See Exhibit List Below

Part 3

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INFORMATION SHEET

PRESIDING: Commissioner Hughes, Presiding; Chair Mitchell; and Commissioners Brown-Bland, Clodfelter, Duffley, McKissick, and Kemerait
PLACE: Dobbs Building, Raleigh North Carolina
DATE: Friday, November 4, 2022
TIME: 9:01 p.m. – 4:56 p.m.
DOCKET NOS.: W-354, Sub 398
COMPANY: Carolina Water Service
DESCRIPTION: Carolina Water Service, Inc. of North Carolina, 5821 Fairview Road, Suite 401, Charlotte, North Carolina 28209, for Determination of Fair Value of Utility Assets Pursuant to N.C. Gen. Stat. 62-133.1A and Establishing Rate Base for Acquisition of the Carteret County Water System

VOLUME NUMBER: 4

APPEARANCES
(See attached)

WITNESSES
(See attached)

EXHIBITS
(See attached)

*Attachments Include CWSNC Form Application 1A

REPORTED BY: Joann Bunze
DATE FILED: November 21, 2022

TRANSCRIPT PAGES: 139
PREFILED PAGES: 17
TOTAL PAGES: 156

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PLACE: Dobbs Building, Raleigh, North Carolina

DATE: Friday, November 4, 2022

DOCKET NO.: W-354, Sub 398

TIME: 2:01 p.m. - 4:56 p.m.

BEFORE: Commissioner Jeffrey A. Hughes, Presiding
Chair Charlotte A. Mitchell
Commissioner ToNola D. Brown-Bland
Commissioner Daniel G. Clodfelter
Commissioner Kimberly W. Duffley
Commissioner Floyd B. McKissick, Jr.
Commissioner Karen M. Kemerait

IN THE MATTER OF:

Carolina Water Service, Inc. of North Carolina,
5821 Fairview Road, Suite 401,
Charlotte, North Carolina 28209,
for Determination of Fair Value of Utility Assets
Pursuant to N.C. Gen. Stat. §62-133.1A and
Establishing Rate Base for Acquisition of the
Carteret County Water System

Volume 4

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A P P E A R A N C E S:

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Raleigh, North Carolina 27604

David Drooz, Esq.
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Raleigh, North Carolina 27601

FOR CARTERET COUNTY:
Claud R. Wheatly, III
710 Cedar Street
Beaufort, North Carolina 28516

FOR THE USING AND CONSUMING PUBLIC:
William E.H. Creech, Esq.
William E. Grantmyre, Esq.
Public Staff - North Carolina Utilities Commission
4326 Mail Service Center
Raleigh, North Carolina 27699-4300

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NORTH CAROLINA UTILITIES COMMISSION

APPEARANCE SLIP

DATE: 10-18-22 DOCKET NO.: W-354, Subs 398 & 399

ATTORNEY NAME and TITLE: Jo Anne Sanford

FIRM NAME: Sanford Law Office

ADDRESS: 721 Bloodworth Street

CITY: Raleigh STATE: NC ZIP CODE: 27604

APPEARANCE ON BEHALF OF: CUCSNC

APPLICANT: ✓ COMPLAINANT: ___ INTERVENOR: ___

PROTESTANT: ___ RESPONDENT: ___ DEFENDANT: ___

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Email: sanford@sanfordlawoffice.com

SIGNATURE: /s/ Jo Anne Sanford

(Signature Required for distribution of CONFIDENTIAL information)

NORTH CAROLINA UTILITIES COMMISSION

APPEARANCE SLIP

DATE: 11-3-22 DOCKET NO.: W-354 sub 398

ATTORNEY NAME and TITLE: David Drooz

FIRM NAME: Fox Rothschild

ADDRESS: 434 Fayetteville St

CITY: Raleigh STATE: NC ZIP CODE: _____

APPEARANCE ON BEHALF OF: Carolina Water Service

APPLICANT: ✓ COMPLAINANT: ___ INTERVENOR: ___

PROTESTANT: ___ RESPONDENT: ___ DEFENDANT: ___

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Email: ddrooz@foxrothschild.com

SIGNATURE: David Drooz

(Signature Required for distribution of CONFIDENTIAL information)

NORTH CAROLINA UTILITIES COMMISSION

APPEARANCE SLIP

DATE: Nov. 3, 2022 DOCKET NO.: W-354, Sub 358

ATTORNEY NAME and TITLE: Claud Wheatly III

FIRM NAME: Wheatly Law Group

ADDRESS: 710 Cedar St

CITY: Beaufort STATE: NC ZIP CODE: 28516

APPEARANCE ON BEHALF OF: Carteret County

APPLICANT: ___ COMPLAINANT: ___ INTERVENOR: ✓

PROTESTANT: ___ RESPONDENT: ___ DEFENDANT: ___

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☐ **Yes, I have signed the Confidentiality Agreement.**

Email: rob@wheatlylaw.com

SIGNATURE: [signature]

(Signature Required for distribution of CONFIDENTIAL information)

NORTH CAROLINA UTILITIES COMMISSION
PUBLIC STAFF - APPEARANCE SLIP

DATE: November 3, 2022 DOCKET #: W-354, Sub 398

PUBLIC STAFF ATTORNEYS: William E. H. Creech, William E. Grantmyre

TO REQUEST A **CONFIDENTIAL** TRANSCRIPT, PLEASE PROVIDE YOUR EMAIL ADDRESS BELOW:

ACCOUNTING_____
CONSUMER SERVICES_____
COMMUNICATIONS_____
ENERGY_____
ECONOMICS_____
LEGAL: zeke.creech@psncuc.nc.gov;
William.grantmyre@psncuc.nc.gov;
gina.holt@psncuc.nc.gov
TRANSPORTATION_____
WATER_____

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COUNSEL/MEMBER(s) REQUESTING A **CONFIDENTIAL** TRANSCRIPT WHO HAS SIGNED A CONFIDENTIALITY AGREEMENT WILL NEED TO SIGN BELOW.

/s/ Gina C. Holt

/s/ William E. Grantmyre

/s/ William E. H. Creech

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CARTERET COUNTY
WATER SYSTEM ASSETS

FAIR MARKET VALUE APPRAISAL

AT

DECEMEBR 31, 2021

Prepared by:

GANNETT FLEMING

Gannett Fleming
Valuation and Rate Consultants, LLC

Corporate Headquarters
207 Senate Avenue
Camp Hill, PA 17011
P 717.763.7211 | **F** 717.763.8150

gannettfleming.com

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Nov 22 2022

July 1, 2022

Via email to eugene.foxworth@carteretcountync.gov

Mr. Eugene Foxworth
Assistant County Manager
Carteret County
402 Broad St.
Beaufort, NC 28516

Dear Mr. Foxworth:

Fair Market Value Appraisal

In accordance with your request, we have prepared a fair market value appraisal of Carteret County's water system assets ("Water System") as of December 31, 2021.

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

Based on our analysis, as described in the attached appraisal report, the estimate of the fair market value of the Water System as of December 31, 2021, is $14,575,000 (rounded).

Our appraisal was developed consistent with the Uniform Standards of Professional Appraisal Practices. Our fair market value appraisal of the Water 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.

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

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

Valuation Approach	Indicated Value
Cost Approach	$16,024,799
Income Approach	15,061,795
Market Approach	12,638,497

FIDUCIARY DUTY

I, Harold Walker III, have a fiduciary duty to, and have provided a thorough, objective, and fair valuation using the cost, market, and income approaches in accordance with N.C. Gen. Stat. § 62-133.1A, North Carolina Utility Commission's Rule R7-41, Commission Rule R10-28, and North Carolina laws.

I, Harold Walker III, acknowledge that the Commission, the Public Staff, the utility, and the Local Government Utility anticipate relying upon the valuation analysis conducted by myself and that this analysis is thorough, objective, and fair. I, Harold Walker III, reached my conclusions of fair market value based on an objective analysis of basic data, informed professional judgment, and clear presentation of the results.

I, Harold Walker III, attest that I do 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 an 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.

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GANNETT FLEMING

We thank Carteret County for this opportunity to provide valuation services in connection with the fair market value appraisal of the Water System's assets.

Respectfully Submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

HAROLD WALKER, III
Manager, Financial Studies

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INTRODUCTION

Introduction and Summary. The following narrative report presents our findings and conclusions regarding the fair market value of the water system assets of the Carteret County as of December 31, 2021. The report describes the valuation methodologies employed and the Exhibits that present the valuation results. Based upon the analyses, we believe the fair market value of the Carteret County's water system assets is $14.6 million. 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 $12.6 million to $16.0 million. However, most of the appropriate indicated values approximated $14.6 million.

Description of the Assignment. Gannett Fleming Valuation and Rate Consultants, LLC was retained by Carteret County ("County") to estimate the fair market value of Carteret County's water system assets ("Water System") as of December 31, 2021.

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

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

1 The International Glossary of Business Valuation Standards

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

We valued the Water System's assets as a group under the premise that the assets collectively comprise an ongoing operating business enterprise. Additionally, in accordance with N.C. Gen. Stat. § 62-133.1A, the original source of funding for any part of the Water System's assets was not relevant to the determination of the value of said assets.

Intended Use of the Valuation. The intended use of the valuation is to comply with N.C. Gen. Stat. § 62-133.1A, and North Carolina Utility Commission's Rule R7-41and Rule R10-28 and conduct a fair market value appraisal of the Water System in compliance with the Uniform Standards of Professional Appraisal Practices, employing the cost, market, and income approaches.

Client and Users. The client is Carteret County. The intended users of the valuation are Carteret County, Carolina Water Service, Inc. of North Carolina, and the North Carolina Utilities Commission ("NCUC").

Jurisdictional Exceptions. In accordance with N.C. Gen. Stat. § 62-133.1A, and North Carolina Utility Commission's Rule R7-41 and Rule R10-28, the acquiring public utility and selling utility jointly retain a licensed engineer to conduct an assessment of the tangible assets of the system ("Engineering Assessment") to be acquired. The Engineering Assessment is required to be used by the three appraisers in determining fair value. The Engineering Assessment provides both a condition assessment and original cost inventory of the assets.

