509</u>

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:

	<u>2018</u>	<u>2017</u> (As Restated)	<u>2016</u> (As Restated)
Operating revenues	\$ 30,585,831	\$ 30,896,495	\$ 30,918,388
Operating expenses	<u>23,767,518</u>	<u>22,075,632</u>	<u>22,678,509</u>
Operating Income before Depreciation	6,818,313	8,820,863	8,239,879
Depreciation and amortization	<u>3,872,439</u>	<u>3,304,835</u>	<u>2,946,682</u>
Operating Income	2,945,874	5,516,028	5,293,197
Nonoperating revenues (expenses), net	<u>3,728,086</u>	<u>(2,461,546)</u>	<u>(3,468,433)</u>
Increase in Net Position	<u>\$ 6,673,960</u>	<u>\$ 3,054,482</u>	<u>\$ 1,824,764</u>

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	975,181	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	5,978,398
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. | 34

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	<u>24,376,640</u>	<u>23,304,048</u>
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	<u>18,307,584</u>	<u>16,402,468</u>
Operating income	<u>6,069,056</u>	<u>6,901,580</u>
Nonoperating Revenues (Expenses)		
Interest income	99,485	793,490
Tapping fees	1,422,458	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)	<u>(297,214)</u>	<u>(144,188)</u>
Income before capital contributions	5,771,842	6,757,392
Capital contributions	<u>1,075,815</u>	<u>851,741</u>
Increase in net position	6,847,657	7,609,133
Net position at beginning of year	<u>104,086,085</u>	<u>96,476,952</u>
Net position at end of year	<u>\$ 110,933,742</u>	<u>\$ 104,086,085</u>

The Notes to Financial Statements are an integral part of these statements. | 26

LANCASTER AREA SEWER AUTHORITY
Management's Discussion and Analysis
March 31, 2018 and 2017

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.

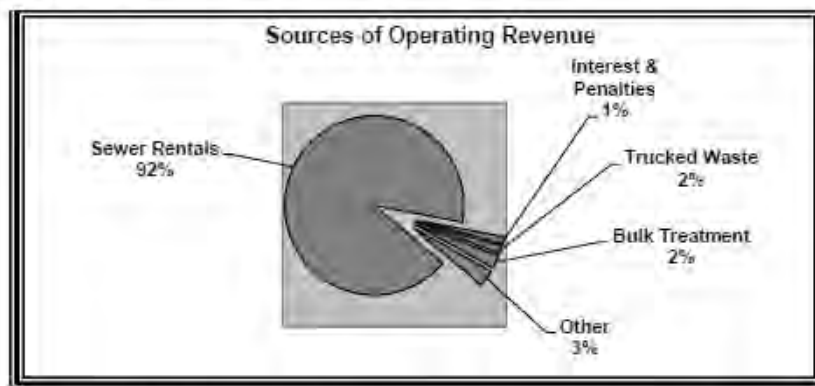


Table 3 : Sources of Operating Revenue - Fiscal Year 2018

LANCASTER AREA SEWER AUTHORITY
Management's Discussion and Analysis

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	\$ 20,849,882
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	(900,165)
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.

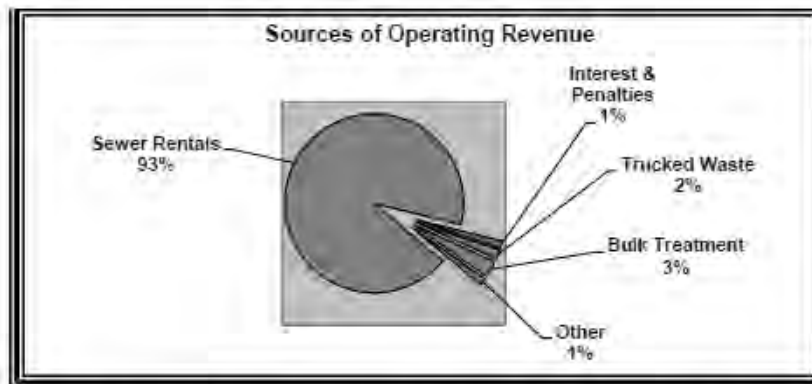


Table 3 - Sources of Operating Revenue - Fiscal Year 2019

LANCASTER AREA SEWER AUTHORITY
Management's Discussion and Analysis

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.

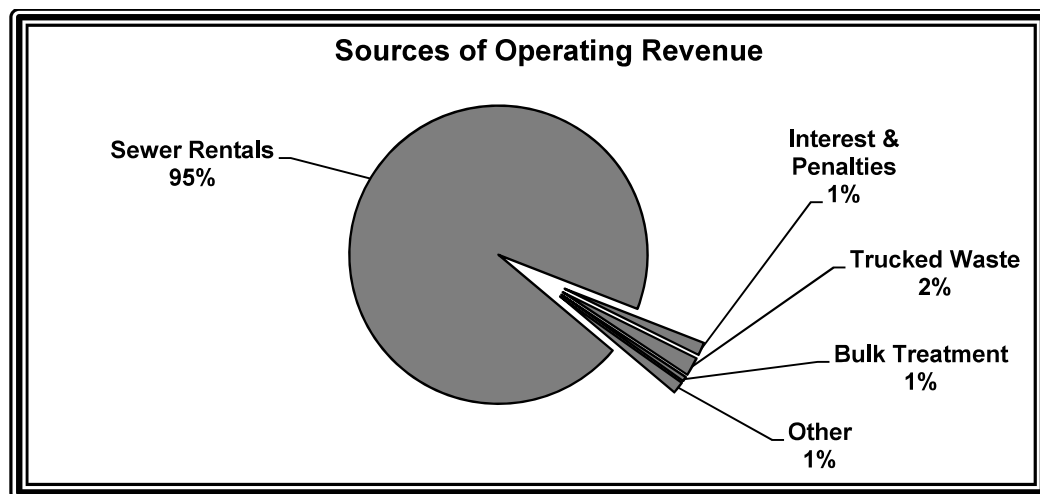


Table 3 - Sources of Operating Revenue - Fiscal Year 2020

LANCASTER AREA SEWER AUTHORITY
Management's Discussion and Analysis
March 31, 2018 and 2017

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
	<u>229,040,114</u>	<u>202,918,885</u>	<u>104,696,881</u>
Total accumulated depreciation	<u>(87,820,739)</u>	<u>(83,211,180)</u>	<u>(78,843,305)</u>
Total Capital Assets	<u>\$ 141,219,375</u>	<u>\$ 119,707,705</u>	<u>\$ 105,853,576</u>

**Table 6 - Condensed Statement of Capital Assets -
Fiscal Years 2018, 2017, and 2016**

LANCASTER AREA SEWER AUTHORITY
Management's Discussion and Analysis

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	33,042,520
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
	<u>234,996,143</u>	<u>229,040,114</u>	<u>202,918,885</u>
Total accumulated depreciation	<u>(92,678,068)</u>	<u>(87,820,739)</u>	<u>(83,211,180)</u>
Total Capital Assets	<u>\$ 142,318,075</u>	<u>\$ 141,219,375</u>	<u>\$ 119,707,705</u>

**Table 6 - Condensed Statement of Capital Assets -
Fiscal Years 2019, 2018, and 2017**

LANCASTER AREA SEWER AUTHORITY
Management's Discussion and Analysis

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
	<u>238,177,082</u>	<u>234,996,143</u>	<u>229,040,114</u>
Total accumulated depreciation	<u>(97,771,861)</u>	<u>(92,678,068)</u>	<u>(87,820,739)</u>
Total Capital Assets	<u>\$ 140,405,221</u>	<u>\$ 142,318,075</u>	<u>\$ 141,219,375</u>

**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

	<u>2018</u>	<u>2017</u>
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

APPENDIX A-5.2

	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

	<u>2020</u>	<u>2019</u>
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	<u>1,340,963</u>	<u>865,774</u>
Total current assets	<u>25,616,439</u>	<u>20,057,629</u>
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	<u>197,500,684</u>	<u>191,269,705</u>
Total non-current assets	<u>229,979,306</u>	<u>233,307,889</u>
Total assets	<u>255,595,745</u>	<u>253,365,518</u>
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	<u>11,179,830</u>	<u>11,912,546</u>
Total deferred outflow of resources	<u>141,346,273</u>	<u>32,762,058</u>
Total assets and deferred outflow of resources	<u>\$ 396,942,018</u>	<u>\$ 286,127,576</u>

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

	<u>2020</u>	<u>2019</u>
Operating revenues	<u>\$ 40,725,085</u>	<u>\$ 40,086,711</u>
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	<u>2,850,000</u>	<u>3,600,000</u>
Total operating expenses	<u>19,517,328</u>	<u>22,143,829</u>
Operating income before depreciation	21,207,757	17,942,882
Depreciation	<u>7,746,138</u>	<u>8,393,230</u>
Operating income	13,461,619	9,549,652
Non-operating revenue (expense)		
Interest expense	(13,588,313)	(12,123,859)
Other revenue (expense), net	<u>(153,290)</u>	<u>1,651,260</u>
Net loss before contributed capital	(279,984)	(922,947)
Capital asset contributions	<u>-</u>	<u>-</u>
CHANGE IN NET POSITION	(279,984)	(922,947)
Net Position		
Beginning of year	<u>(55,786,094)</u>	<u>(54,863,147)</u>
End of year	<u><u>\$ (56,066,078)</u></u>	<u><u>\$ (55,786,094)</u></u>

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	<u>\$ 286,127,576</u>	<u>\$ 285,495,125</u>	<u>\$ 632,451</u>	<u>0.22%</u>
LIABILITIES AND NET POSITION				
Current liabilities	\$ 7,175,123	\$ 8,766,073	\$ (1,590,950)	-18.15%
Long-term debt, net of unaccrued 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	<u>341,913,670</u>	<u>340,358,272</u>	<u>1,555,398</u>	<u>0.46%</u>
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	<u>(55,786,094)</u>	<u>(54,863,147)</u>	<u>(922,947)</u>	<u>1.68%</u>
Total liabilities and net position	<u>\$ 286,127,576</u>	<u>\$ 285,495,125</u>	<u>\$ 632,451</u>	<u>0.22%</u>

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%).