Extraordinary Assumptions. The Engineering Assessment did not provide installation dates for all assets listed (Engineering Assessment's Table 2). For those assets which did not have an installation date, the installation dates were primarily derived from other County provided

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material (e.g., Carteret County Fixed Assets Depreciation Schedule 6/30/21). In instances where the same County provided material (e.g., Carteret County Fixed Assets Depreciation Schedule 6/30/21) listed alternative original cost, the alternative original costs were used.

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

Limiting Conditions. We accepted all information and data provided by the Carteret County 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.

Site Inspection. We viewed or observed the Water System's facilities on June 20, 2022. We also relied on engineering assessment of the Water System's facilities report, "Carteret County, NC, Laurel Road / Merrimon Water Systems, Update to Present Value of Water System, December 2021" and related files prepared by Draper Aden Associates, to confirm the condition of the Water System's property and equipment.

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

"Carteret County, NC, Laurel Road / Merrimon Water Systems, Update to Present Value of Water System, December 2021" and related files prepared by Draper Aden Associates;

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

Water System's Customer data;

Water System's Water Meter Asset Inventory;

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Water System's Fee Schedule;

Carteret County Fixed Assets Depreciation Schedule 6/30/21;

Fair Value Engineering Assessment Form (FORM FV1(a));

Well Permit Approvals;

Feasibility Study for Water System Merger, Carteret County, NC (December 2019);

Southern Corrosion Inc. Water Tank Management Schedules;

Water Treatment Plant Authorization to Construct;

2021 Water Tank Inspection Reports for all three elevated water tanks;

Draper Aden Associates' letter response to comments and requests for clarifications regarding Fair Value Engineering Assessment (5/3/22);

Copper Reduction Plan;

2021 Pump Run Reports;

Asset Purchase Agreement;

Carteret County's Audited Financials (2018 - 2021);

Carteret County's Budgets for Water System (2022);

North Carolina Office of State Budget and Management population projections;

Blue Chip Financial Forecasts;

US Census Bureau, various data files;

Value Line Investment Survey; and

S&P Capital IQ.

Description of Carteret County. Carteret County is located along the central coastline of North Carolina. Carteret County is situated in the tidewater region of North Carolina. Carteret County is bordered on the East by the Pamlico Sound, Bogue Sound, Core Sound and Atlantic

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Ocean to the South and East, on the Northeast by the Neuse River, on the west by Craven County, on the Northwest by Jones County, and on the southwest by Onslow County. Carteret County is the 42nd largest land mass of North Carolina's 100 counties, was the 39th most populous with 67,686 people (2020) and 27th in housing units with 50,725 (2018). Carteret County consists of 506.3 square miles and lies approximately 175 miles east south-east of Raleigh, North Carolina. According to U.S. Census figures, Carteret County's population grew 1.8% from 2010 to 2020, while population in North Carolina grew 2.4%.

Description of the Water System. Carteret County owns and operates the Water System which is comprised of the 29 customer (December 2021) Merrimon Water System, located in Merrimon Township, and the 1,225 customer (December 2021) Mill Creek/North River Water System, located in Beaufort Township. The Merrimon Water System is approximately 20 miles north of the Mill Creek/North River Water System. In total, the Water System contains eight parcels totaling 16.49 acres, three 200,000-gallon elevated water tanks, one ground tank (about 10,000 gallons), three booster pump stations, the Laurel Road water treatment plant, the Jonaquin Creek wellhouse, the Laurel Road well, 57 miles of water line, 600 valves, 175 fire hydrants, 1,254 billed water meters (December 2021) and 1,254 related customer services. There are an additional 533 water meters (December 2021) and 533 related customer services which have been install but remain inactive. The Water System's 57 miles of water lines are mainly PVC, with some ductile iron, range in diameter of 2-inch to 10-inches and are generally less than 20-years old.[2]

The Mill Creek/North River Water System's above ground assets listed above include seven parcels, the Laurel Road well water source, the 0.6 MGD Laurel Road water treatment plant,

2 Included in this total is the Merrimon Water System's one mile of 6-inch PVC water lines.

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the three 200,000-gallon elevated water tanks (Laurel Road Water Tank, Mayflower Road Water Tank, and Taylor Farm Road Water Tank), and the three booster pump stations. The Merrimon Water System related above ground assets listed above include one parcel, the Jonaquin Creek wellhouse water source, and one ground tank (about 10,000 gallons).#According to the Engineer's Assessment, the Water System's water infrastructure is well documented, in good condition, and does not require any major capital investment in the near future.

Carteret County utilizes one enterprise fund ('Water Fund") to account for the Water System's operations. The Water Fund accounts for water fees and related contracted cost. In accordance with NC General Statutes, the Water Fund is budgeted on the modified accrual basis of accounting, and it is reported at fiscal year-end in the financial statements on the accrual basis of accounting. For the year ended June 30, 2021, (shown on Exhibit 1) the Water System had reported revenues of $0.737 million and expenses of $1.042 million. At the same point in time, the Water System was capitalized with $5.392 million of fund equity and the long-term debt attributable to the Water System was $1.687 million. At the same point in time, the Water System had total assets of $7.861 million, including $5.759 million net utility plant. As in previous years, the Water Fund is not self-supporting and relies on the Water Taxing District Special Revenue Fund's ("Water Taxing District") revenues being transfer into the Water Fund.[3] In fiscal year 2021, $0.405 million was transferred from the Water Taxing District to the Water Fund.

For budget year 2022 (July 1,2021 to June 30, 2022) the Water Fund's operating revenues are $1.260 million due to the Board of Commissioners increasing water user rates 95% from fiscal year 2021. The increase is due to the Board not levying any property taxes in the Water Taxing

3 Water Taxing District's revenues are derived from property tax and sales tax revenues. Fiscal year 2012 was the first year a tax was levied in this newly established district. Previously, the Water Fund relied on General Fund for transfers.

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District, the need to have funding for maintenance and capital expenses, and concerns regarding the potential of the State classifying the system as a financially distressed system. In prior years, the Water Taxing District's funds were transferred into the Water Fund and with that elimination, the majority of the user rate increase is to offset that transfer, and to have a more user supported water system.

The Water System is exempt from NCUC regulation as a municipal utility. The Water System's rate requirements are established by the needed funds to run the system. Most municipalities, including Water System, use a Government Accounting Standards Board ("GASB") process of accounting versus Financial Accounting Standards Board ("FASB") method of accounting used by investor-owned utilities ("IOU"). Municipalities are not typically concerned with the return on and the return of their investments of their utility systems since they deem they are providing a public service to their taxpayers. Municipalities typically expense (i.e., maintenance expense) renewals replacement, and customer distribution 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 Water System's financial statements should be fully relied upon without recognizing their limitations.

As shown on Exhibit 2, the Water System provides service to 1,254 customers (December 2021) within a service area population of 3,092 people. Over the last five years, about 15 new taps have been added annually.

Demographics and Growth for the Water 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 North Carolina grew 2.4%. During this same period, Carteret County's population

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grew 1.8% (Exhibit 3, Table 3.2). Carteret County's population growth was ranked 44th of the 100 Counties in North Carolina. We were not able to find any population projections for future time periods for Merrimon Township or Beaufort Township.

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 North Carolina Office of State Budget and Management ("OSBM") publishes population projections for North Carolina and its 100 counties. As shown on Exhibit 3, Table 3.3, Carteret County's population growth is projected to be about 28% of the growth rate projected for North Carolina from 2010 through 2050. The Carteret County's project population growth is ranked 43rd of the 100 counties in North Carolina. Carteret County's project population growth is equal to compound growth of 0.28% annually. We were not able to find any population projections for future time periods for Merrimon Township or Beaufort Township.

Currently, there are approximately 3,092 people (Exhibit 2) in the Water System's service area. There are 4,644 occupied housing units in the townships where the Water System provides service, and the ratio of people to occupied households is 2.17 persons per household. The Water System's service area density is 2.5 people per customer based on an estimated population of 3,092 and 1,254 customers. The Water System's service area density is less than the 3.5 per customer density of water and wastewater systems (see Table 2 in this report) indicating greater market penetration.

HISTORY AND NATURE OF THE BUSINESS

Economic Outlook. The valuation date (December 31, 2021) is the specific date at which

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the value of the Water System is based. Generally, only the circumstances existing at the valuation date and events occurring up to the valuation date are considered. Events which could affect the value may occur after the valuation date.

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

We do not believe the appraised value of the long-lived Water System assets is materially impacted by COVID-19 or its related relatively short-term events and does not significantly affect the determination of value as of the specified valuation date of December 31, 2021. In the valuation of any company, the general economic outlook as of the valuation date is important since it influences how investors perceive alternative investment opportunities at that point in time. As part of our analysis, we considered the forecasts for the U.S. economy that prevailed as of December 31, 2021. We focused on the forecasts and economic commentary presented in Blue Chip Financial Forecasts in the December 1, 2021, edition. Some of these economic forecasts are presented in Table 1.

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Economic Indicators

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

Table 1

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

The 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 11,283 U.S. Businesses with a SIC code of 4941.

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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.

A comparative industry to the water supply industry is the wastewater utility industry. 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 2,104 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.

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

The water utility industry and wastewater utility industry's increased compliance with state and federal water purity levels and large infrastructure replacements are driving consolidation of the water utility and wastewater utility industries. Because many water utility and wastewater

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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 requirements[4] 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 established in the future, or the cost

4 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.

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and effect of existing and potential regulations and legislation upon the water and wastewater systems. However, as a small sized water system, the Water 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 Water System, and a group of companies ("Comparable Group") that operate in the same basic or similar industry as the Water System. Since no marketplace exists for the common stock of the Water System, an alternative to estimate the value of the Water System is to analyze the price investors are willing to pay for the publicly traded common stock of companies that are like the Water 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 December 31, 2021 market value of common stock, the product of multiplying the closing stock price by the number of common shares outstanding, greater than $200.0 million; (4) a December 31, 2021 total enterprise value (the sum of market value, preferred stock and total debt) greater than $450.0 million; (5) were not the subject of a known acquisition at December 31, 2021; (6) with a Standard Industrial Classification (SIC) of 4941 (i.e., Water Supply Facilities and Infrastructure) and (7) with a North American Industry Classification System (NAICS) of 221310 (i.e., Water Supply and Irrigation Systems). The eight companies ("Comparable Group") that met the criteria for selection are listed in Table 2.

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Acquisition Date Size Statistics

	Revenues (Mill. $)	Customers	Population	Customer Density
Carteret County Water System Assets	$1.260	1,254	3,092	2.5
Comparable Group				
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	55.119	73,144	204,000	2.8
Median	$536.270	342,750	1,263,000	3.5

Table 2

We believe that similar economic, industry and business risks have affected the Comparable Group as those faced by the Water 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 Water System. The relative size difference between the group and the Water System suggests that the risk of the Water System is greater than the Comparable Group. We will discuss the difference in risk resulting from size later in this report.

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Financial Review. We conducted a financial review that considered the financial and operating statistics for the Water 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 Water 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 Water System's rates have not considered a fair rate of return nor taxes. That is, the Water 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. As mentioned earlier, the Water Fund is not self-supporting and relied on the Water Taxing District's revenues being transfer into the Water Fund. As a result, the Water System's historical financial performance shown on Exhibits 4 and 6 have been adjusted to reflect the Water Taxing District's transfers as revenues. Consequently the results of the Water 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 Water System and the Comparable Group, we reviewed financial ratios and coverages.

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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 Water 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 Water 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 Water System's risk is higher than the Comparable Group given Water System's relatively small size. Table 2 details the size difference between the Water System and the Comparable Group. As shown on Table 2, the Water 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

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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 Water System. Because the larger Comparable Group has a more diverse geographic operation than the Water 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 Water System.

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

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

The change in risk adjusted common stock return rate between quartiles 2 and quartile 4 (column J) is 1.92 percentage points. The results of the illustration shown on Exhibit 5 suggests the Water System’s common equity cost rate could be about 1.92 percentage points higher than

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

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Property Plant and Equipment Analysis. The Water System can best be characterized as an integrated water system, or a system with treatment and distribution services. The Water System does not have the number of large treatment facilities that the Comparable Group has. The Water System's gross property, plant and equipment is in relatively good condition given its age (Exhibit 6, Table 6.1) with 76% of their gross property, plant and equipment remaining undepreciated while 78% 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 N.C. Gen. Stat. § 62-133.1A, and NCUC's Rule R7-41 and Rule R10-28 (fair market value appraisal), the original source of funding for any part of the assets of a selling utility is not relevant to determining the value of a selling utility's assets.

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

5 The Water 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.

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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 Water 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 N.C. Gen. Stat. § 62-133.1A, and NCUC's Rule R7-41 and Rule R10-28.

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 Water System also had annual capital expenditures averaging less than 1% of net plant. Therefore, the Water System historical capital spending was below the Comparable Group's median ratio.

Growth Rate Analyses. Higher growth rates are an indication of less risk. A review of the growth rates in revenue, operating income plus depreciation and operating income, reveal that the Water System's revenues (including Water Tax District Fund revenues) have been growing less than the Comparable Group (Exhibit 6, page 4, Table 6.4) over the last three years. Similarly, the Water System's operating income plus depreciation and operating income have been growing less than the Comparable Group. Prospectively, the Water System's growth rates should lag 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 Water 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

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("EBITDA") divided by total revenue to gain a clearer view of the Water System's core profitability. The Water System's EBITDA profit margins are lower than the Comparable Group's indicating more risk. Similarly, the Water System's EBIT profit margins are lower indicating more risk (Exhibit 6, page 5, Table 6.5).

VALUATION

The purpose of this valuation is to comply with N.C. Gen. Stat. § 62-133.1A, and NCUC's Rule R7-41 and Rule R10-28 and conduct a fair market value appraisal of the Water System's assets as of December 31, 2021, in compliance with the Uniform Standards of Professional Appraisal Practices, employing the cost, market, and income approaches. Consequently, three basic valuation approaches were considered in this analysis: the cost approach, the income approach, and the market approach.

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

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

The original cost method begins with determining the original cost new ("OCN") measure of the cost of the assets when first constructed. The OCN is based on (1) a review and summary of the utility's accounting records, contractors' invoices and bid tabulations to determine the most

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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,

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and entrepreneurial profit[7] are applied to the inventory listing in order to determine the RPCN and to determine the RCN.

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

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

Depreciation represents the loss in property value from: physical deterioration; functional obsolescence; and economic (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

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.

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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, Carteret County provided us a copy of the Engineer's assessment report "Carteret County, NC, Laurel Road / Merrimon Water Systems, Update to Present Value of Water System, December 2021" and related files prepared by Draper Aden Associates., to confirm the condition of the Water System's property and equipment. We utilized the Engineering Assessment and calculated the Original Cost and Related Accrued Depreciation of the Water System as of December 31, 2021 ("OCNLD Study") shown on Exhibit 7.

As mentioned previously, the Engineering Assessment did not provide installation dates for all assets listed (Engineering Assessment's Table 2). For those assets which did not have an installation date, the installation dates were primarily derived from other County provided material (e.g., Carteret County Fixed Assets Depreciation Schedule 6/30/21). In instances where the same County provided material (e.g., Carteret County Fixed Assets Depreciation Schedule 6/30/21) listed alternative original cost, the alternative original costs were used. Additionally, assets included in accounts such as meters, customer services, power generation equipment, water treatment equipment, tools, shop and garage equipment were not included in the Engineering Assessment's inventory. The modifications made to the Engineering Assessment's inventory is shown on page 4 of Exhibit 7.

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

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

The accrued depreciation calculation, shown on page 3 of Exhibit 7, was based on recognized methods using estimated survivor characteristics and the straight-line depreciation method. The estimated survivor curves are those used by other North Carolina regulated water 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 Water System's utility plant in service as of December 31, 2021, was not less than $14.9 million ($14,873,314 rounded). The OCNLD Study also determined a theoretical calculated accrued depreciation reserve of the utility plant in service of $3.6 million ($3,615,459 rounded) as of December 31, 2021. After factoring in the OCNLD Study's accrued depreciation reserve, the OCNLD of Water System's utility plant in service as of December 31, 2021, was determined to be $11.3 million ($14,873,314 - $3,615,459 = $11,257,855).

The Replacement Cost Method. We utilized the OCN to calculate the trended original cost (TOC) measures, or the replacement cost of the depreciable assets (RCN), by multiplying the OCN by specific transition factors.[8] The transition factors included both cost changes measured during TOC process and preliminary obsolescence, so all RPCN values were valued on an RCN

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.

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

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

The replacement cost new of the Water 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 Water System by account and vintage year and related 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 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 preliminary RCN of the Water System's utility plant in service as of December 31, 2021, was not less than $25.0 million ($24,954,003 rounded). The RCNLD Study also determined a theoretical calculated accrued depreciation reserve of the utility plant in service of $6.8 million ($6,818,675 rounded) as of

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.

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December 31, 2021. After factoring in the RCNLD Study's accrued depreciation reserve, the preliminary RCNLD of Water System's utility plant in service as of December 31, 2021, was determined to be $18.1 million ($24,954,003 - $6,818,675 = $18,135,328).

The results of the OCNLD and preliminary RCNLD Cost Approaches show a range of value for the Water System of $11.3 million to $18.1 million and collectively, indicate a preliminary value of $18.1 million ($18,135,328 rounded) for the Water 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 provide a meaningful metric to evaluate the reasonableness of other indications of value produced by other valuation methods. For example, the Comparable Group's market value of common equity plus minority interest, preferred stock, and total debt net of cash and cash equivalents ("Enterprise Value") is currently 2.03-times (Exhibit 17, page 2) their OCNLD or net property, plant and equipment. Similarly, the Comparable Group's Enterprise Value is currently 1.62-times (Exhibit 17, page 2) their OCN or gross property, plant and equipment.

The above-mentioned property, plant and equipment "multiples" understate the multiple applicable to the Water 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 17, page 3) based on differences between investor provided capital and OCN results in CIAC adjusted multiples of 2.31-times OCNLD and 1.84-times OCN

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.

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for the Comparable Group.

Multiplying the Water System's OCN of $14.9 million by the Comparable Group's 1.62-times OCN multiple or the 1.84-times contributions adjusted OCN multiple indicates a range of market value of $24.1 million to $27.4 million for the Water System, similar to the preliminary RCNLD of $18.1 million. Further, multiplying the Water System's OCNLD of $11.3 million by the Comparable Group's 2.03-times OCNLD multiple or the 2.31-times contributions adjusted OCNLD multiple indicates a range of market value of $22.9 million to $26.1 million for the Water System, similar to the preliminary RCNLD of $18.1 million. However, multiplying the Water System's number of customers of 1,254 by the Comparable Group's $10,691-times customer multiple indicates a market value of $13.4 million, below the preliminary RCNLD of $18.1 million[12]

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

Functional obsolescence ("FO") "is a form of deterioration due to a feature in the property that is no longer useful or functional, resulting in a loss of value for the entire property."[13] FO is

12 The range of benchmark metrics values suggested for the Water System are not a substitute for an appraisal. However, the referenced range of market values for the Water System can be a meaningful metric to evaluate the reasonableness of indication of value produced by valuation methods.
13 "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/

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sometimes evident due to increased operating costs, increased maintenance costs, lost profits and for a water utility, excess unaccounted for water.

Economic obsolescence ("EO") refers to the loss of value that is caused by factors that are external to the property.