Erie City Water Authority

(aka Erie Water Works)

MANAGEMENT DISCUSSION AND ANALYSIS (Unaudited)

December 31, 2018 and 2017

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%
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 –

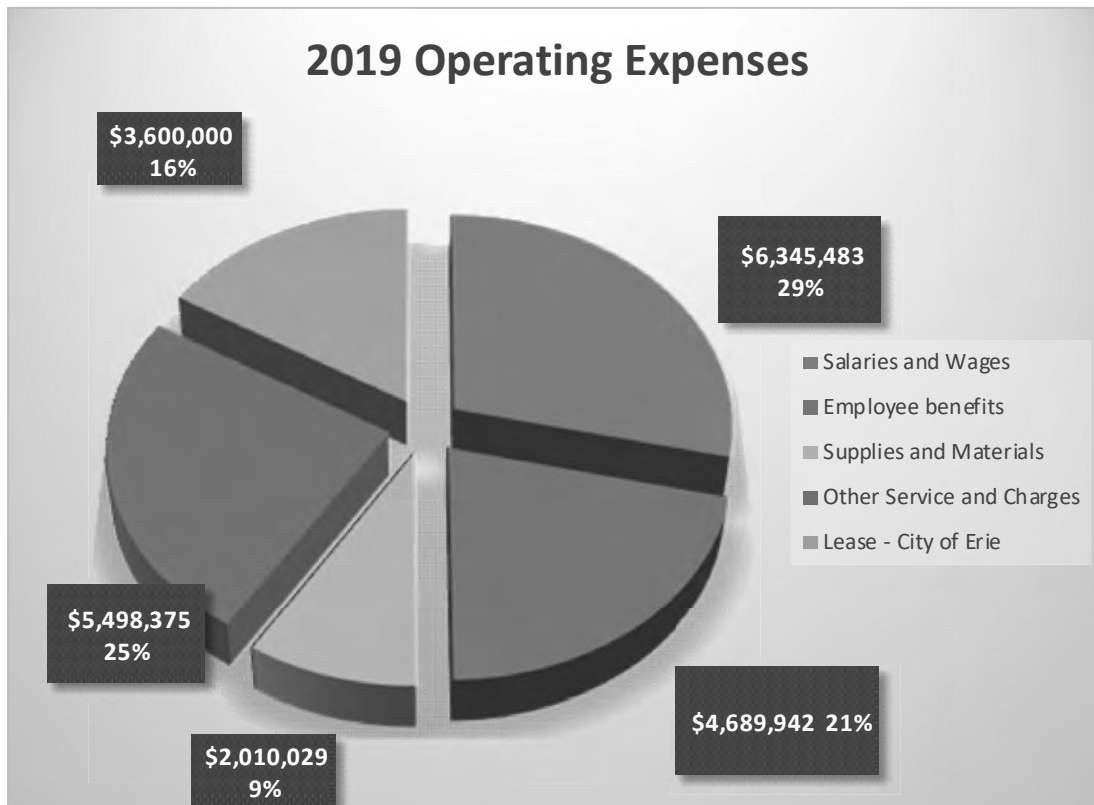
The Authority's net position decreased by <\$3.65> million in 2018, compared to a <\$.84> million decrease in 2017. The 2018 decrease in the net position resulted from several factors – \$1.84 million increase in pension costs, \$1.1 million increase in interest expense and \$1.03 million of bond issue 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	<u>\$ 9,549,652</u>	<u>\$ 10,005,109</u>	<u>\$ (455,457)</u>	<u>-4.55%</u>
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%
	<u>(10,472,599)</u>	<u>(13,734,800)</u>	<u>3,262,201</u>	<u>-23.75%</u>
Net loss before capital contributions	(922,947)	(3,729,691)	2,806,744	-75.25%
Capital assets contributions	<u>-</u>	<u>79,975</u>	<u>(79,975)</u>	<u>-100.00%</u>
Change in net position	<u>\$ (922,947)</u>	<u>\$ (3,649,716)</u>	<u>\$ 2,726,769</u>	<u>-74.71%</u>



Erie City Water Authority
(aka Erie Water Works)

MANAGEMENT DISCUSSION AND ANALYSIS (Unaudited)

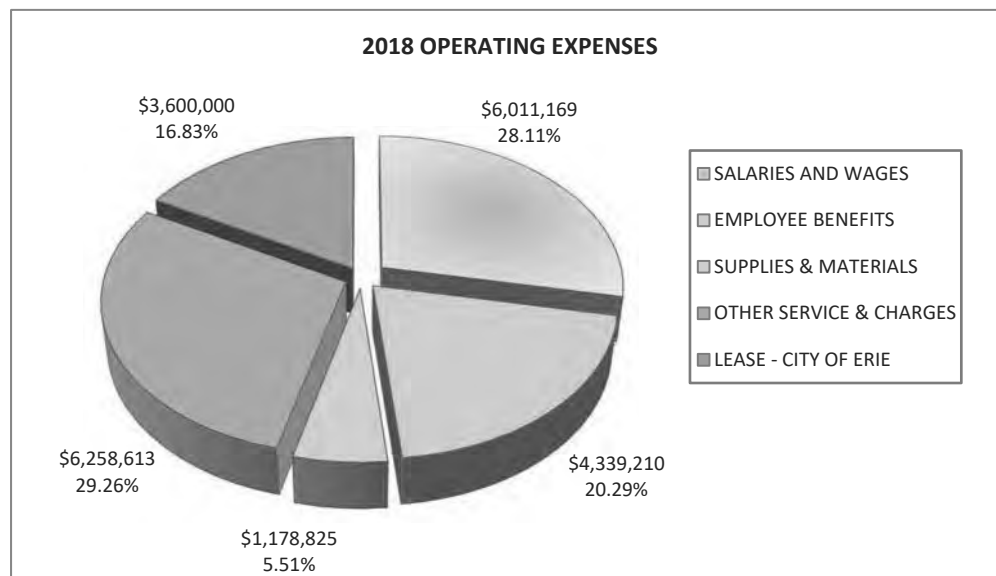
December 31, 2018 and 2017

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,	
	<u>2019</u>	<u>2018</u>
<u>Current Assets</u>		
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	<u>25,240,228</u>	<u>22,186,751</u>
<u>Non-Current Assets</u>		
Property, plant, and equipment—net of accumulated depreciation	282,114,520	277,881,505
Net pension asset	806,245	-
Total Non-Current Assets	<u>282,920,765</u>	<u>277,881,505</u>
<u>Restricted Assets</u>		
Cash and cash equivalents	28,304,535	7,629,992
Total Restricted Assets	<u>28,304,535</u>	<u>7,629,992</u>
Total Assets	<u>336,465,528</u>	<u>307,698,248</u>
<u>Deferred Outflows of Resources</u>		
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	<u>3,047,572</u>	<u>5,066,541</u>
<u>Total Assets and Deferred Outflows of Resources</u>	<u>\$ 339,513,100</u>	<u>\$ 312,764,789</u>

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,	
	<u>2019</u>	<u>2018</u>
<u>Operating Revenues</u>		
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	<u>45,763,176</u>	<u>43,326,153</u>
<u>Operating Expenses</u>		
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	<u>41,057,982</u>	<u>41,838,723</u>
<u>Operating Income</u>	<u>4,705,194</u>	<u>1,487,430</u>
<u>Non-Operating Revenues/(Expenses)</u>		
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)	<u>(1,561,203)</u>	<u>(1,711,843)</u>
<u>Income (Loss) Before Contributions</u>	3,143,991	(224,413)
<u>Capital Contributions</u>	<u>894,723</u>	<u>5,652,845</u>
<u>Change In Net Position</u>	<u>4,038,714</u>	<u>5,428,432</u>
<u>Net Position - Beginning of year, as previously reported</u>	234,034,302	233,538,507
<u>Cumulative effect of prior period adjustment for adoption of GASB 75 - Net OPEB Liability</u>	<u>-</u>	<u>(4,932,637)</u>
<u>Net Position - Beginning of year, restated</u>	<u>234,034,302</u>	<u>228,605,870</u>
<u>Net Position - End of year</u>	<u>\$ 238,073,016</u>	<u>\$ 234,034,302</u>

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,	
	<u>2018</u>	<u>2017</u>
<u>Current Assets</u>		
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	<u>22,186,750</u>	<u>24,092,784</u>
<u>Non-Current Assets</u>		
Property, plant, and equipment—net of accumulated depreciation	277,881,505	271,133,389
Net pension asset	-	1,501,182
Total Non-Current Assets	<u>277,881,505</u>	<u>272,634,571</u>
<u>Restricted Assets</u>		
Cash and cash equivalents	7,629,992	7,549,260
Total Restricted Assets	<u>7,629,992</u>	<u>7,549,260</u>
Total Assets	<u>307,698,247</u>	<u>304,276,615</u>
<u>Deferred Outflows of Resources</u>		
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	<u>5,066,541</u>	<u>1,479,458</u>
<u>Total Assets and Deferred Outflows of Resources</u>	<u>\$ 312,764,788</u>	<u>\$ 305,756,073</u>

See accompanying notes to financial statements.

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Chester Water Authority
Statements of Revenues, Expenses, and Changes In Net Position
For The Years Ended December 31, 2018 and 2017

	December 31,	
	<u>2018</u>	<u>2017</u>
<u>Operating Revenues</u>		
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	<u>43,326,153</u>	<u>42,291,466</u>
<u>Operating Expenses</u>		
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	<u>41,838,723</u>	<u>39,496,243</u>
<u>Operating Income</u>	<u>1,487,430</u>	<u>2,795,223</u>
<u>Non-Operating Revenues (Expenses)</u>		
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)	<u>(1,711,844)</u>	<u>(1,784,535)</u>
<u>(Loss) Income Before Contributions</u>	<u>(224,414)</u>	<u>1,010,688</u>
<u>Capital Contributions</u>	<u>5,652,845</u>	<u>2,699,498</u>
<u>Change In Net Position</u>	<u>5,428,431</u>	<u>3,710,186</u>
<u>Net Position—Beginning of year, as previously reported</u>	<u>233,538,507</u>	<u>229,828,321</u>
<u>Cumulative effect of prior period adjustment for adoption of GASB 75 - Net OPEB Liability</u>	<u>(4,932,637)</u>	<u>-</u>
<u>Net Position - Beginning of year, restated</u>	<u>228,605,870</u>	<u>229,828,321</u>
<u>Net Position—End of year</u>	<u>\$ 234,034,301</u>	<u>\$ 233,538,507</u>

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.

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 Date: 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	184.071	183.87	185.553	189.763	188.687	190.543	192.368	193.271	196.193	196.865

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 Date: 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	161.19	162.807	163.481	164.007	164.545	164.812	164.878	166.89	167.079	167.849

P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication.

POWER OPERATED EQUIPMENT

Series Id: PCU333120333120

Series Tit 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	294.221	302.832	304.699	305.899	308.245	316.722	317.622	317.618	318.923	319.002
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 Datr 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	92.635	93.009	93.192	93.72	93.823	93.87	93.925	94.995	95.145
P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication.												

COMPUTER & PERIPHERAL

Series Id: PCU334118334118

Series Title: PPI industry data for Computer terminal and other computer peripheral equipment mfg, not seasonally adjusted

Industry: Computer terminal and other computer peripheral equipment mfg

Product: Computer terminal and other computer peripheral equipment mfg

Base Date: 199312

Download:

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1993												100
1994	98.5	98	99	97.6	97.5	97.7	97.4	97.5	97.3	97.2	97.5	97.7
1995	97.1	96.2	95.8	96.1	95.8	96	95.6	95.2	95.2	95.4	95.1	95
1996	93.7	94	94.1	94	93.6	93.9	93	93	92.7	91.9	91.9	91.9
1997	91.4	91.3	91.4	91.1	91.1	90.5	90.2	90.3	89.8	89.8	89.8	89.7
1998	89.1	89	86.5	84.2	84.2	84	83.9	83.8	83.7	82.9	83	81.5
1999	80.7	80.7	80.2	80.1	80.1	80.1	80	79.8	79.9	79.9	79.9	79.6
2000	79.4	79.5	79.1	79	78.9	78.6	78.7	78.5	78.5	78.7	78.6	78.6
2001	78.7	78.4	78.4	78.3	78.3	78.3	78.1	77.8	78.5	78.4	78.4	78.3
2002	78.3	78.2	78.2	78.8	78.8	78.8	78.9	78.9	78.7	78.7	78.6	78.6
2003	78.5	78.6	78.6	78.5	78.5	78.5	78.5	78.1	77.9	77.1	77.1	77.1
2004	77.1	77.1	77.3	77.4	77.4	76.9	76.9	76.7	76.8	76.6	76.6	77
2005	76.7	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.5
2006	76.6	76.6	76.6	76.1	76.1	76	76	75.9	75.9	75.9	75.9	75.9
2007	75.6	75.6	75.6	76	75.8	75.8	75.8	75.2	75.2	75	74.7	74.7
2008	74.8	74.8	74.4	74.2	74.2	74.2	74	73.9	73.9	73.9	73.9	74.1
2009	74.3	74.6	74.6	74.7	74.6	74.6	74.6	74.6	74.6	74.8	73.3	73.2
2010	73.2	73.1	73.9	73.2	73	73	72.6	72.2	72.2	72.1	72.1	72.1
2011	72.1	72.1	72.1	72.8	72.8	72.9	72.9	72.9	72.9	72.9	73.1	73.3
2012	73.5	73.5	73.5	73.5	73.3	73.1	73.2	73.2	73.1	73.4	73.3	73.4
2013	73.6	74.2	74.3	74.5	74.6	74.6	74.6	74.6	74.5	74.5	75.3	75.6
2014	75.6	75.6	75.6	76.1	76.1	76.1	76.3	76.7	76.7	76.6	76.6	76.6
2015	77.1	71.2	71.2	70.7	70.6	70.7	70.7	70.3	70.2	70.2	70.2	70.2
2016	70.6	70.7	63.4	64	63.9	63.9	63.5	63.5	63.5	63.7	63.7	63.7
2017	63.7	64	64	66.5	66.5	66.5	66.5	66.5	66.5	66.8	66.8	66.7
2018	66.7	66.7	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.8	66.7	66.8
2019	65.7	65.7	65.7	65.7	63.5	63.5	63.5	63.1	63.1	63.1	63.1	63.2
2020	62	62	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1
2021	62.1	62.1	62.1	62.1	62.1	62.7	62.303	61.888	61.857	61.857	62.095	62.075
2022	65.058	65.171	65.171	65.198	65.212	65.241	62.608	62.575	62.622	62.662	62.563	62.663
P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication.												