> "Economic obsolescence (EO) is the loss of value resulting from external economic factors to an asset or group of assets. EO is often encountered in valuation work performed for financial reporting purposes, bankruptcy emergence and in other practice areas when dealing with companies in capital-intensive industries. Identifying, measuring and **applying the adjustment for EO can be a complex and iterative process**, requiring expertise and interaction across multiple valuation disciplines, including real property, personal property, business valuation and intangible asset valuation."[14] (Emphasis added)
>
> "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."[15]
>
> "In the initial stages of the valuation process, fixed assets are valued under an in-use premise by applying all necessary forms of depreciation (e.g., physical deterioration and functional obsolescence). The actual utility of the asset or asset group is then compared to its rated utility or capacity, which is the physical productive capacity of the facility at full operation as it exists at the time of valuation. Full utilization, depending on the type of facility or process, is generally in the range of 85 to 95 percent of capacity, as most facilities have some normal amount of downtime for routine maintenance, equipment changeovers, etc. If an asset is less than fully-utilized, the EO adjustment would be applied directly to the asset in the determination of fair value."[16]

Our initial RCN and RCNLD indicated values of $35.5 million and $25.7 million, respectively, before we considered any FO and/or EO in our transition factors. These initial values

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

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produced ratios, measured on a per customer basis, above the known RCN per customer and RCNLD per customer ratios that we are aware of for the water industry. The Water System percentage of unaccounted for water (2021) is above the Comparable Group's, indicative of FO. Both customer density, as measured by customer per foot of main, and treatment plant excess capacity are indicative of EO. Further, the range of the results of the market multiples method, discussed later in this report, also suggests EO. As a result, we used a preliminary 30% transition factor for the depreciable property used to develop our preliminary RCN and RCNLD values.

Our preliminary RCN and RCNLD, discussed previously, indicated values of $25.0 million and $18.1 million, respectively. We then compared our preliminary RCNLD value of $18.1 million to the economic values produced by our Income and Market Approaches, discussed later in this report, and conclude additional EO is suggested. We reached this conclusion by comparing the average maximum economic value indicated by the Income Approach ($16.6 million) and Market Approach ($15.4 million) of $16.0 million relative to our preliminary RCNLD value of $18.1 million. This comparison indicates $2.1 million of additional EO is suggested. Our final RCNLD value of $16.0 million reflecting both FO and EO is shown in Table 3.

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Preliminary RCNLD	$18,135,328
Less:	
Income Approach	16,647,175
Market Approach	15,402,423
Conclusion	16,024,799
Additional EO	2,110,529
Final RCNLD	$16,024,799

	Initial	Preliminary	Final	Total FO & EO
RCN	$35,490,123	$24,954,003		
RCNLD	25,748,820	18,135,328	$16,024,799	
Obsolescence %		30%		38%

Table 3

Therefore, the results of $16.0 million final RCNLD method form the basis for our Cost Approach conclusion of $16.0 million ($16,024,799 rounded) and is used as the Cost Approach as part of our fair market value determination for the Water System.

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 security or asset 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

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capitalization rate. The capitalization of earnings is best suited when the future earnings, or cash flow, can be predicted. The implicit assumption in the capitalization of earning method is that the cash flow is a perpetuity, and the capitalization rate is a constant.

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

The capitalization rate used in the capitalization of earnings method and the discount rate used in the DCF method are related. The discount rate is the market participant's opportunity cost rate related to the risk of the cash flows. For the Water System's, the market participants are assumed to include IOU and larger regional municipal authority ("MUNI"). Even though government owned utilities are not generally specific bidders trying to acquire another government owned utility in North Carolina, the availability of government funding, including grant money, principal forgiveness and no to low interest loans makes them market participants. For the Water System, the appropriate discount rate is the current municipal revenue bond yield on December 31, 2021, of 2.85%. The appropriate IOU discount rate is the current net of tax overall cost of capital (weighted average cost of capital) on December 31, 2021, and ranges from 6.59% to

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8.50%.[17] 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 Water System as it is currently owned (i.e., non-IOU) and operated. However, change in ownership of the Water System to an IOU or indirectly a MUNI produces a myriad of problems for both the capitalization of earnings method and the DCF Method because any future cash flow estimates would be hypothetical or estimated due to the uncertain nature that would accompany new ownership including future rates, future expenses, future capital expenditures, taxes, and regulation.

For a MUNI, the appropriate discount rate is the current municipal revenue bond, 2.85%, because debt is the only major source of capital available to finance an acquisition (Exhibit 21, 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.[18] For valuation purposes, an embedded cost of debt, or the historical cost of all debt issuances outstanding is not used because this capital is already invested in assets. Whereas the marginal cost of debt, 2.85%, at the valuation date is used in accordance with accepted valuation practices and used for market valuation purposes.

As discussed previously, for an IOU, the appropriate discount rate is the net of tax overall cost of capital (weighted average cost of capital), 6.59% to 8.50% (Exhibit 21, pages 2-8). In this

17 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."
18 For example, when a municipal or government entity, such as the State of North Carolina, finance construction of a road or bridge, they only consider the marginal debt cost despite having "equity" reflected on their books (balance sheet).

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instance, the net of tax overall cost of capital (weighted average cost of capital) is based on the Comparable Group's market value capital structure of 22.7% debt and 77.3% equity, a market cost of debt of 3.08% and a range of market cost of equity of 7.87% to 10.35% based on the Comparable Group's market value CAPM on December 31, 2021.[19] 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.

We began the Income Approach for the Water System by first determining the Debt Free Net Cash Flow to be capitalized or discounted. The Debt Free Net Cash Flow is comprised of EBIT, minus income taxes, plus depreciation and amortization, plus or minus projected changes in net cash working capital, less projected capital expenditures. The development of Water 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 and FASB because there are differences in their purpose. The GASB's impetus is 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 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 Water System and the Comparable Group.

Exhibit 1 presents the Water System's financial information contained in their financial

19 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 .

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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 Water System's 2018 to 2021 financial statements and their rates, did not include taxes nor a fair rate of return.[20] For budget year 2022 (July 1,2021 to June 30, 2022) the Water Fund's operating revenues are $1.260 million due to the Board of Commissioners increasing water user rates 95% from fiscal year 2021. Accordingly, on Exhibits 13 through 16 we adjusted the Water System's post-2021 fiscal year's financial information for the budgeted increase in revenues, 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 Water System by first determining the Debt Free Net Cash Flow to be capitalized. The Debt Free Net Cash Flow is comprised of current EBIT, minus income taxes, plus current depreciation, and amortization, plus or minus projected changes in net cash working capital, less projected capital expenditures. Specifically, our capitalization of earnings method capitalizes Water System's current (2022) budgeted 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 December 31, 2021, of 2.85% (Exhibit 12, line 24) as a capitalization rate. We also did a second capitalization of earnings calculation based on a 2.75% capitalization rate (Exhibit 12, line 27), or 10-basis points below the current level to reflect the unique population growth projected for the Water System's because we

20 As noted previously, during the fiscal years 2018 through 2021, the Water Fund was not self-supporting and relied on the Water Taxing District's revenues to transfer into the Water Fund.

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assumed the Water System's Debt Free Net Cash Flow growth will be at least 0.1% (10-basis points).

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

For pro forma 2022, we adjusted the Water System's Debt Free Net Cash Flow (Exhibit 12, lines 23 and 28) to account (subtract) for average projected capital expenditures equal to depreciation expense if system is not sold. Exhibit 12 shows the results of the capitalization of earnings method. For the Water System, the capitalization of earnings method using a 2.85% capitalization rate (no growth) indicates a value of $23.2 million and $10.4 million on pro forma 2022 results. The capitalization of earnings method using a 2.75% capitalization rate (growth) indicates a value of $24.0 million and $10.8 million on pro forma 2022 results. Collectively, for Water 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 $10.8 million based on pro forma 2012 results.

The DCF Method. For the Water System, the DCF method considers two types of discounted cash flow analyses, the EBIT and EBITDA terminal value model ("Market Multiple

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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 Water System's operations over the next 20 years. We use two different assumptions for the Water System's future operations in the DCF methods: MUNI ownership shown on Exhibits 13 and 15; and IOU ownership shown on Exhibits 14 and 16.

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

We computed the Market Multiple DCF terminal values by multiplying the Water System's projected EBIT and EBITDA by the Comparable Group's adjusted multiples of 23.4-times and 15.8-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 Water System of $12.7 million to $13.0 million. The results of the Market Multiple DCF shown on Exhibit 13

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show a value of $11.5 million. Collectively, the DCF method based on the MUNI ownership scenario indicates a value of $12.3 million for the Water System based on the 0.1% growth assumption.

Exhibit 14 shows the results of the DCF method under the IOU ownership scenario. The results of the Capitalization DCF shown on Exhibit 14 show a range of value for Water System of $7.4 million to $9.6 million. The results of the Market Multiple DCF shown on Exhibit 14 show a range of value of $9.7 million to $12.2 million. Collectively, the DCF method based on the IOU ownership scenario and a 0.1% growth assumption indicates a value of $9.6 million for the Water System.

The DCF method based on the MUNI ownership scenario indicates a value of $12.3 million and the DCF method based on the IOU ownership scenario indicates a value of $9.6 million. Collectively, the DCF method indicates a value of $10.9 million based on OCNLD.

Change in ownership of the Water 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 NCUC, future cash flow estimates are uncertain since regulation by the NCUC 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 OCNLD and RCNLD. 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 Water System of $17.9

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million to $18.2 million. The results of the Market Multiple DCF shown on Exhibit 15 show a value of $15.1 million. Collectively, the DCF method based on the MUNI ownership scenario indicates a value of $16.6 million for the Water System based on the 0.1% growth assumption.

Exhibit 16 shows the results of the DCF method under the IOU ownership. The results of the Capitalization DCF shown on Exhibit 16 show a range of value for Water System of $10.4 million to $13.6 million. The results of the Market Multiple DCF shown on Exhibit 16 show a range of value of $13.4 million to $16.8 million. Collectively, the DCF method based on the IOU ownership scenario and a 0.1% growth assumption indicates a value of $13.5 million for the Water System.

The DCF method based on the MUNI ownership scenario indicates a value of $16.6 million and the DCF method based on the IOU ownership scenario indicates a value of $13.5 million. Collectively, the DCF method indicates a value of $15.1 million based on the Income Approach.

The Market Approach. There are two methods of doing the Market Approach to valuation: the market multiples method; and the selected transaction method. We provide 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 Water 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 Water System. Since no marketplace exists for the common stock of the Water System, an alternative to estimate the value of the Water System is to analyze the price investors are willing to pay for the publicly traded common stock of companies that are similar to the Water System. The specific market price data reviewed includes the market value of common equity plus minority interest, preferred stock, and

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

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

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

We believe that similar economic, industry and business risks have affected the Comparable Group as those faced by the Water 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 Water System. The relative size difference between the Comparable Group and Water System suggests that the risk to investors of the Water System is higher than the Comparable Group. Further, based upon our quantitative and qualitative analysis, we concluded that the Water System has more risk than the Comparable Group.

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Accordingly, the Comparable Group's Market Multiples are not directly applicable to the Water System. We assumed the higher risk due to the Water 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 Water System being 30% more risky than the Comparable Group and produces an 70% (100% - 30%) base risk adjustment to the Comparable Group's Market Multiples. We applied the 70% base risk adjustment to all financial multiples. For example, the Comparable Group's ICAP multiple was multiplied by 70% to produce a lower multiple applicable to the Water 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 Water System (Exhibit 17, page 3). The Comparable Group's Market Multiples of GPPE and NPPE were adjusted for the base risk adjustment and for their percentage of property plant and equipment (Exhibit 17, page 3) financed with "cost free" capital such as contributions because "cost free" capital should not be part of this valuation process. The Comparable Group's Market Multiples of Customers and Population were adjusted for the type of assets of the Water System, earnings rate, and growth.

The net risk adjustments to the Comparable Group's Market Multiples are shown on page 1 of Exhibit 17. The adjustments to the Comparable Group's Market Multiples are: 70% of ICAP (more risk/less growth); 80% of GPPE (more risk/lower growth and contributions); 80% of NPPE (more risk/lower growth and contributions); 70% of Revenue (more risk/lower growth); 70% of EBIT; 70% EBITDA (more risk/lower growth); 81% of Customers (growth, earning rate, and contributions); and 81% Population (growth, earning rate, and contributions).

Page 1 of Exhibit 17 shows the market multiples method indicated values based on: Revenue, EBIT and EBITDA (collectivity called "Income Statement Items"); ICAP, GPPE and

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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 fact that their dollars of Revenue, EBIT and EBITDA do not reflect any provision for taxes, while the multiples for the Comparable Group do.[21] 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 Water System. This is accomplished by multiplying the Water System's financial and operating data by the Comparable Group's median Market Multiples (Exhibit 17, page 1) after the net risk adjustments are applied. The results of the market multiples method (Exhibit 17, page 1) show a range of value for the Water System of $9.9 million to $15.4 million and collectively, indicate value of $12.6 million based on the meaningful Market Multiples.

The Selected Transactions Method. The selected transactions method entails analyzing certain public information relating to selected transactions involving the purchase or sales of businesses involved in the same or similar business line. The number of selected transactions available for review is limited because most acquisitions in the water and wastewater industry involve small acquisitions for which no public information exits. Additionally, not all transactions are comparable since some purchase prices may only involve the acquisition of the common stock, purchase prices may be net of cash, and others may only involve assets. In any of these instances,

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

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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 (December 31, 2021). Accordingly, changes in economic and market conditions should be considered. Additionally, regulatory rules and regulatory differences between jurisdictions impact the market multiples measured by the selected transactions method. For example, an acquirer may be limited to being authorized a return on and a return of the OCNLD of assets after "cost free" capital/customer contributions have been subtracted regardless of the acquisition price. Even within the same regulatory jurisdiction, or same State, the market multiples measured by the selected transactions method will differ if the transaction is governed by OCNLD related legislation/rules or "fair valuation" legislation/rules.

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; (4) transactions governed by "fair valuation" legislation/rules, (5) publicly available sales information similar to the market multiples method information shown on Exhibit 17, and (6) those that did not discount "cost free" capital/customer contributions in the valuation. We focused on Pennsylvania transaction because those transactions met all the above stated criteria has been an active market. The selected transactions that met the stated selection criteria are shown on pages 2 and 3 of Exhibit 18.

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

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calculated sales price multiples included transactions multiples of: ICAP; GPPE; NPPE; Revenue; EBITDA; EBIT; Customers; and Population. As shown on pages 2 and 3 of Exhibit 18, the selected transactions method indicated values based on the Income Statement Items are far different than the Water 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.[22] Consequently, we do not believe the results of the multiples of Income Statement Items are meaningful.

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

In the selected transactions method, the significant selected transactions multiples of the selling utilities are used to develop an indicated value of the Water System. This is accomplished by multiplying the Water System's financial and operating data by the selling utilities' transactions multiples (Exhibit 18, pages 2 and 3). The results of the selected transactions method (Exhibit 18, page 1) show a range of value for the Water System of $9.5 million to $22.0 million when all

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

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transactions are considered and a range of value of $12.5 million to $21.5 million when fully integrated assets are solely considered. Collectively, the selected transactions method indicates a value of $16.4 million after giving additional weight to the fully integrated assets selected transactions multiples.

In 2018 two IOUs, Connecticut Water Service, Inc and SJW Group, announced a planned merger with Connecticut Water being acquired by SJW through a stock purchase. SJW Group's purchase of Connecticut Water was approved in late 2019. Although this acquisition is not directly applicable to the Water System, it does provide a range of indicated value for the Water System (Exhibit 18, page 4) which we relied on as a check. In this selected transaction, the significant selected transactions multiples of the selling utilities (Connecticut Water) are used to develop an indicated value of the Water System. This is accomplished by multiplying the Water System's financial and operating data by the selling utilities' transactions multiples. The results of the Connecticut Water selected transactions show a range of value for the Water System of $12.3 million when the reported significant selected transactions multiples are considered and a value of $14.4 million when the reported significant selected transactions multiples have been adjusted for "cost free" capital. Since the Connecticut Water transaction was a stock transaction, we believe it may understate the value of an asset purchase. However, we also note that Connecticut Water was a fully integrated company, as is the Water System, but was publicly traded which the Water System is not, and therefore, may overstate the value of the Water System.

The results of the market multiples method shown on Exhibit 17 indicate value of $12.6 million. The results of the selected transactions method shown on Exhibit 18 indicate value of $16.4 million. We did not give any weight to the results of the selected transactions method

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because we have not determined if the North Carolina transactions market will be similar to Pennsylvania's since North Carolina's "fair valuation" market has only recently launched.

Therefore, the results of the market multiples method form the basis for our Market Approach conclusion. Based on the aforesaid results, the Market Approach to valuation indicates a value of $12.6 million for the Water System based on the results of the market multiples method.[23]

Conclusion. On Exhibit 19 we show a summary of our methods, approaches, and conclusions. We summarize our findings for the Water System on Exhibit 20. Our finding for the Water System is based on the Cost, Market, and Income Approaches to valuation. We used seven methods under the Cost, Market, and Income Approaches to valuation: Original Cost Method, Replacement Cost Method, Capitalization of Earnings Method, Market Multiple Discounted Cash Flow Method, Capitalization Discounted Cash Flow Method, Market Multiples Method, and the Selected Transactions Method.

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

23 Had we given equal weighting to the market multiples method results shown on Exhibit 17, and the selected transactions method shown on Exhibit 18, the Market Approach to valuation would indicate a value of $14.5 million.

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our conclusion regarding the fair market value is $14.6 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 20. The results of our analyses, shown on Exhibit 20, indicate a range of value for the Water System of $12.6 million to $16.0 million and collectively indicate a fair market value of $14,575,000 for the Water System.

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APPENDIX A - QUALIFICATIONS

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APPENDIX A

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

EDUCATION

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

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

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

BUSINESS EXPERIENCE

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

Head, Gannett Fleming GASB 34 Task Force responsible for developing Governmental Accounting Standards Board (GASB) 34 services and educating Gannett Fleming personnel and Gannett Fleming clients on GASB 34 and how it may affect them. The GASB 34 related services

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

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

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

Mr. Walker was also the Publisher of C.A. Turner Utility Reports from 1988 to 1996. 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

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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.

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COMPLIANCE & APPRAISAL CERTIFICATION

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

Fulfillment of Requirements for a Personal Property Appraisal and Report

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

  The client is Carteret County. The intended users of the valuation are Carteret County, Carolina Water Service, Inc. of North Carolina, and the North Carolina Utilities Commission ("NCUC").

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

  The intended use of the valuation is to comply with N.C. Gen. Stat. § 62-133.1A, and North Carolina Utility Commission's Rule R7-41and Rule R10-28 and conduct a fair market value appraisal of the Water 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.**

  Carteret County owns and operates the Water System which is comprised of the 29 customer (December 2021) Merrimon Water System, located in Merrimon Township, and the 1,225 customer (December 2021) Mill Creek/North River Water System, located in Beaufort Township. The Merrimon Water System is approximately 20 miles north of the Mill Creek/North River Water System. In total, the Water System contains eight parcels totaling 16.49 acres, three 200,000-gallon elevated water tanks, one ground tank (about 10,000 gallons), three booster pump stations, the Laurel Road water treatment plant, the Jonaquin Creek wellhouse, the Laurel Road well, 57 miles of water line, 600 valves, 175 fire hydrants, 1,254 billed water meters (December 2021) and 1,254 related customer services. There are an additional 533 water meters (December 2021) and 533 related customer services which have been install but remain inactive. The Water System's 57 miles of water lines are mainly PVC, with some ductile iron, range in diameter of 2-inch to 10-inches and are generally less than 20-years old.