MISCELLANEOUS EQUIPMENT

Series Id: PCU333912333912

Series Title: PPI industry data for Air and gas compressor mfg, not seasonally adjusted

Industry: Air and gas compressor mfg

Product: Air and gas compressor mfg

Base Date: 198406

Download:

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1984						100	100.1	100.5	100.5	100.5	100.8	101
1985	101.7	101.3	101.5	101.6	101.7	101.7	101.9	101.6	101.7	102.5	102.7	102.7
1986	102.8	102.8	102.9	103.1	103.1	103.1	103.3	102.7	103.4	103.1	103.2	103.2
1987	103.3	103.6	104	103.9	104.5	104.3	103.8	103.8	103.8	104.7	104.9	105
1988	105.9	106.2	106.6	106.7	106.6	107	107.1	107.5	108	108.1	108.4	108.6
1989	111.9	112.2	112.7	113.4	113.9	114.2	114.2	114.3	114.5	114.7	114.8	115
1990	116.6	116.8	116.8	117.2	117.3	117.6	118.1	118.2	118.3	118.3	118.3	118.6
1991	119.7	120	121	121.5	122	122	122.7	122.8	122.8	122.8	123	123

1992	123.8	123.9	124	124.2	124.1	124.5	125	125.1	126.4	126.4	126.6	126.8
1993	127.7	128	128.2	128.3	128.4	128.6	128.6	128.6	128.8	128.8	129	129.1
1994	130.5	130.2	130	129.7	130.1	130	130.2	129.7	129.9	130.8	130.7	131.5
1995	132.7	132	132.3	132.5	132.8	132.9	132.9	133	133	132.9	133	133.1
1996	133.9	134.3	134.8	134.8	135.1	135.1	135	135.2	135.2	135.2	135.5	135.6
1997	136.5	136.6	136.5	136.6	136.6	136.8	136.7	136.7	136.7	136.7	136.8	136.8
1998	137.4	137.6	137.6	137.7	137.8	138.4	138	138.1	138.1	138.1	138	138.6
1999	138.9	139.5	140	140	140	139.9	140.1	140.3	140.3	140.2	140.3	140.3
2000	141.2	141.3	140.6	140.6	140.6	140.8	141.9	141.9	141.9	141.9	141.9	142.3
2001	142.9	143	143.5	144.4	144.5	144.5	144.7	144.8	144.8	144.8	145.9	145.9
2002	146.2	145.7	145.7	146	146.1	146.1	146.4	147	146.5	146.7	146.7	146.7
2003	147	147	147.1	147.1	147.2	147.3	147.3	147.7	148	148	148	148.1
2004	149	148.9	148.9	148.8	148.9	151.3	152.3	152.3	153	153.1	153.8	153.8
2005	155.1	158.4	159.2	159.6	159.9	161.1	161.5	162.9	163	163.2	163.9	164.4
2006	164	164.7	164.8	164.4	164.6	164.8	166	166.6	166.9	167.4	167.7	167.8
2007	168.5	170.2	170.2	171.5	171.8	171.8	172	172.5	172.7	172.8	172.9	173
2008	176.2	177	177	177.7	177.9	178.5	181.1	181.6	187.3	185.6	185.7	186.6
2009	188.1	188.6	188	188	188	188.1	188.1	188.1	188.7	188.6	188.6	188.7
2010	189	189	189.6	189.8	189.9	190.4	190.1	190.3	190.3	190.3	190.4	192.6
2011	198.3	198.5	199.2	199.8	199.8	200.2	200.6	201.2	201.2	201.3	201.3	201.6
2012	202.2	205.1	205.8	205.9	205.9	205.9	205.9	206	206	206.5	206.4	206.8
2013	208.6	212.3	212.3	213	213	213	213	212.6	212.6	212.6	212.6	212.9
2014	215.4	217.1	216.9	217.1	217.3	217.4	217.9	218.1	219.5	219.4	219.4	219.6
2015	220.7	220.7	219.8	220.8	221.1	220.5	220.5	220.6	220.7	220.8	220.9	220.8
2016	222.5	221.2	221.2	221.2	221.2	221.2	221.2	221.2	221.2	221.2	221.7	222.5
2017	224.1	224.9	224.9	224.9	224.7	224.7	224.7	224.7	224.7	226.4	227.8	227.8
2018	229.3	229.3	229.6	230	231	232.1	235.1	236.1	236.8	238.7	240.9	241.6
2019	238.2	238.4	239	240.7	241	241	242.8	242.8	243.8	244.1	245.7	245.7
2020	247.2	247.3	247.3	247.3	247.8	248	248.7	248.7	248.7	248.7	248.7	248.7
2021	250.4	250.4	250.4	251.4	255.3	256.2	262.543	263.587	266.85	267.907	269.483	271.419
2022	276.236	284.524	285.8	292.215	300.177	305.674	311.482	313.692	317.608	320.249	324.978	324.978
P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication.												

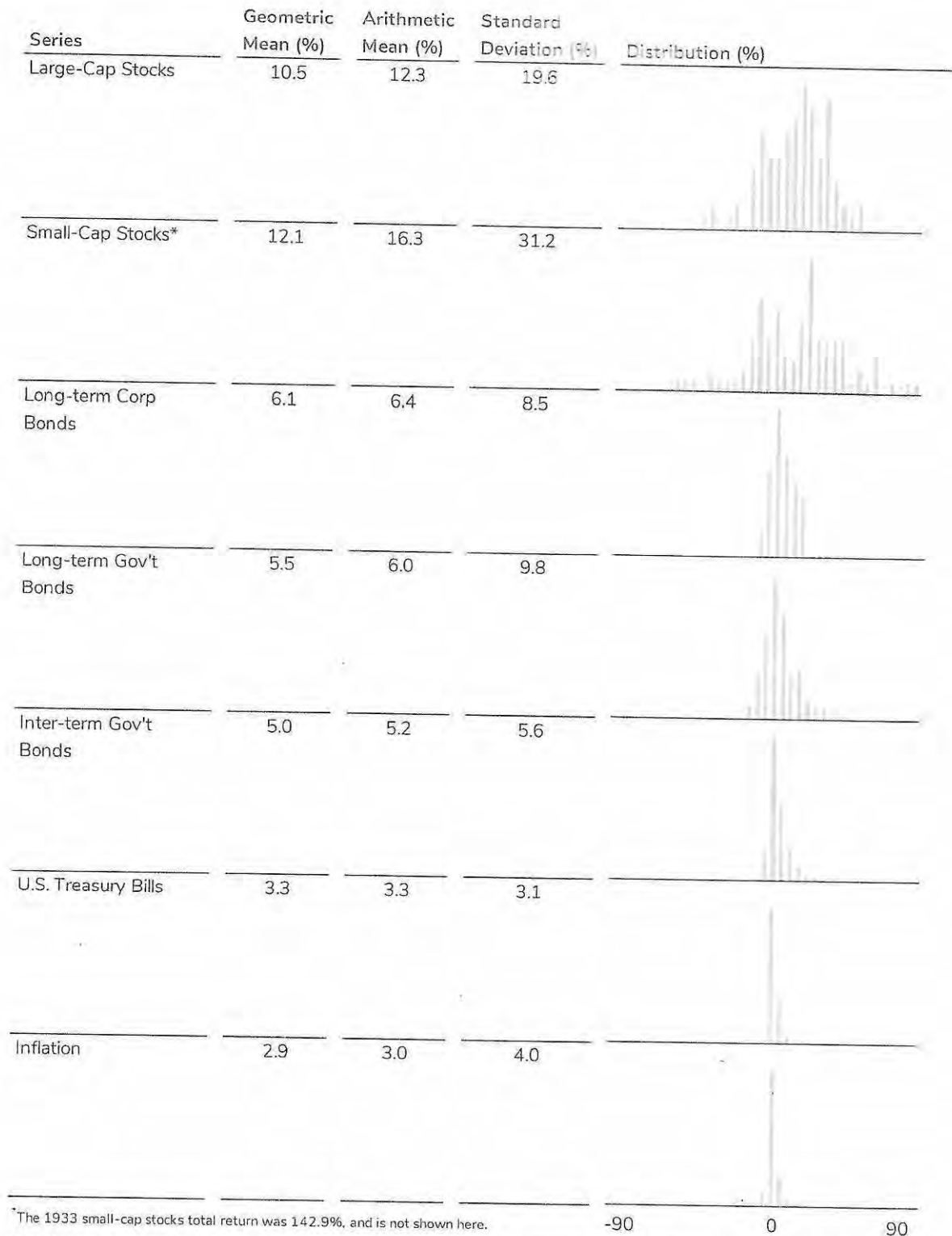


2022 SBBI[®] Yearbook

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



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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) increases 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.

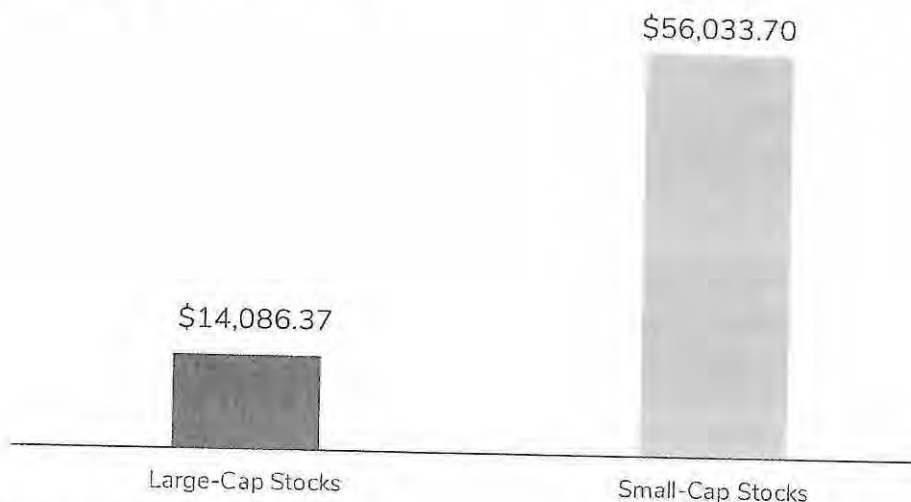
Exhibit 7.1: Summary Statistics of Large-Cap Stocks and Small-Cap Stocks (%)
1926–2021

	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:

$$k_e = R_f + \beta \times (RP_m) - RP_s$$

Where:

k_e	=	Cost of equity capital
R_f	=	Risk-free rate
β	=	Beta
RP_m	=	Equity risk premium (also referred as ERP)
RP_s	=	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 [www.krollcostofcapital.com](#) (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.com](#).