  The Mill Creek/North River Water System's above ground assets listed above include seven parcels, the Laurel Road well water source, the 0.6 MGD Laurel Road water treatment plant, the three 200,000-gallon elevated water tanks (Laurel Road Water Tank, Mayflower Road Water Tank, and Taylor Farm Road Water Tank), and the three booster pump stations. The Merrimon Water System related above ground assets listed above include one parcel, the Jonaquin Creek wellhouse water source, and one ground tank (about 10,000 gallons). According to the

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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

Engineer's Assessment, the Water System's water infrastructure is well documented, in good condition, and does not require any major capital investment in the near future.

Carteret County's Water System land and land rights include land used for three 200,000-gallon elevated water tanks, one ground tank (about 10,000 gallons), three booster pump stations, the Laurel Road water treatment plant, the Jonaquin Creek wellhouse, the Laurel Road well, 57 miles of water line, 600 valves, 175 fire hydrants, 1,254 billed water meters (December 2021) and 1,254 related customer services and multiple easements and rights-of-way necessary to operate the Water System.

- **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 December 31, 2021, and the appraisal report date is July 1, 2022.

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

  Conduct a fair market value appraisal of the Carteret County's water system assets (Water System) in compliance with the Uniform Standards of Professional Appraisal Practices, employing the cost, market, and income approaches.

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Fulfillment of Requirements for a Personal Property Appraisal and Report

The premise of value is going concern and the assets are valued as a group under the premise that they collectively comprise an ongoing operating business enterprise.

We accepted all information and data provided by the County as it pertains to this assignment "as is" after a limited review. That is, we neither audited nor verify any data, original cost data, financial records or operating data provided for this assignment.

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

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

Market Approach - The market approach was developed based on the market multiples method and the selected transaction method. The market multiples method was based on the market price data of publicly traded corporations engaged in the same or a similar line of business as the Water System. The market price data

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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

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 Water System to calculated market multiples at the time of transaction (sale/purchase). The calculated market multiples determined by the market multiples method and the selected transaction method were then multiplied by the corresponding the Water System financial and operating statistic to produce an indicated value for the Water 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;**

    Extraordinary assumption - The Engineering Assessment did not provide installation dates for all assets listed (Engineering Assessment's Table 2). For those assets which did not have an installation date, the installation dates were primarily derived from other County provided material (e.g., Carteret County Fixed Assets Depreciation Schedule 6/30/21). In instances where the same County provided material (e.g., Carteret County Fixed Assets Depreciation Schedule 6/30/21) listed alternative original cost, the alternative original costs were used. There were no 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.

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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

- **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**

  Carteret County's Water System land and land rights include land used three 200,000-gallon elevated water tanks, one ground tank (about 10,000 gallons), three booster pump stations, the Laurel Road water treatment plant, the Jonaquin Creek wellhouse, the Laurel Road well, 57 miles of water line, 600 valves, 175 fire hydrants, 1,254 billed water meters (December 2021) and 1,254 related customer services and multiple easements and rights-of-way necessary to operate the Water System.

  The Carteret County Water System's land and land rights were assumed to be used for the operation of the Water 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 Water System for the appraisal, were valued at original cost, and not at highest and best use of the real estate.

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

  No departures for Standard 1 were made.

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

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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

See attached for signed certification.

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APPRAISAL CERTIFICATION
Carteret County, North Carolina
Carteret County
Water System Assets
Fair Market Value Appraisal Report
As of December 31, 2021

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

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

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

— Gannett Fleming Valuation and Rate Consultants, LLC has not performed an appraisal of the Carteret County Water System prior to this current appraisal.

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

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

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

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

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

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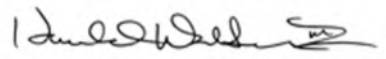
APPRAISAL CERTIFICATION
Carteret County, North Carolina
Carteret County
Water System Assets
Fair Market Value Appraisal Report
As of December 31, 2021

— The signers of this report relied upon Gregor R. Howell Jr., Senior Project Inspector – Carolinas Construction Services 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 Gannett Fleming Valuation and Rate Consultants, LLC.

Gannett Fleming Valuation and Rate Consultants, LLC

By,



HAROLD WALKER, III

Manager, Financial Studies

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EXHIBITS

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Carteret County Water System Assets
Selected Audited Financial Information

	12-Months Ended June 30:			
	2018	2019	2020	2021
Gross property, plant & equipment	12,176,413	12,195,043	12,195,043	12,195,043
Accumulated depreciation	5,339,770	5,706,672	6,071,559	6,435,829
Net property, plant & equipment	6,836,643	6,488,371	6,123,484	5,759,214
Assets	7,926,928	7,750,539	7,579,439	7,861,675
Debt Current	0	0	0	0
Debt	2,255,160	2,066,128	1,877,096	1,687,064
Equity	5,416,883	5,396,221	5,340,343	5,392,898
Total Capital	7,672,043	7,462,349	7,217,439	7,079,962
OPERATING REVENUES				
Charges for services	674,952	680,476	676,001	733,693
Other operating income	3,927	31,256	17,743	4,165
TOTAL OPERATING REVENUES	678,879	711,732	693,744	737,858
Expenses	828,647	729,963	766,799	677,742
Depreciation	366,186	369,612	364,887	364,270
TOTAL OPERATING EXPENSES	1,194,833	1,099,575	1,131,686	1,042,012
CAPX	37,898	25,500	0	0
Interest	65,907	60,568	55,201	49,835
Principal	188,032	189,032	189,032	190,032
Transfer (Water Tax District Fund)	433,600	400,000	420,000	405,000

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

EXHIBIT 2

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Carteret County Water System Assets
Customers, Population, New Taps and Housing Units
Customer Count

	Service Area Customers	Estimated Service Area Population *
Merrimon area	29	71
Beaufort area	1,225	3,021
Total	1,254	3,092

Population To Customers

2.5

New Taps

	2017	2018	2019	2020	2021
New Taps	14	13	14	13	23

Population and Housing Units (2021)

	Total Population	Population in Households	Total Housing Units	Vacancy Rate	Population per Housing Unit
Merrimon Township	663	663	502	37.5%	2.11
Beaufort Township	9,577	9,407	5,723	24.3%	2.17
Total	10,240	10,070	6,225	25.4%	2.17

* - Estimated by Environmental Finance Center at the University of North Carolina, Chapel Hill.

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TABLE 3.1 US Population Census Counts, 2010 & 2020

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

Source: U.S. Census Bureau, Population Division

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

Geographic Area	Population 2010	Population 2020	Percentage Change	County Growth Rank
North Carolina	9,535,483	10,439,388	2.4%	-
Carteret County	66,469	67,686	1.8%	44 out of 100 counties

Source: U.S. Census Bureau,Census 2010 & 2012 Redistricting Data (Public Law 94-171) Summary File.

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TABLE 3.3 Forecasted Population by County and Municipality, 2010-2050

	Population					Percentage Change					
	Estimate 2010	Forecast 2020	Forecast 2030	Forecast 2040	Forecast 2050	2010 to 2020	2020 to 2030	2030 to 2040	2040 to 2050	2010 to 2050	
North Carolina	9,571,007	10,456,593	11,527,150	12,669,133	13,824,955	9.3%	10.2%	9.9%	9.1%	44.4%	
Carteret County	66,615	67,571	68,863	71,870	74,956	1.4%	1.9%	4.4%	4.3%	12.5%	43 out of 100 counties

Source: North Carolina OSBM, Standard Population Estimates, Vintage 2020 and Population Projections, Vintage 2021.

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Comparison of Credit Market Financial Risk Metrics
For Carteret County Water System Assets
And the Comparable Group
2019 - 2021 (1)

	Carteret County Water System Assets			Comparable Group		
	2021	2020	2019	2021	2020	2019
Debt Service Coverage	0.3	-0.3	-0.1	2.3	2.4	2.0
Pre-Tax Interest Coverage - Including AFC(2)(x)	-6.1	-7.9	-6.4	4.4	3.7	3.6
Post-Tax Interest Coverage - Including AFC(2)(x)	-6.1	-7.9	-6.4	3.7	3.2	2.9
GCF / Interest Coverage(3)(x)	1.2	-1.3	-0.3	5.9	5.2	4.7
GCF / Tot. Debt(4)(%)	0.6	-6.8	-3.8	18.2	15.9	15.8
GCF / Construction(5)(%)	NA	NA	-309.0	73.2	72.2	63.0

Comment : Metrics for Carteret County Water System have been adjusted to include transfers from Water Tax District Fund.

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

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Carteret County Water System Assets
Illustrating the Impact of Size on Risk and Retun
Through Common Stock Returns

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

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

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

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

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

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Carteret County Water 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 $)		
Carteret County Water System Assets *	$14.873	$11.258	76%
Comparable Group			
American States Water Company	$2,202.419	$1,614.705	73%
American Water Works Company	26,972.000	20,680.000	77%
Artesian Resources Corporation	743.292	585.751	79%
California Water Service Group	4,124.024	2,796.369	68%
Essential Utilities, Inc.	12,348.442	10,012.155	81%
Middlesex Water Company	1,063.753	865.947	81%
SJW Group	3,616.710	2,486.932	69%
The York Water Company	464.886	368.286	79%
Median			78%

* - Developed on Exhibit 7.