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 [www.krollcostofcapital.com](#). (subscription required).

¹⁹¹ For more information, see the Resources section of the Cost of Capital Navigator at [www.krollcostofcapital.com](#). 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

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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.

WVLR-EX

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Specify search criteria

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

APC	ERP	Size Premium	IRP	DoE	WACC	Summ 17		
				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%)		

<https://coc.bvresources.com/#/>

1/2

Business Valuation Resources

2	186	\$13,178,743	\$28,808,073	12.82%	1.04	1.01%
3	210	\$6,743,361	\$13,177,829	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%

Please note: this license is for your exclusive and individual use. For information on firm-wide pricing please contact BVR at 503-479-8200 ext. 2 or sales@bvresources.com
Thank you for using the BVR Cost of Capital Professional

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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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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County/region totals	AREA IN SQUARE MILES					2015										2020				
	Total	Land	Water	Households	Average household size	Group-quarter population	WORKPLACE EMPLOYMENT					Total population	Average household size	Households	Group-quarter population	WORK				
							Retail	Manufac- turing	Services	Other	Total					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	788,3355	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	3,866		
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 the City of Pittsburgh and county totals are Sorted County, Municipality

NOTE: column names in yellow cells are for reference

County/region totals	LACE EMPLOYMENT					Average household size
	Municipality (or Pittsburgh neighborhood cluster)	Services	Other	Total	Households	
Butler	Butler City	14,555	907	17,817	7,415	2.14
Butler	Butler Township	9,214	644	15,326	7,415	2.18
Butler	Center Township	1,592	207	3,200	3,301	2.29
Butler	Connoquenessing Borough	26	26	56	209	2.42
Butler	East Butler Borough	239	19	322	311	2.21
Butler	Oakland Township	204	79	370	1,115	2.54
Butler	Penn Township	1,260	406	2,030	2,092	2.36
Butler	Summit Township	841	244	2,219	1,805	2.48

County/region totals	LACE EMPLOYMENT					Average household size
	Municipality (or Pittsburgh neighborhood cluster)	Services	Other	Total	Households	
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 the City of Pittsburgh and county totals are sorted by Municipality)



NOTE: column names in yellow cells are for reference

		2025										2030																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	County/region totals	Group-quarter population	Total population	WORKPLACE EMPLOYMENT						Average household size	Households	Group-quarter population	Total population	WORKPLACE EMPLOYMENT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
				gpop_25	totpop_25	retemp_25	manufac_turing_25	services_25	othemp_25					Other	Total	gpop_30	totpop_30	retemp_30	manufac_turing_30	services_30	othemp_30	Other	Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Butler	Butler City	494	12,692	1,602	646	14,272	927	17,447	5,789	7,637	2.13	494	12,851	1,555	591	14,185	960	17,291	5,981	7,892	2.15	494	13,005	1,576	603	14,420	986	17,419	6,088	7,999	2.17	494	13,119	1,603	615	14,534	1,019	17,553	6,203	8,112	2.19	494	13,243	1,637	627	14,658	1,051	17,677	6,327	8,236	2.21	494	13,367	1,669	639	14,782	1,083	17,801	6,451	8,360	2.23	494	13,491	1,701	651	14,906	1,115	17,925	6,575	8,484	2.25	494	13,615	1,733	663	15,030	1,147	18,049	6,699	8,608	2.27	494	13,739	1,765	675	15,154	1,179	18,173	6,823	8,732	2.29	494	13,863	1,797	687	15,278	1,211	18,297	6,947	8,856	2.31	494	13,987	1,829	699	15,402	1,243	18,421	7,071	8,979	2.33	494	14,111	1,861	711	15,526	1,275	18,545	7,195	9,103	2.35	494	14,235	1,893	723	15,650	1,307	18,669	7,319	9,227	2.37	494	14,359	1,925	735	15,774	1,339	18,793	7,443	9,351	2.39	494	14,483	1,957	747	15,898	1,371	18,917	7,567	9,475	2.41	494	14,607	1,989	759	16,022	1,403	19,041	7,691	9,599	2.43	494	14,731	2,021	771	16,146	1,435	19,165	7,815	9,723	2.45	494	14,855	2,053	783	16,270	1,467	19,289	7,939	9,847	2.47	494	14,979	2,085	795	16,394	1,499	19,413	8,063	9,971	2.49	494	15,103	2,117	807	16,518	1,531	19,537	8,187	10,095	2.51	494	15,227	2,149	819	16,642	1,563	19,661	8,311	10,219	2.53	494	15,351	2,181	831	16,766	1,595	19,785	8,435	10,343	2.55	494	15,475	2,213	843	16,890	1,627	19,909	8,559	10,467	2.57	494	15,599	2,245	855	17,014	1,659	20,033	8,683	10,591	2.59	494	15,723	2,277	867	17,138	1,691	20,157	8,807	10,715	2.61	494	15,847	2,309	879	17,262	1,723	20,281	8,931	10,839	2.63	494	15,971	2,341	891	17,386	1,755	20,405	9,055	10,963	2.65	494	16,095	2,373	903	17,510	1,787	20,529	9,179	11,087	2.67	494	16,219	2,405	915	17,634	1,819	20,653	9,303	11,211	2.69	494	16,343	2,437	927	17,758	1,851	20,777	9,427	11,335	2.71	494	16,467	2,469	939	17,882	1,883	20,901	9,551	11,459	2.73	494	16,591	2,501	951	18,006	1,915	21,025	9,675	11,583	2.75	494	16,715	2,533	963	18,130	1,947	21,149	9,799	11,707	2.77	494	16,839	2,565	975	18,254	1,979	21,273	9,923	11,831	2.79	494	16,963	2,597	987	18,378	2,011	21,397	10,047	11,955	2.81	494	17,087	2,629	999	18,502	2,043	21,521	10,171	12,079	2.83	494	17,211	2,661	1,011	18,626	2,075	21,645	10,295	12,203	2.85	494	17,335	2,693	1,023	18,750	2,107	21,769	10,419	12,327	2.87	494	17,459	2,725	1,035	18,874	2,139	21,893	10,543	12,451	2.89	494	17,583	2,757	1,047	18,998	2,171	22,017	10,667	12,575	2.91	494	17,707	2,789	1,059	19,122	2,203	22,141	10,791	12,699	2.93	494	17,831	2,821	1,071	19,246	2,235	22,265	10,915	12,823	2.95	494	17,955	2,853	1,083	19,370	2,267	22,389	11,039	12,947	2.97	494	18,079	2,885	1,095	19,494	2,299	22,513	11,163	13,071	2.99	494	18,203	2,917	1,107	19,618	2,331	22,637	11,287	13,195	3.01	494	18,327	2,949	1,119	19,742	2,363	22,761	11,411	13,319	3.03	494	18,451	2,981	1,131	19,866	2,395	22,885	11,535	13,443	3.05	494	18,575	3,013	1,143	19,990	2,427	23,009	11,659	13,567	3.07	494	18,699	3,045	1,155	20,114	2,459	23,133	11,783	13,691	3.09	494	18,823	3,077	1,167	20,238	2,491	23,257	11,907	13,815	3.11	494	18,947	3,109	1,179	20,362	2,523	23,381	12,031	13,939	3.13	494	19,071	3,141	1,191	20,486	2,555	23,505	12,155	14,063	3.15	494	19,195	3,173	1,203	20,610	2,587	23,629	12,279	14,187	3.17	494	19,319	3,205	1,215	20,734	2,619	23,753	12,403	14,311	3.19	494	19,443	3,237	1,227	20,858	2,651	23,877	12,527	14,435	3.21	494	19,567	3,269	1,239	20,982	2,683	23,999	12,651	14,559	3.23	494	19,691	3,301	1,251	21,106	2,715	24,123	12,775	14,683	3.25	494	19,815	3,333	1,263	21,230	2,747	24,247	12,899	14,807	3.27	494	19,939	3,365	1,275	21,354	2,779	24,371	13,023	14,931	3.29	494	20,063	3,397	1,287	21,478	2,811	24,495	13,147	15,055	3.31	494	20,187	3,429	1,299	21,602	2,843	24,619	13,271	15,179	3.33	494	20,311	3,461	1,311	21,726	2,875	24,743	13,395	15,303	3.35	494	20,435	3,493	1,323	21,850	2,907	24,867	13,519	15,427	3.37	494	20,559	3,525	1,335	21,974	2,939	24,991	13,643	15,551	3.39	494	20,683	3,557	1,347	22,098	2,971	25,115	13,767	15,675	3.41	494	20,807	3,589	1,359	22,222	3,003	25,239	13,891	15,799	3.43	494	20,931	3,621	1,371	22,346	3,035	25,363	14,015	15,923	3.45	494	21,055	3,653	1,383	22,470	3,067	25,487	14,139	16,047	3.47	494	21,179	3,685	1,395	22,594	3,099	25,611	14,263	16,171	3.49	494	21,303	3,717	1,407	22,718	3,131	25,735	14,387	16,295	3.51	494	21,427	3,749	1,419	22,842	3,163	25,859	14,511	16,419	3.53	494	21,551	3,781	1,431	22,966	3,195	25,983	14,635	16,543	3.55	494	21,675	3,813	1,443	23,090	3,227	26,107	14,759	16,667	3.57	494	21,799	3,845	1,455	23,214	3,259	26,231	14,883	16,791	3.59	494	21,923	3,877	1,467	23,338	3,291	26,355	15,007	16,915	3.61	494	22,047	3,909	1,479	23,462	3,323	26,479	15,131	17,039	3.63	494	22,171	3,941	1,491	23,586	3,355	26,603	15,255	17,163	3.65	494	22,295	3,973	1,503	23,710	3,387	26,727	15,379	17,287	3.67	494	22,419	4,005	1,515	23,834	3,419	26,851	15,503	17,411	3.69	494	22,543	4,037	1,527	23,958	3,451	26,975	15,627	17,535	3.71	494	22,667	4,069	1,539	24,082	3,483	27,099	15,751	17,659	3.73	494	22,791	4,101	1,551	24,206	3,515	27,223	15,875	17,783	3.75	494	22,915	4,133	1,563	24,330	3,547	27,347	15,999	17,907	3.77	494	23,039	4,165	1,575	24,454	3,579	27,471	16,123	18,031	3.79	494	23,163	4,197	1,587	24,578	3,611	27,595	16,247	18,155	3.81	494	23,287	4,229	1,599	24,702	3,643	27,719	16,371	18,279	3.83	494	23,411	4,261	1,611	24,826	3,675	27,843	16,495	18,403	3.85	494	23,535	4,293	1,623	24,950	3,707	27,967	16,619	18,527	3.87	494	23,659	4,325	1,635	25,074	3,739	28,091	16,743	18,651	3.89	494	23,783	4,357	1,647	25,198	3,771	28,215	16,867	18,775	3.91	494	23,907	4,389	1,659	25,322	3,803	28,339	16,991	18,899	3.93	494	24,031	4,421	1,671	25,446	3,835	28,463	17,115	19,023	3.95	494	24,155	4,453	1,683	25,570	3,867	28,587	17,239	19,147	3.97	494	24,279	4,485	1,695	25,694	3,899	28,711	17,363	19,271	3.99	494	24,403	4,517	1,707	25,818	3,931	28,835	17,487	19,395	4.01	494	24,527	4,549	1,719	25,942	3,963	28,959	17,611	19,519	4.03	494	24,651	4,581	1,731	26,066	3,995	29,083	17,735	19,643	4.05	494	24,775	4,613	1,743	26,190	4,027	29,207	17,859	19,767	4.07	494	24,899	4,645	1,755	26,314	4,059	29,331	17,983	19,891	4.09	494	25,023	4,677	1,767	26,438	4,091	29,455	18,107	20,015	4.11	494	25,147	4,709	1,779	26,562	4,123	29,579	18,231	20,139	4.13	494	25,271	4,741	1,791	26,686	4,155	29,703	18,355	20,263	4.15	494	25,395	4,773	1,803	26,810	4,187	29,827	18,479	20,387	4.17	494	25,519	4,805	1,815	26,934	4,219	29,951	18,603	20,511	4.19	494	25,643	4,837	1,827	27,058	4,251	30,075	18,727	20,635	4.21	494	25,767	4,869	1,839	27,182	4,283	30,199	18,851	20,759	4.23	494	25,891	4,901	1,851	27,306	4,315	30,323	18,975	20,883	4.25	494	26,015	4,933	1,863	27,430	4,347	30,447	19,099	21,007	4.27	494	26,139	4,965	1,875	27,554	4,379	30,571	19,223	21,131	4.29	494	26,263	4,997	1,887	27,678	4,411	30,695	19,347	21,255	4.31	494	26,387	5,029	1,899	27,802	4,443	30,819	19,471	21,379	4.33	494	26,511	5,061	1,911	27,926	4,475	30,943	19,595	21,503	4.35	494	26,635	5,093	1,923	28,050	4,507	31,067	19,719	21,627	4.37	494	26,759	5,125	1,935	28,174	4,539	31,191	19,843	21,751	4.39	494	26,883	5,157	1,947	28,298	4,571	31,315	19,967	21,875	4.41	494	27,007	5,189	1,959	28,422	4,603	31,439	20,091	21,999	4.43	494	27,131	5,221	1,971	28,546	4,635	31,563	20,215	22,123	4.45	494	27,255	5,253	1,983	28,670	4,667	31,687	20,339	22,247	4.47	494	27,379	5,285	1,995	28,794	4,699	31,811	20,463	22,371	4.49	494	27,503	5,317	2,007	28,918	4,731



Cycle 11 forecast (adopted by the City of Pittsburgh and county totals are Sorted County, Municipality

NOTE: column names in yellow cells are for r

County/region totals	2035										2040									
	Average household size					Group-quarter population					Households					Total population				
	Households	avgsize	gpop	totpop	Total	Retail	Manufac-turing	Services	Other	Total	Households	avgsize	gpop	totpop	Total	Retail	Manufac-turing	Services	Other	Total
Pittsburgh, City of	146,977	2.10	23,939	333,067	388,040	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	430,866	2.27	11,413	989,969	1,075,355	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	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	24,655	
Beaver	73,039	2.34	2,951	174,012	12,821	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	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	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	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	7,848	1,916	26,760	9,737	46,261	38,100	2.34	5,923	95,010	8,009	1,838	27,696	10,187	47,750	
Lawrence	36,507	2.33	2,361	87,531	6,496	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	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	36,450	14,312	113,058	23,403	187,223	166,525	2.28	8,562	387,880	37,125	13,962	117,387	23,596	192,120	
SPC Region	1,158,207	2.28	75,817	2,721,414	280,649	280,649	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	
County/region totals	2035										2040									
	Average household size					Group-quarter population					Households					Total population				
	Households	avgsize	gpop	totpop	Total	Retail	Manufac-turing	Services	Other	Total	Households	avgsize	gpop	totpop	Total	Retail	Manufac-turing	Services	Other	Total
Pittsburgh, City of	146,977	2.10	23,939	333,067	388,040	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	430,866	2.27	11,413	989,969	1,075,355	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	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	24,655	
Beaver	73,039	2.34	2,951	174,012	12,821	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	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	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	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	7,848	1,916	26,760	9,737	46,261	38,100	2.34	5,923	95,010	8,009	1,838	27,696	10,187	47,750	
Lawrence	36,507	2.33	2,361	87,531	6,496	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	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	36,450	14,312	113,058	23,403	187,223	166,525	2.28	8,562	387,880	37,125	13,962	117,387	23,596	192,120	
SPC Region	1,158,207	2.28	75,817	2,721,414	280,649	280,649	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 title)
City of Pittsburgh and county totals are for title
Sorted County, Municipality

NOTE: column names in yellow cells are for title

		2045									
		Households	Average household size	Group-quarter population	Total population	Retail	Manufacturing	Services	Other	Total	
County/region totals	Municipality (or Pittsburgh neighborhood cluster)	hholds_45	avgsize_45	gpop_45	totpop_45	retemp_45	mitemp_45	servemp_45	othtemp_45	totemp_45	
Butler	Butler City	6,277	2.12	494	13,818	1,573	523	15,083	961	18,140	
Butler	Butler Township	8,379	2.11	353	18,044	3,961	823	9,584	603	14,971	
Butler	Center Township	3,679	2.23	15	8,226	1,427	50	1,811	186	3,474	
Butler	Connoquenessing Borough	242	2.25	0	545	0	2	37	14	53	
Butler	East Butler Borough	348	2.16	0	752	21	40	269	31	361	
Butler	Oakland Township	1,242	2.46	5	3,060	63	27	266	68	424	
Butler	Penn Township	2,481	2.23	11	5,554	359	28	1,472	382	2,241	
Butler	Summit Township	2,101	2.42	300	5,383	183	715	1,053	291	2,242	

County/region totals	Households	Average household size	Group-quarter population	Total population	2045				
					WORKPLACE EMPLOYMENT				Total
					Retail	Manufac- turing	Services	Other	
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

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.

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.

RBS sounds alarm over Brexit

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

Our Standards: [The Thomson Reuters Trust Principles.](#)

MORE FROM REUTERS

Created by EDGAR Online, Inc.

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

Created by EDGAR Online, Inc.

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
1	Belmont N. H.	7,356	160	16	Sub Totals Forward:	30,120	725
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	

Annual Return of Mountain Water Systems, Inc.

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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	

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.

Media Contacts:**Aquarion Contact:**

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New England Service Company Contact:

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President and Chief Executive Officer
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37 Northwest Drive
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Phone: (860)-747-1665
NLaChance@NewEnglandServiceCompany.com

###

NEW ENGLAND SERVICE COMPANY, INC. AND SUBSIDIARIES

Consolidated Balance Sheets

	December 31,	
	2020	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	<u>35,067,948</u>	<u>34,624,436</u>
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	<u>1,498,842</u>	<u>1,492,447</u>
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	<u>51,811</u>	<u>52,968</u>
Total Current Assets	<u>2,919,799</u>	<u>2,710,949</u>
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	<u>4,263,900</u>	<u>4,238,900</u>
Total Other Assets	<u>6,551,434</u>	<u>6,064,758</u>
Total Assets	<u>\$ 46,038,023</u>	<u>\$ 44,892,590</u>

See Notes to Consolidated Financial Statements

NEW ENGLAND SERVICE COMPANY, INC. AND SUBSIDIARIES

Consolidated Balance Sheets (continued)

	December 31,	
	2020	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.

1 subsidiary water companies, serving approximately 200,000 customers in 52 towns and
2 cities with a population of approximately 674,000 throughout Connecticut's seven
3 counties.² A map showing AWC-CT's current service area is attached to the Joint
4 Application as Exhibit I. AWC-CT has provided water and water services to Connecticut
5 residents and customers continuously since 1857. AWC-CT is well known to PURA and
6 well respected by the water industry in Connecticut, and nationally. AWC-CT had over
7 \$1.68 billion of utility plant assets as of December 31, 2020 and operating revenues of
8 \$189.6 million in 2020.

9 **Q. Please describe New England Service Company.**

10 **A.** NESC is a Connecticut stock corporation. NESC was formed in 1996 as a holding company
11 to operate in both regulated and unregulated water utility markets. NESC has one regulated
12 water distribution operating subsidiary in Connecticut. VWS, a utility established in 1884
13 as the Plainville Water Company, delivers water to over 6,800 customers or a population of
14 approximately 18,000 in Plainville, Southington, and Farmington, Connecticut. A map
15 showing VWS' current service area is attached to the Joint Application as Exhibit I.
16 In addition to owning VWS, NESC is also the sole stockholder of Colonial Water
17 Company, a utility that provides water to about 1,530 customers in Dover and Plymouth,
18 Massachusetts; Mountain Water Systems, a utility that provides water to about 490
19 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.

Filed by Eversource Energy
(Commission File No. 001-05324) pursuant
to Rule 425 under the Securities Act of 1933
Subject Company: The Torrington Water Company

THE TORRINGTON WATER COMPANY LETTERHEAD

March 8, 2022

Dear Stockholder:

We are pleased to announce that on March 7, 2022, the Board of Directors of The Torrington Water Company (OTC Pink Sheets Trading Symbol: TORW) unanimously approved an Agreement and Plan of Merger (the "Agreement") with Aquarion Company ("Aquarion"), a wholly-owned subsidiary of Eversource Energy (NYSE: ES). Aquarion is a holding company based in Bridgeport, Connecticut with regulated water operations in Connecticut, Massachusetts, and New Hampshire. The Torrington Water Company ("TWC") is a public utility that provides water service to approximately 10,000 customers in the city of Torrington and the towns of Burlington, Harwinton, Litchfield and New Hartford, Connecticut.

Under the terms of the Agreement, which has been unanimously approved by the boards of directors of Aquarion and TWC, TWC would merge with and become a wholly-owned subsidiary of Aquarion, and the stockholders of TWC would receive in exchange for their TWC shares a number of validly issued, fully paid and nonassessable common shares, par value \$5.00 per share, of Eversource Energy. The exchange ratio ("Exchange Ratio") that determines the number of Eversource Energy common shares issued in the merger will float between 1.0241 and 1.07 IO and will be determined by dividing \$93.51 by Eversource's volume weighted average share price for IO full trading days ending on and including the second full trading day prior to closing date of the merger ("Eversource Share Value"). The Exchange Ratio becomes fixed at 1.0710 if the Eversource Share Value is less than \$87.32 and becomes fixed at 1.0241 if the Eversource Share Value is greater than \$91.32. An Exchange Ratio of 1.0710 implies a \$92.81 per share value based on the closing price of \$88.66 for Eversource Energy common shares on March 7, 2022, or a market premium of approximately 1.04% over TWC's \$45.50 closing price on March 7, 2022. Boenning & Scattergood, Inc. provided a fairness opinion to the Board of Directors of TWC. Based on an Exchange Ratio of 1.07 IO and the most recently declared dividends by TWC and Eversource Energy, TWC shareholders would receive an equivalent dividend of \$2.58 per share compared to their current dividend on TWC shares of \$1.38 per share.

The completion of the merger will require approval by the stockholders of TWC, and the TWC Board of Directors has resolved to recommend the adoption of the Agreement by the stockholders. The merger is also subject to the satisfaction of several other customary closing conditions, including the approval of the Connecticut Public Utilities Regulatory Authority. The parties plan to file for the approval of the Connecticut Public Utilities Regulatory Authority shortly, with an anticipated consummation of the merger by the end of 2022.

Within the coming weeks, you will be mailed a Proxy Statement/Prospectus for the TWC Stockholder Meeting, at which TWC stockholders will consider and vote with respect to the proposed merger.

Enclosed with this letter is the press release announcing the signing of the Agreement. The press release provides additional information that will answer many of your questions.

Sincerely yours,
Susan Suhanovsky
President

Forward-Looking Statements

This letter includes statements concerning The Torrington 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 Aquarion Water 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.