TABLE 6.2 Property Plant & Equipment Analysis for Contributions

	(As of 9/30/2021)			
	Net Property, Plant & Equipment	Investor's Capital	Percentage of Property, Plant & Equipment Net of Contributions	2021 Percentage of Known "Cost Free" Capital
	(Millions of $)			
Comparable Group				
American States Water Co	$1,614.705	$1,292.917	80%	22%
American Water Works Co Inc	20,680.000	18,040.000	87%	20%
Artesian Resources -CL A	585.751	347.983	59%	40%
California Water Service Gp	2,796.369	2,305.564	82%	27%
Essential Utilities, Inc.	10,012.155	10,907.411	109%	21%
Middlesex Water Co	865.947	693.048	80%	26%
SJW Corp	2,486.932	2,569.103	103%	26%
York Water Co	368.286	285.060	77%	27%
Median			81%	26%

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Carteret County Water System Assets
Property Plant & Equipment Analysis
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TABLE 6.3 Capital Expenditures Analysis

	PP&E-Total Net (Millions of $)				Capital Expenditures (Millions of $)			
	2021	2020	2019	2018	2021	2020	2019	2018
Carteret County Water System Assets	$5.759	$6.123	$6.488	$6.837	$0.000	$0.000	$0.026	$0.038
Comparable Group								
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
Carteret County Water System Assets	0%	0%	0%	1%
Comparable Group				
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%

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Carteret County Water System Assets
Property Plant & Equipment Analysis
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	Revenues				EBITDA			
	2021	2020	2019	2018	2021	2020	2019	2018
	(Millions of $)				(Millions of $)			
Carteret County Water System Assets	$1.143	$1.114	$1.112	$1.112	$0.060	($0.073)	($0.018)	($0.150)
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 $)			
Carteret County Water System Assets	($0.304)	($0.438)	($0.388)	($0.516)
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

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Carteret County Water System Assets
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TABLE 6.4 Growth Rate Analyses

	Revenue Growth			EBITDA Growth		
	2021	2020	2019	2021	2020	2019
Carteret County Water System Assets	2.6%	0.2%	0.0%	-182.2%	305.6%	-88.0%
Comparable Group						
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
Carteret County Water System Assets	-30.6%	12.9%	-24.8%
Comparable Group			
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%

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Carteret County Water System Assets
Property Plant & Equipment Analysis
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TABLE 6.5 Profit Margin Analyses

	EBITDA / Revenue - Margin		
	2021	2020	2019
Carteret County Water System Assets	5.2%	-6.6%	-1.6%
Comparable Group			
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
Carteret County Water System Assets	-26.6%	-39.3%	-34.9%
Comparable Group			
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%

Comment : Financial information for Carteret County Water System have been adjusted to include transfers from Water Tax District Fund.

Source: S&P Capital IQ
EXHIBIT 1

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

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

ACCOUNT	DESCRIPTION	ORIGINAL COST	ACCRUED DEPRECIATION
(1)	(2)	(3)	(4)
303.00	LAND AND LAND RIGHTS	369,722.00	0
304.30	STRUCTURES - TREATMENT	2,119,263.81	678,546
304.40	STRUCTURES AND IMPROVEMENTS - PUMPHOUSE	680,506.83	126,118
307.00	WELLS AND SPRINGS	600,000.00	350,400
310.00	POWER GENERATION EQUIPMENT	55,766.76	24,131
320.00	WATER TREATMENT EQUIPMENT	176,028.98	48,883
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	2,073,615.83	692,710
331.00	TRANSMISSION AND DISTRIBUTION MAINS	6,800,175.65	1,074,364
333.00	SERVICES	867,207.42	155,029
334.00	METERS AND METER INSTALLATIONS	258,314.88	64,677
335.00	HYDRANTS	525,000.00	107,216
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	67,711.80	27,385
346.00	COMMUNICATION EQUIPMENT	280,000.00	266,000
	TOTAL COMPANY	**14,873,313.96**	**3,615,459**

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

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

ACCOUNT	DESCRIPTION	ORIGINAL COST
(1)	(2)	(3)
303.00	LAND AND LAND RIGHTS	369,722.00
304.30	STRUCTURES - TREATMENT	2,119,263.81
304.40	STRUCTURES AND IMPROVEMENTS - PUMPHOUSE	680,506.83
307.00	WELLS AND SPRINGS	600,000.00
310.00	POWER GENERATION EQUIPMENT	55,766.76
320.00	WATER TREATMENT EQUIPMENT	176,028.98
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	2,073,615.83
331.00	TRANSMISSION AND DISTRIBUTION MAINS	6,800,175.65
333.00	SERVICES	867,207.42
334.00	METERS AND METER INSTALLATIONS	258,314.88
335.00	HYDRANTS	525,000.00
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	67,711.80
346.00	COMMUNICATION EQUIPMENT	280,000.00
	TOTAL COMPANY	**14,873,313.96**

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

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

ACCOUNT	DESCRIPTION	SURVIVOR CURVE	ORIGINAL COST	ACCRUED DEPRECIATION
(1)	(2)	(3)	(4)	(5)
303.00	LAND AND LAND RIGHTS	NONDEPRECIABLE	369,722.00	0
304.30	STRUCTURES - TREATMENT	55-R3	2,119,263.81	678,546
304.40	STRUCTURES AND IMPROVEMENTS - PUMPHOUSE	45-R2	680,506.83	126,118
307.00	WELLS AND SPRINGS	55-R4	600,000.00	350,400
310.00	POWER GENERATION EQUIPMENT	25-S3	55,766.76	24,131
320.00	WATER TREATMENT EQUIPMENT	35-S0.5	176,028.98	48,883
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	45-R2.5	2,073,615.83	692,710
331.00	TRANSMISSION AND DISTRIBUTION MAINS	85-R1	6,800,175.65	1,074,364
333.00	SERVICES	40-O1	867,207.42	155,029
334.00	METERS AND METER INSTALLATIONS	25-R1	258,314.88	64,677
335.00	HYDRANTS	45-R3	525,000.00	107,216
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	67,711.80	27,385
346.00	COMMUNICATION EQUIPMENT	10-SQ	280,000.00	266,000
	TOTAL COMPANY		**14,873,313.96**	**3,615,459**

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

SUMMARY OF ORIGINAL COST NEW INVENTORY
OF WATER SYSTEM AS OF DECEMBER 31, 2021

ORIGINAL COST NEW INVENTORY LISTING USED FOR FMV				ENGINEER'S ASSESSMENT INVENTORY LISTING			
ACCOUNT (A)	DESCRIPTION (B)	ORIGINAL COST (C)		ASSEST GROUP (D)	SOURCE TABLE (E)	HISTORICAL COST (F)	DIFERENCE IN COST (G) = (C) - (F)
303.00	LAND AND LAND RIGHTS	$369,722		LAND PROPERTY	TABLE 2	$369,722	$0
304.30	STRUCTURES - TREATMENT	2,119,264	(1)	WATER TREATMENT PLANTS	TABLE 2	1,575,000	544,264
304.40	STRUCTURES AND IMPROVEMENTS - PUMPHOUSE	680,507		BOOSTER PUMPS	TABLE 1	680,507	
307.00	WELLS AND SPRINGS	600,000	(2)	WELL HOUSES	TABLE 2	630,000	(30,000)
310.00	POWER GENERATION EQUIPMENT	55,767	(1)	NOT LISTED			55,767
320.00	WATER TREATMENT EQUIPMENT	176,029	(1)	NOT LISTED			176,029
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	2,073,616		WATER TANKS	TABLE 1	2,073,616	0
331.00	TRANSMISSION AND DISTRIBUTION MAINS	6,800,176	(1)	PIPING SYSTEM	TABLE 2	7,550,991	(750,815)
333.00	SERVICES	867,207	(3)	NOT LISTED			867,207
334.00	METERS AND METER INSTALLATIONS	258,315	(4)	NOT LISTED			258,315
335.00	HYDRANTS	525,000	(5)	FIRE HYDRANTS	TABLE 2	300,000	225,000
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	67,712	(1)	NOT LISTED			67,712
346.00	COMMUNICATION EQUIPMENT	280,000	(2)	SCADA	TABLE 2	294,000	(14,000)
	TOTAL COMPANY	**$14,873,314**				**$13,473,836**	**$1,399,478**

Notes: (1) Carteret County Fixed Assets Depreciation Schedule 6/30/21.
(2) Taken from the 2019 feasibility study (i.e., Removed 5% escalation)
(3) Estimated based on trended unit cost of $900 (2019 $) per service and vintage customer additions.
(4) Estimated based on trended unit cost of $350 (2021 $) per meter with MXU and vintage meter replacement and customer additions.
(5) Estimated based on trended unit cost of $3,000 (2012 $) per hydrant and vintage addition.

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 303.00 LAND AND LAND RIGHTS

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
NONDEPRECIABLE							
1988	51,525.00						
2003	57,220.00						
2010	20,615.00						
2012	240,362.00						
	369,722.00						

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 304.30 STRUCTURES - TREATMENT

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

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 55-R3							
NET SALVAGE PERCENT.. 0							
2003	2,119,263.81	55.00	1.82	38,570.60	37.39	0.3202	678,546
	2,119,263.81			38,570.60			678,546

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.82

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 304.40 STRUCTURES AND IMPROVEMENTS - PUMPHOUSE

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

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 45-R2							
NET SALVAGE PERCENT.. 0							
2012	680,506.83	45.00	2.22	15,107.25	36.66	0.1853	126,118
	680,506.83			15,107.25			126,118

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.22

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 307.00 WELLS AND SPRINGS

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 55-R4							
NET SALVAGE PERCENT.. 0							
1988	600,000.00	55.00	1.82	10,920.00	22.88	0.5840	350,400
	600,000.00			10,920.00			350,400

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.82

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 310.00 POWER GENERATION EQUIPMENT

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 25-S3							
NET SALVAGE PERCENT.. 0							
2006	15,000.00	25.00	4.00	600.00	10.27	0.5892	8,838
2011	19,190.76	25.00	4.00	767.63	14.60	0.4160	7,983
2013	21,576.00	25.00	4.00	863.04	16.53	0.3388	7,310
	55,766.76			2,230.67			24,131

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 4.00

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 320.00 WATER TREATMENT EQUIPMENT

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 35-S0.5							
NET SALVAGE PERCENT.. 0							
2009	17,500.00	35.00	2.86	500.50	24.65	0.2957	5,175
2010	158,528.98	35.00	2.86	4,533.93	25.35	0.2757	43,708
	176,028.98			5,034.43			48,883

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.86

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 330.00 DISTRIBUTION RESERVOIRS AND STANDPIPES

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 45-R2.5							
NET SALVAGE PERCENT.. 0							
1988	619,263.00	45.00	2.22	13,747.64	17.24	0.6169	382,017
2010	689,091.16	45.00	2.22	15,297.82	34.45	0.2344	161,551
2012	765,261.67	45.00	2.22	16,988.81	36.23	0.1949	149,142
	2,073,615.83			46,034.27			692,710