This Communication Does Not Constitute a Solicitation of Proxies

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 The Torrington Water 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 The Torrington Water Company may file with the SEC in connection with the proposed transaction. INVESTORS AND SECURITY HOLDERS OF THE TORRINGTON WATER 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, THE TORRINGTON WATER COMPANY AND THE PROPOSED TRANSACTION. Investors and security holders may be able to obtain free copies of these documents (when they are available) and other related documents filed with the SEC at the SEC's website at www.sec.gov. The materials may also be obtained for free by directing a written request to: Susan Suhanovsky, President, The Torrington Water Company, PO Box 867, Torrington, CT 06790, telephone (860) 489-4149. Investors should read the proxy materials/prospectus before making a decision regarding the merger.

This filing may be deemed solicitation material in respect of the proposed business combination transaction between Aquarion Company and The Torrington Water Company. The directors, trustees, executive officers and certain other members of management and employees of Eversource Energy, Aquarion Company and The Torrington Water Company may be deemed “participants” in the solicitation of proxies from stockholders of The Torrington Water 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, 2021, which was filed with the SEC on February 17, 2022 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 The Torrington Water 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 Susan Suhanovsky at The Torrington Water Company as described above.

About Aquarion Water Company:

Aquarion Water Company is the public water supply company for more than 700,000 people in 68 cities and towns in Connecticut, 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 Water 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.

MUNICIPALITIES SUPPLIED					
1. Show below the names of the municipalities in which the respondent supplies water and the number of customers in each.					
Line No.	Name (a)	Estimated Population Supplied*** (b)	Number of customers served by meter* (c)	Number of customers not served by meter** (d)	Total customers supplied (e)
1	Torrington	29,000	9,789	-	9,789
2	New Hartford	18	7	-	7
3	Litchfield	171	57	-	57
4	Harwinton	402	134	-	134
5	Burlington	414	138		138
6					
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55	Total	30,005	10,125	-	10,125

THE TORRINGTON WATER COMPANY

Balance Sheets

	December 31,		
	2021	2020	2019
ASSETS			
Utility plant, at cost	\$74,999,793	\$71,847,851	\$69,057,611
Less: accumulated depreciation	<u>26,458,744</u>	<u>25,210,076</u>	<u>24,139,469</u>
Net utility plant	<u>48,541,049</u>	<u>46,637,775</u>	<u>44,918,142</u>
Nonutility property, net of accumulated depreciation	<u>202,624</u>	<u>372,935</u>	<u>372,935</u>
Current Assets			
Cash and cash equivalents	1,577,648	2,781,302	1,064,441
Accounts receivable	554,416	757,705	518,129
Accrued unbilled revenues	876,500	858,000	821,000
Regulatory asset-water revenue adjustment, current portion	627,149	631,461	707,560
Materials and supplies inventory	196,635	369,507	300,436
Prepaid expenses	<u>168,630</u>	<u>183,413</u>	<u>132,139</u>
Total Current Assets	<u>4,000,978</u>	<u>5,581,388</u>	<u>3,543,705</u>
Other Assets			
Other assets	1,924,448	1,976,334	2,306,894
Preliminary survey and investigation charges	154,216	154,216	230,862
Regulatory asset-income taxes recoverable	7,375,800	6,855,660	6,476,000
Regulatory asset-water revenue adjustment, net of current portion	146,373	142,065	154,160
Regulatory asset-unfunded postretirement benefits	<u>3,371,985</u>	<u>3,205,165</u>	<u>3,038,255</u>
Total Other Assets	<u>12,972,822</u>	<u>12,333,440</u>	<u>12,206,171</u>
Total Assets	<u>\$65,717,473</u>	<u>\$64,925,538</u>	<u>\$61,040,953</u>

See notes to financial statements

THE TORRINGTON WATER COMPANY

Balance Sheets (continued)

	December 31,		
	2021	2020	2019
STOCKHOLDERS' EQUITY AND LIABILITIES			
Stockholders' Equity			
Common stock, no par; 1,000,000 shares authorized; 864,000 issued and outstanding	\$ 1,800,000	\$ 1,800,000	\$ 1,800,000
Retained earnings	21,930,762	21,326,808	20,524,284
Total Stockholders' Equity	<u>23,730,762</u>	<u>23,126,808</u>	<u>22,324,284</u>
Long-term debt, net	<u>12,305,080</u>	<u>12,656,619</u>	<u>10,515,289</u>
Current Liabilities			
Current portion of long-term debt	360,000	360,000	360,000
Accounts payable	191,921	586,707	329,619
Accrued taxes	501,964	695,550	611,538
Accrued interest	173,400	179,520	185,640
Other current liabilities	113,561	131,691	133,408
Total Current Liabilities	<u>1,340,846</u>	<u>1,953,468</u>	<u>1,620,205</u>
Other Liabilities			
Deferred income taxes	9,589,665	8,889,230	8,416,575
Regulatory liability-excess deferred income taxes	1,139,918	1,200,609	1,261,300
Unfunded postretirement benefits	3,371,985	3,205,165	3,038,255
Customer advances for construction	506,436	544,075	515,481
Contributions in aid of construction	11,078,991	10,772,973	10,850,172
Amortized contributions in aid of construction	2,653,790	2,576,591	2,499,392
Total Other Liabilities	<u>28,340,785</u>	<u>27,188,643</u>	<u>26,581,175</u>
Total Stockholders' Equity and Liabilities	<u>\$65,717,473</u>	<u>\$64,925,538</u>	<u>\$61,040,953</u>

See notes to financial statements

THE TORRINGTON WATER COMPANY
Statements of Income and Retained Earnings

	Year Ended December 31,		
	2021	2020	2019
OPERATING REVENUES			
Contracts with customers	\$ 6,934,525	\$ 6,956,272	\$ 6,268,405
Alternative revenue programs	900,619	762,420	1,211,817
Total Operating Revenues	<u>7,835,144</u>	<u>7,718,692</u>	<u>7,480,222</u>
OPERATING EXPENSES			
Operation expenses	2,485,521	2,570,359	2,381,493
Maintenance expenses	703,589	698,831	647,629
Depreciation expense	1,217,968	1,170,187	1,146,922
Taxes other than income taxes	1,382,016	1,333,810	1,319,487
Income taxes	133,200	135,900	74,200
Total Operating Expenses	<u>5,922,294</u>	<u>5,909,087</u>	<u>5,569,731</u>
Utility Operating Income	<u>1,912,850</u>	<u>1,809,605</u>	<u>1,910,491</u>
Other Income and Deductions			
Merchandising and jobbing, net	123,068	123,170	116,208
Interest income	2,411	2,212	4,025
Miscellaneous non-operating income	247,496	192,286	160,412
Gain on forgiveness of Paycheck Protection Program loan	-	276,057	-
Allowance for funds used during construction	42,306	26,707	10,905
Total Other Income and Deductions	415,281	620,432	291,550
Taxes applicable to other income	33,604	28,604	21,055
Net Other Income and Deductions	<u>381,677</u>	<u>591,828</u>	<u>270,495</u>
Income Before Interest Expense	<u>2,294,527</u>	<u>2,401,433</u>	<u>2,180,986</u>
Interest Expense			
Interest on long-term debt	489,624	466,235	446,760
Amortization of deferred financing costs	8,461	7,998	7,350
Other interest	168	1,476	1,538
Total Interest Expense	<u>498,253</u>	<u>475,709</u>	<u>455,648</u>
Net Income	<u>1,796,274</u>	<u>1,925,724</u>	<u>1,725,338</u>
RETAINED EARNINGS			
Dividends declared	(1,192,320)	(1,123,200)	(1,080,000)
Retained earnings, beginning	21,326,808	20,524,284	19,878,946
Retained earnings, ending	<u>\$21,930,762</u>	<u>\$21,326,808</u>	<u>\$20,524,284</u>
PER SHARE AMOUNTS			
Net income, basic	\$ 2.08	\$ 2.23	\$ 2.00
Dividends declared	\$ 1.38	\$ 1.30	\$ 1.25
Book value	\$ 27.47	\$ 26.77	\$ 25.84

See notes to financial statements

The Water Utility Industry consists of six investor-owned companies that provide water services to residential, commercial, and industrial customers. The group is extremely small because most of the water utilities in the United States are run by states and local municipalities. The fundamentals in this industry do not change quickly. Change comes incrementally here, which can be both good and bad. Almost every water utility in the country is playing catch up. For years, the nation's pipelines and wastewater facilities had been falling into disrepair. Over the past decade or so, the industry has been investing heavily to replace these older assets.

All utilities are overseen by some state authority that decides on what rates water users will ultimately pay. Fortunately, the relations between the industry and regulators has been very constructive in the recent past. These relationships may be tested in the coming years because of inflation. Earnings in the Water Industry are well defined. The demand for water is mostly inelastic, except for when rates are raised meaningfully during a drought or water emergency to dampen demand. Almost all of these stocks score well for Price Stability, Price Growth Persistence, and Earnings Predictability.

In the past three months, the equities in this group have outperformed the market averages.

Fundamentals

Members of this group are all in the midst of large ongoing construction programs that ought to take decades to complete. For years, insufficient capital was allocated to upgrading and modernizing the country's water infrastructure. Indeed, the average age of many pipelines is now between 60 and 75 years. As a result, an era in which water has become scarcer, a large volume of it was leaking and being wasted due to a shoddy transmission system. Both the utilities and regulatory are to blame for the predicament because neither party wanted to receive backlash from raising customer bills to make the required improvements. In any case, the industry has taken steps to correct this situation. Instead of one massive spending program, the outlays will be made gradually.

Mediocre Finances

To fund the building projects, most utilities have to depend in part on external financing. Over the past 15 years, we have been in a low interest rate environment and debt was the preferred source of financing. With interest rates for long-maturity corporate bonds spiking higher, there is a chance that this could change. Many water utilities have been reluctant to issue equity in the past. Since the industry's stocks are now trading with historically high P/E ratios (more below), we think now would be a good time to sell shares. For example, eleven years ago, *American Water Works* had 175.66 million shares outstanding. When 2022 ended, we estimated the figure rose to just 182 million, a meager annual growth rate of 0.3%. (The company hasn't had any kind of stock repurchase program.) Over that same time, *American Water's* long-term debt-to total capital ratio has increased. While this is not a weak balance sheet, it can't be classified as strong either. This also applies to most

Scarcity Of Stocks

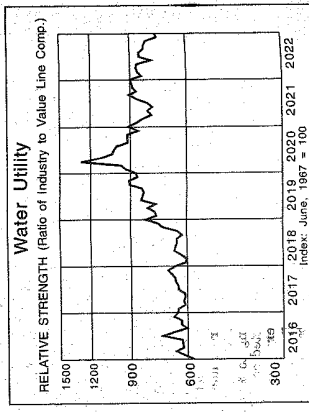
water utilities.

The total market capitalization of the Water Utility Industry is about \$51 billion, or slightly below that of Dominion Energy, the nation's fourth largest electric utility. Moreover, *American Water Works* accounts for over 54% of the total. Thus, in the *Essential Utilities* () That leaves 4 companies that have market caps ranging from \$2.5 billion to \$3.4 billion. The demand to own shares by the large institutional investors clearly outstrips the supply. This is one of the prime reasons for these stocks trading at such seemingly inflated P/E ratios. Of the six water stocks covered by *Value Line*, the P/E's range from a low of 24.8, to a high of 38.8, with the average being 32.4. *Essential Utilities* is the only equity with a P/E below 30, mostly because of its gas utility operations.

Conclusion

Should investors want to become involved in this sector, they must be willing to pay a huge premium. While this sector has several positive attributes, it also has a severe limitations. For one, the returns on equity are determined by an outside entity. Thus, there is a ceiling to each company's profit potential. Furthermore, regulators can be fickle. The water industry has enjoyed positive relations with regulators over the past decade or so, but that was during a time of very low inflation. Passing along the rate hike needed to finance the replacement of old pipes will likely remain above the level of inflation, which is currently over 6%. State regulatory commissions are under political pressure to keep ratepayers' bills low. So, even though a utility may have spent funds prudently, that does not necessarily mean that regulators will allow a fair return to be made on the investment. In the electric utility sector this has happened frequently, mainly due to a backlash from the public. Regulators are appointed by politicians. Elected officials do not gain popular support (i.e. votes) by raising utility bills. In our opinion, Wall Street has not taken this into account, as it certainly is not reflected in the price of the stocks. As always, we urge investors to read each individual report before investing.

James A. Flood



To subscribe call 1-800-VALUELINE

AMER. STATES WATER									
TIMELINESS	3	12	24	36	48	60	72	84	96
SAFETY	2	12	24	36	48	60	72	84	96
TECHNICAL	1	12	24	36	48	60	72	84	96
BETA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
18-Month Target Price Range	Low-High	Midpoint (1/2 to Mid)							
Low-High	Midpoint (1/2 to Mid)								
2022 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2026 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2027 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2028 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2029 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2030 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2031 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2032 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2033 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2034 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2035 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2036 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2037 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2038 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2039 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2040 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2041 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2042 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2043 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2044 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2045 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2046 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2047 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2048 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2049 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2050 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2051 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2052 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2053 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2054 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2055 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2056 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2057 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2058 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2059 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2060 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2061 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2062 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2063 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2064 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2065 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2066 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2067 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2068 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2069 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2070 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
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Low-High	Midpoint (1/2 to Mid)								
2072 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
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Low-High	Midpoint (1/2 to Mid)								
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Low-High	Midpoint (1/2 to Mid)								
2075 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2076 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2077 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2078 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2079 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2080 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2081 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2082 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2083 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2084 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2085 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2086 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2087 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2088 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2089 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2090 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2091 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2092 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2093 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2094 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2095 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2096 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2097 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2098 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2099 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2100 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2101 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2102 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2103 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2104 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2105 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2106 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
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Low-High	Midpoint (1/2 to Mid)								
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Low-High	Midpoint (1/2 to Mid)								
2109 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2110 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2111 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2112 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2113 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
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Low-High	Midpoint (1/2 to Mid)								
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Low-High	Midpoint (1/2 to Mid)								
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Low-High	Midpoint (1/2 to Mid)								
2118 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2119 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2120 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
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Low-High	Midpoint (1/2 to Mid)								
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Low-High	Midpoint (1/2 to Mid)								
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Low-High	Midpoint (1/2 to Mid)								
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Low-High	Midpoint (1/2 to Mid)								
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Low-High	Midpoint (1/2 to Mid)								
2128 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
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Low-High	Midpoint (1/2 to Mid)								
2134 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
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2135 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2136 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
Low-High	Midpoint (1/2 to Mid)								
2137 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
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2138 PROJECTIONS	Price	Gain	Return	Yield	Div	Yield	Div	Yield	Div
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AMERICAN WATER NYSE:AWK

RECENT PRICE \$153.02 PE 33.6 (Trading 24.5) RELATIVE 2.05 1.8% VALUE 1780

THRESHOLD 3 **LEVEL 11/1/22** **LOW 125** **HIGH 185** **MAJOR 125** **MINOR 125** **MAJOR 125** **MINOR 125**

SAFETY 3 **LEVEL 11/1/22** **LOW 125** **HIGH 185** **MAJOR 125** **MINOR 125** **MAJOR 125** **MINOR 125**

TECHNICAL 4 **LEVEL 11/1/22** **LOW 125** **HIGH 185** **MAJOR 125** **MINOR 125** **MAJOR 125** **MINOR 125**

BETA 39 **11/1/22** **LOW 125** **HIGH 185** **MAJOR 125** **MINOR 125** **MAJOR 125** **MINOR 125**

18-Month Target Price Range
 Low-High Midpoint (± 1σ)
 Low-High Midpoint (± 1σ)
 Low-High Midpoint (± 1σ)

2025-27 PROJECTIONS
 Price Annual Total
 High 185 (+20%) 7%
 Low 125 (-20%) -2%

Institutional Decisions
 Buy 450
 Hold 450
 Sell 450
 Buy 450
 Hold 450
 Sell 450

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Institutional Decisions
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 Hold 450
 Sell 450
 Buy 450
 Hold 450
 Sell 450

[illegible]

INDUSTRY TIMELINESS: 11 (of 99)

regardless of the market backdrop.

Strategic Business Improvements

The companies herein operate in a fairly competitive space. Several have long histories of growth through acquisitions, and may consider asset purchases or other investments, such as technological innovation, to strengthen their rosters.

Meanwhile, a few implemented cost controls or have been focusing on productivity improvements to bolster margins and aid profit growth.

Conclusion

The Brokers & Exchange Industry has been on an upswing over the past few months. The group, as a whole, is ranked near the top of the Value Line industry ranking system for Timeliness.

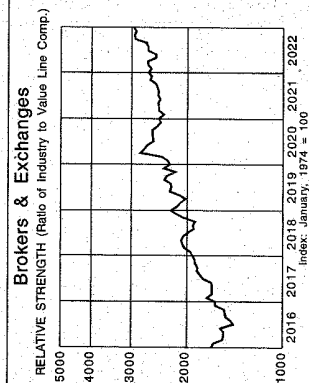
Due to the nature of their businesses and their proximity to the eye of the storm, so to speak, the companies herein and their stocks tend to be vulnerable to market volatility. As a result, we imagine the stocks herein will probably face a bumpy road in the near term. Moreover, the issues' recent price strength has limited some of the capital appreciation potential we envision over the 2025-2027 pull. Consequently, investors with a longer-term bent may want to wait for a better entry point before taking a position.

Despite elevated volatility, many securities exchanges and brokerages may still appeal to conservative investors. Several in this group are mature companies with long histories and stable finances, earning them high scores for Financial Strength. Moreover, a few stocks stand out thanks to their above-average safety ratings.

What's more, few members herein possess attractive dividend yields. Plus, most of their payouts are well secured, thanks to their healthy cash flow. As a result, income-oriented investors may want to take a closer look here, especially those seeking investment vehicles with risk-adjusted total return prospects.

As always, we caution readers from painting with too broad a brush, and recommend evaluating each individual stock report and equity's investment merits and risks before making any capital commitments.

Orly Seidman



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The Brokers & Exchanges Industry, as a whole, has held up despite recent market turbulence. In fact, the group is ranked near the top of the Value Line investment universe for year-ahead relative price performance.

The financial companies and exchange operators discussed herein are no strangers to major market movements. In fact, many of their businesses are embroiled in the ups and downs of the global equity markets.

We will take a closer look at how external factors may impact this industry in the near term, and what internal improvements the brokers and exchanges are taking in order to counter headwinds and better position themselves for growth.

The Macroeconomic Environment

In March of 2020, the global economy was hard hit by the onset of COVID-19. Stock markets across the world slumped in the early days of the pandemic, and countries implemented shelter-in-place orders to curb the spread of the virus, and limited non-essential businesses. China, however, continued its zero-COVID policies, though the world's second-largest economy plans to lift travel restrictions and will be reopening its borders in early 2023. The lingering effects of the coronavirus have had echoes in the market's recent rout.

Rapid inflation hurt businesses and consumers across the globe. In addition, supply-chain disruptions also led to higher operating costs. The ongoing war between Russia and Ukraine further exacerbated oil and energy valuations. Likewise, there are ongoing concerns that several nations are on the brink of a recession or stagnant economic growth.

Overall, 2022 was a turbulent year for U.S. and global stocks, with the major U.S. equity indexes entering into bear market territory several times over the course of the year.

The one silver lining for the exchange operators and financial companies is that market volatility can be good for their businesses. Increased trading activity can boost their revenues, regardless if it is spurred by bullish or bearish market movement. Moreover, a few herein have rolled out new products and services to help their clients navigate the difficult market climate.

Rising U.S. Interest Rates

The Federal Reserve has been trying to strengthen the U.S. economy. At the conclusion of the December meeting of the Federal Open Market Committee, the central bank announced another 50-basis-point increase to the benchmark federal funds rate, raising it to a range of 4.25% to 4.50%. The Fed has also continued its bond-buying program. Additional interest-rate hikes are likely in the next year or so.

The tighter monetary policy aims to restrict money in circulation, and limit consumer spending, thereby curtailing inflation, which is still flirting with 40-year highs. Personal Consumption Expenditures (PCE) figures have moderated over the last few quarters, but it may take more time for the central bank's efforts to significantly move the needle.

Equities tend to lose some of their luster in rising interest-rate environments. However, thanks to the companies' well-diversified portfolios, and exposure to fixed-income assets, we think that they will perform decently

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S&P GROUP										NYSE-S&P	RECENT PRICE										PE	34.5 (Trailing 42)	RELATIVE 2.10	1.8%	VALUE LINE	1784
TIMELINESS 3										3.0	30.1	33.7	35.7	56.9	68.3	88.4	74.5	53.9	45.6	56.7	81.3					
SAFETY 3										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
TECHNICAL 3										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
BETA .80 (1.00 = Market)										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
18-Month Target Price Range										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
S&P 500: 379 (75%)										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2025-27 PROJECTIONS										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
Price										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
Gain										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
Return										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
Institutional Decisions										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2006-2007										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2008-2009										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2010-2011										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2012-2013										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2014-2015										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2016-2017										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2018-2019										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2020-2021										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2022-2023										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2024-2025										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2026-2027										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2028-2029										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2030-2031										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2032-2033										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2034-2035										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2036-2037										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2038-2039										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2040-2041										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2042-2043										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2044-2045										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2046-2047										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2048-2049										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2050-2051										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2052-2053										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2054-2055										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2056-2057										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2058-2059										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2060-2061										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2062-2063										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2064-2065										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2066-2067										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2068-2069										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2070-2071										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2072-2073										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2074-2075										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2076-2077										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2078-2079										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2080-2081										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2082-2083										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2084-2085										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2086-2087										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2088-2089										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2090-2091										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2092-2093										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2094-2095										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2096-2097										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2098-2099										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2100-2101										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2102-2103										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2104-2105										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2106-2107										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2108-2109										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2110-2111										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2112-2113										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2114-2115										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2116-2117										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2118-2119										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2120-2121										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2122-2123										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2124-2125										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2126-2127										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2128-2129										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2130-2131										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2132-2133										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2134-2135										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2136-2137										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2138-2139										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2140-2141										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2142-2143										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2144-2145										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2146-2147										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2148-2149										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2150-2151										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2152-2153										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2154-2155										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2156-2157										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2158-2159										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2160-2161										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2162-2163										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2164-2165										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2166-2167										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2168-2169										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2170-2171										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2172-2173										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2174-2175										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2176-2177										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2178-2179										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2180-2181										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2182-2183										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2184-2185										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2186-2187										3.0	22.8	24.5	25.5	27.5	28.6	45.4	51.3	45.6	56.7	81.3						
2188-2189										3.0	22.8	24.5	25.5	27.5												

DASHBOARD BROWSE RESEARCH MARKETS FIND IDEAS INVESTMENT EDUCATION SUBSCRIBE INSTITUTIONAL

Artesian Res Corp NASDAQ:ARTNA

Last Price	Day Change	Trailing P/E	Relative P/E Last FY	Dividend Yield	3 to 5-Year Target Price Range	Performance	Safety	Financial Strength
\$60.77	-\$0.53 (-0.86%)	1.36	1.82%	--				

As of 9:32 AM Jan 27, 2023. Delayed at least 15 minutes.

Industry Rank: Water Utility -

Securities Banner:

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CHARTING

1d 5d 3m 1y 5y Show data

QUOTES

Last Price	Day's Change	Volume
\$61.30	\$0.00 0.00%	50
Bid (size)	Ask (size)	Above
\$58.74 (1)	\$63.72 (1)	10-day avg.

As of 3:59 PM Jan 26, 2023. Delayed at least 15 minutes.

Previous close	61.30
Open	--
Trailing P/E	
Market cap	527.79M
Shares outstanding	8.61M
Beta	0.7
Next earnings date	5/8/2020
52 Week Low & High	
\$44.08 6/14/2022	1/25/2023 \$63.00
	\$61.30

Hist. Prices

INDUSTRY ANALYSIS

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SEC FILINGS

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Filing	Filing Date	Category
SC 13G/A	Jan 24, 2023	Insider Activity
5	Jan 17, 2023	Insider Activity
5	Jan 10, 2023	Insider Activity
5	Jan 10, 2023	Insider Activity
5	Jan 10, 2023	Insider Activity
5	Jan 10, 2023	Insider Activity
5	Jan 10, 2023	Insider Activity
5	Jan 10, 2023	Insider Activity

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DOW 30

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Company Name	Ticker	Safety™
3M Company	MMM	1
American Express Company	AXP	2
Amgen Inc	AMGN	1
Apple Inc	AAPL	1
Boeing Co	BA	3
Caterpillar Inc	CAT	2
Chevron Corporation	CVX	3
Cisco Systems Inc	CSCO	1
Coca Cola Company	KO	1
Dow Inc.	DOW	3

View all »

INSIDER TRANSACTIONS

Options Buys & Sells

Buys Sells

Date	Insider	Trans.
Dec 14	Taylor Dian C	Sell
Dec 14	Taylor Dian C	Sell
Dec 13	Taylor Dian C	Sell
Dec 13	Taylor Dian C	Sell
Dec 12	Taylor Dian C	Sell
Dec 12	Taylor Dian C	Sell
Dec 9	Taylor Dian C	Sell

INSTITUTIONAL OWNERSHIP

Number of Transactions Show top holders

Buyers Sellers Closing price

Percent Shares Held by Institutions

FINANCIAL STATEMENTS

Income Statement & Balance Sheet	2021	2 Year Trend
Gross Profit	49	
Total Operating Expenses	69	
Operating Income	22	
Net Income	17	
Total Liabilities	447	
Shareholders' Equity	178	
Total Liab. & Stockholders' Eq.	625	
Cash Flow		
Closing Cash	0	
Net CapEx	--	
Free Cash Flow	-10	

DASHBOARD BROWSE RESEARCH MARKETS FIND IDEAS INVESTMENT EDUCATION SUBSCRIBE INSTITUTIONAL

York Water Co. (The) NASDAQ:YORW

Last Price	Day Change	Trailing P/E	Relative P/E Last FY	Dividend Yield	3 to 5-Year Target Price Range	Performance	Safety	Financial Strength
\$45.60	\$0.05 (0.11%)			1.78%	--			

As of 9:30 AM Jan 27, 2023. Delayed at least 15 minutes.

Industry Rank: Water Utility -

Securities Banner:

Customize the page to your preference by choosing from three Security Banners.

CHARTING

1d	5d	3m	1y	5y

 Show data

QUOTES

Last Price	Day's Change	Volume
\$45.55	\$0.00 0.00%	28,746
Bid (size)	Ask (size)	Below
\$45.60 (5)	\$46.90 (3)	10-day avg.

As of 4:00 PM Jan 26, 2023. Delayed at least 15 minutes.

Previous close	45.55
Open	--
Trailing P/E	
Market cap	650.27M
Shares outstanding	14.28M
Beta	0.8
Next earnings date	3/14/2012
52 Week Low & High	
\$36.85 10/13/2022	3/7/2022 \$47.95
	\$45.55

Hist. Prices

INDUSTRY ANALYSIS

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1 of 4 Close All Next

SEC FILINGS

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Filing	Filing Date	Category
SC 13G/A	Jan 25, 2023	Insider Activity
4	Jan 20, 2023	Insider Activity
4	Jan 20, 2023	Insider Activity
4	Jan 19, 2023	Insider Activity
4	Jan 19, 2023	Insider Activity
4	Jan 19, 2023	Insider Activity
4	Jan 19, 2023	Insider Activity
4	Jan 19, 2023	Insider Activity
4	Jan 19, 2023	Insider Activity
4	Jan 19, 2023	Insider Activity

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DOW 30

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Company Name	Ticker	Safety™
3M Company	MMM	1
American Express Company	AXP	2
Amgen Inc	AMGN	1
Apple Inc	AAPL	1
Boeing Co	BA	3
Caterpillar Inc	CAT	2
Chevron Corporation	CVX	3
Cisco Systems Inc	CSCO	1
Coca Cola Company	KO	1
Dow Inc.	DOW	3

View all »

INSIDER TRANSACTIONS

Options Buys & Sells

Buys Sells

Date	Insider	Trans.
Dec 20	Rasmussen Stev...	Buy
Dec 9	Hand Joseph Th...	Buy
Nov 21	Rasmussen Stev...	Buy
Nov 14	Bracey Vernon L	Sell
Oct 20	Rasmussen Stev...	Buy
Oct 17	Hand Joseph Th...	Buy
Oct 17	Wheeler Mark A	Buy

INSTITUTIONAL OWNERSHIP

Number of Transactions Show top holders

Buyers Sellers Closing price

Percent Shares Held by Institutions

FINANCIAL STATEMENTS

Income Statement & Balance Sheet	2021	2 Year Trend
Gross Profit	43	
Total Operating Expenses	32	
Operating Income	23	
Net Income	17	
Total Liabilities	306	
Shareholders' Equity	153	
Total Liab. & Stockholders' Eq.	459	
Cash Flow		
Closing Cash	0	
Net CapEx	--	
Free Cash Flow	11	

Company Name	AMERICA N STATES WATER COMPANY	AMERICA N WATER WORKS COMPANY , INC.	ARTESIAN RESOURC ES CORPORATION	CALIFORNIA WATER SERVICE GROUP	ESSENTIAL UTILITIES, INC.	MIDDLESEX WATER COMPANY	THE YORK WATER COMPANY
2016 Sales-Net[y16]	436.087	3302	79.089	609.37	819.875	132.906	339.706
2017 Sales-Net[y17]	440.603	3357	82.235	676.113	809.525	130.775	389.225
2018 Sales-Net[y18]	436.816	3440	80.411	698.196	838.091	138.077	397.699
2019 Sales-Net[y19]	473.869	3610	83.595	714.557	889.692	134.598	420.482
2020 Sales-Net[y20]	488.243	3777	88.141	794.307	1462.698	141.592	564.526
2021 Sales-Net[y21]	498.853	3930	90.859	790.909	1878.144	143.141	573.686
2016 Cash & Short Term Investment[y16]	0.436	75	0.226	25.492	3.763	3.879	6.349
2017 Cash & Short Term Investment[y17]	0.214	55	0.952	94.776	4.204	4.937	7.799
2018 Cash & Short Term Investment[y18]	7.141	130	0.293	47.176	3.627	3.705	420.722
2019 Cash & Short Term Investment[y19]	1.334	60	0.596	42.653	1868.922	2.23	12.944
2020 Cash & Short Term Investment[y20]	36.737	547	0.028	44.555	4.827	4.491	5.269
2021 Cash & Short Term Investment[y21]	4.963	116	0.092	78.38	10.567	3.533	10.908
2016 Current Assets-Total[y16]	166.875	784	14.635	142.069	128.65	26.716	99.611
2017 Current Assets-Total[y17]	155.463	720	18.985	227.873	131.246	29.247	66.858
2018 Current Assets-Total[y18]	131.468	781	16.118	188.702	147.172	30.815	502.722
2019 Current Assets-Total[y19]	122.456	1285	14.207	184.712	2015.127	29.133	122.046
2020 Current Assets-Total[y20]	157.115	1906	17.619	266.016	380.22	34.123	127.331
2021 Current Assets-Total[y21]	138.052	1554	19.16	300.458	437.795	34.355	134.085
2016 Debt in Current Liabilities[y16]	90.33	1423	8.478	123.308	169.822	18.159	14.325
2017 Debt in Current Liabilities[y17]	59.324	1230	11.258	291.02	139.048	34.865	25
2018 Debt in Current Liabilities[y18]	40.32	1049	17.784	170.011	228.723	55.843	100
2019 Debt in Current Liabilities[y19]	7.193	814	9.24	198.42	142.941	27.178	139.481
2020 Debt in Current Liabilities[y20]	2.371	1611	28.695	376.884	214.22	9.255	251.335
2021 Debt in Current Liabilities[y21]	33.421	653	28.33	41.994	286.709	20.531	102.102
2016 Current Liabilities-Total[y16]	177.944	2392	19.328	250.23	301.536	47.056	63.573
2017 Current Liabilities-Total[y17]	156.662	2325	28.461	490.959	284.488	64.537	85.052
2018 Current Liabilities-Total[y18]	146.585	2094	37.731	321.166	398.977	94.363	163.985
2019 Current Liabilities-Total[y19]	115.998	2045	25.599	358.721	323.461	64.981	234.567
2020 Current Liabilities-Total[y20]	118.572	2881	43.724	588.706	603.873	56.848	350.795
2021 Current Liabilities-Total[y21]	155.574	2141	47.702	256.576	675.063	56.619	203.271
2016 noncash wkcap	78.825	-260	3.559	-10.345	-6.827	-6.06	44.014
2017 noncash wkcap	57.911	-430	0.83	-66.842	-18.398	-5.362	-0.993
2018 noncash wkcap	18.062	-394	-4.122	-9.629	-26.709	-81.032	171.159
2019 noncash wkcap	12.317	-6	-2.748	-18.242	-34.315	-10.9	14.016
2020 noncash wkcap	4.177	89	2.562	9.639	-14.26	-17.961	22.602
2021 noncash wkcap	10.936	-50	-0.304	7.496	38.874	-5.266	22.008
2017 Change Non cashWrk Cap	-20.914	-170	-2.729	-56.497	-11.571	0.698	-45.007
2018 Change Non cashWrk Cap	-39.849	36	-4.952	57.213	-8.311	-75.67	172.152
2019 Change Non cashWrk Cap	-5.745	388	1.374	-8.613	-7.606	70.132	-157.143
2020 Change Non cashWrk Cap	-8.14	95	5.31	27.881	20.055	-7.061	8.586
2021 Change Non cashWrk Cap	6.759	-139	-2.866	-2.143	53.134	12.695	-0.594
2017	-4.75%	-5.06%	-3.32%	-8.36%	-1.43%	0.53%	-11.56%
2018 WK cap/sale	-9.12%	1.05%	-6.16%	8.19%	-0.99%	-54.80%	43.29%
2019 WK cap/sale	-1.21%	10.75%	1.64%	-1.21%	-0.85%	52.10%	-37.37%
2020 WK cap/sale	-1.67%	2.52%	6.02%	3.51%	1.37%	-4.99%	1.52%
2021 WK cap/sale	1.35%	-3.54%	-3.15%	-0.27%	2.83%	8.87%	-0.10%
Average	-3.08%	1.14%	-0.99%	0.37%	0.18%	0.34%	-0.85%
						Median	-0.05%

The following sources of information were reviewed but are not included in the workpapers as they are included separately in the PA PUC section 1329 filing related to this FMV and are considered included by this reference:

Engineer's assessment report "Engineer's Assessment Study For: Butler Area Sewer Authority Sanitary Sewer System" and related files prepared by Herbert, Rowland & Grubic, Inc.;

Wastewater System's Customer data;

Wastewater System's Fee Schedule;

BASA's Consent Order and Agreement;

BASA's Corrective Action Plan and Progress Reports;

BASA's Act 537 Plan;

BASA's Chapter 94 Reports; and

Asset Purchase Agreement.