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.22

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 331.00 TRANSMISSION AND DISTRIBUTION MAINS

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 85-R1							
NET SALVAGE PERCENT.. 0							
1991	1,337,172.18	85.00	1.18	15,778.63	63.44	0.2537	339,174
2001	225,282.68	85.00	1.18	2,658.34	70.29	0.1731	38,987
2003	1,475,968.61	85.00	1.18	17,416.43	71.68	0.1567	231,299
2006	2,959,845.59	85.00	1.18	34,926.18	73.79	0.1319	390,344
2007	69,413.93	85.00	1.18	819.08	74.49	0.1237	8,583
2008	183,360.51	85.00	1.18	2,163.65	75.20	0.1153	21,140
2012	549,132.15	85.00	1.18	6,479.76	78.06	0.0817	44,837
	6,800,175.65			80,242.07			1,074,364

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.18

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 333.00 SERVICES

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

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 40-O1							
NET SALVAGE PERCENT.. 0							
1991	12,000.90	40.00	2.50	300.02	24.75	0.3813	4,575
2002	52,147.39	40.00	2.50	1,303.68	30.25	0.2438	12,711
2003	150,417.71	40.00	2.50	3,760.44	30.75	0.2313	34,784
2004	57,881.81	40.00	2.50	1,447.05	31.25	0.2188	12,662
2005	63,078.63	40.00	2.50	1,576.97	31.75	0.2063	13,010
2006	299,993.00	40.00	2.50	7,499.82	32.25	0.1938	58,124
2007	5,366.78	40.00	2.50	134.17	32.75	0.1813	973
2008	14,988.20	40.00	2.50	374.70	33.25	0.1688	2,529
2011	2,571.62	40.00	2.50	64.29	34.75	0.1313	338
2012	46,261.48	40.00	2.50	1,156.54	35.25	0.1188	5,494
2013	31,812.74	40.00	2.50	795.32	35.75	0.1063	3,380
2014	22,307.71	40.00	2.50	557.69	36.25	0.0938	2,091
2015	16,061.55	40.00	2.50	401.54	36.75	0.0813	1,305
2016	13,467.76	40.00	2.50	336.69	37.25	0.0688	926
2017	12,932.01	40.00	2.50	323.30	37.75	0.0563	727
2018	12,320.51	40.00	2.50	308.01	38.25	0.0438	539
2019	14,070.02	40.00	2.50	351.75	38.75	0.0313	440
2020	13,905.60	40.00	2.50	347.64	39.25	0.0188	261
2021	25,622.00	40.00	2.50	640.55	39.75	0.0063	160
	867,207.42			21,680.17			155,029

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.50

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 334.00 METERS AND METER INSTALLATIONS

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

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 25-R1							
NET SALVAGE PERCENT.. 0							
1991	2,910.27	25.00	4.00	116.41	6.70	0.7320	2,130
2002	12,438.32	25.00	4.00	497.53	12.06	0.5176	6,438
2003	12,438.32	25.00	4.00	497.53	12.63	0.4948	6,154
2004	12,438.32	25.00	4.00	497.53	13.22	0.4712	5,861
2005	12,858.94	25.00	4.00	514.36	13.81	0.4476	5,756
2006	15,977.35	25.00	4.00	639.09	14.42	0.4232	6,762
2007	3,222.48	25.00	4.00	128.90	15.04	0.3984	1,284
2008	4,852.30	25.00	4.00	194.09	15.67	0.3732	1,811
2009	4,852.30	25.00	4.00	194.09	16.32	0.3472	1,685
2010	6,987.61	25.00	4.00	279.50	16.97	0.3212	2,244
2011	9,860.71	25.00	4.00	394.43	17.63	0.2948	2,907
2012	15,730.18	25.00	4.00	629.21	18.30	0.2680	4,216
2013	17,465.31	25.00	4.00	698.61	18.98	0.2408	4,206
2014	15,303.36	25.00	4.00	612.13	19.66	0.2136	3,269
2015	9,191.06	25.00	4.00	367.64	20.35	0.1860	1,710
2016	14,978.76	25.00	4.00	599.15	21.04	0.1584	2,373
2017	15,313.89	25.00	4.00	612.56	21.74	0.1304	1,997
2018	15,665.13	25.00	4.00	626.61	22.45	0.1020	1,598
2019	16,337.26	25.00	4.00	653.49	23.17	0.0732	1,196
2020	16,743.01	25.00	4.00	669.72	23.89	0.0444	743
2021	22,750.00	25.00	4.00	910.00	24.63	0.0148	337
	258,314.88			10,332.58			64,677

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 4.00

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 335.00 HYDRANTS

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 45-R3							
NET SALVAGE PERCENT.. 0							
2012	525,000.00	45.00	2.22	11,655.00	35.81	0.2042	107,216
	525,000.00			11,655.00			107,216

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.22

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 343.00 TOOLS, SHOP AND GARAGE EQUIPMENT

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 20-SQUARE							
NET SALVAGE PERCENT.. 0							
2008	17,480.00	20.00	5.00	874.00	6.50	0.6750	11,799
2009	7,400.00	20.00	5.00	370.00	7.50	0.6250	4,625
2014	17,331.80	20.00	5.00	866.59	12.50	0.3750	6,499
2018	25,500.00	20.00	5.00	1,275.00	16.50	0.1750	4,462
	67,711.80			3,385.59			27,385

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 5.00

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 346.00 COMMUNICATION EQUIPMENT

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 10-SQUARE							
NET SALVAGE PERCENT.. 0							
2012	280,000.00	10.00	10.00	28,000.00	0.50	0.9500	266,000
	280,000.00			28,000.00			266,000

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 10.00

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

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

ACCOUNT	DESCRIPTION	REPLACEMENT COST	ACCRUED DEPRECIATION
(1)	(2)	(3)	(4)
303.00	LAND AND LAND RIGHTS	369,722.00	0
304.30	STRUCTURES - TREATMENT	3,487,093.53	1,116,498
304.40	STRUCTURES AND IMPROVEMENTS - PUMPHOUSE	734,539.07	136,132
307.00	WELLS AND SPRINGS	1,104,978.54	645,307
310.00	POWER GENERATION EQUIPMENT	84,041.41	37,382
320.00	WATER TREATMENT EQUIPMENT	206,793.64	57,435
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	4,452,119.89	2,067,139
331.00	TRANSMISSION AND DISTRIBUTION MAINS	11,958,957.65	2,026,112
333.00	SERVICES	1,015,167.67	194,665
334.00	METERS AND METER INSTALLATIONS	436,647.28	133,772
335.00	HYDRANTS	829,074.59	169,314
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	47,702.23	19,112
346.00	COMMUNICATION EQUIPMENT	227,165.49	215,807
	TOTAL COMPANY	**24,954,002.99**	**6,818,675**

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

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

ACCOUNT	DESCRIPTION	REPLACEMENT COST
(1)	(2)	(3)
303.00	LAND AND LAND RIGHTS	369,722.00
304.30	STRUCTURES - TREATMENT	3,487,093.53
304.40	STRUCTURES AND IMPROVEMENTS - PUMPHOUSE	734,539.07
307.00	WELLS AND SPRINGS	1,104,978.54
310.00	POWER GENERATION EQUIPMENT	84,041.41
320.00	WATER TREATMENT EQUIPMENT	206,793.64
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	4,452,119.89
331.00	TRANSMISSION AND DISTRIBUTION MAINS	11,958,957.65
333.00	SERVICES	1,015,167.67
334.00	METERS AND METER INSTALLATIONS	436,647.28
335.00	HYDRANTS	829,074.59
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	47,702.23
346.00	COMMUNICATION EQUIPMENT	227,165.49
	TOTAL COMPANY	**24,954,002.99**

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

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

ACCOUNT	DESCRIPTION	SURVIVOR CURVE	REPLACEMENT COST	ACCRUED DEPRECIATION
(1)	(2)	(3)	(4)	(5)
303.00	LAND AND LAND RIGHTS	NONDEPRECIABLE	369,722.00	0
304.30	STRUCTURES - TREATMENT	55-R3	3,487,093.53	1,116,498
304.40	STRUCTURES AND IMPROVEMENTS - PUMPHOUSE	45-R2	734,539.07	136,132
307.00	WELLS AND SPRINGS	55-R4	1,104,978.54	645,307
310.00	POWER GENERATION EQUIPMENT	25-S3	84,041.41	37,382
320.00	WATER TREATMENT EQUIPMENT	35-S0.5	206,793.64	57,435
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	45-R2.5	4,452,119.89	2,067,139
331.00	TRANSMISSION AND DISTRIBUTION MAINS	85-R1	11,958,957.65	2,026,112
333.00	SERVICES	40-O1	1,015,167.67	194,665
334.00	METERS AND METER INSTALLATIONS	25-R1	436,647.28	133,772
335.00	HYDRANTS	45-R3	829,074.59	169,314
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	20-SQ	47,702.23	19,112
346.00	COMMUNICATION EQUIPMENT	10-SQ	227,165.49	215,807
	TOTAL COMPANY		**24,954,002.99**	**6,818,675**

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

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

ACCOUNT	DESCRIPTION	VINTAGE YEAR	BASE COST	TRANSITION FACTOR	FACTOR REFERENCE	REPLACEMENT COST
(1)	(2)	(3)	(4)	(5)	(6)	(7)
303.00	LAND AND LAND RIGHTS	1988	51,525.00	1.00000	(1)	51,525.00
303.00	LAND AND LAND RIGHTS	2003	57,220.00	1.00000	(1)	57,220.00
303.00	LAND AND LAND RIGHTS	2010	20,615.00	1.00000	(1)	20,615.00
303.00	LAND AND LAND RIGHTS	2012	240,362.00	1.00000	(1)	240,362.00
304.30	STRUCTURES - TREATMENT	2003	2,119,263.81	1.64543	(2)	3,487,093.53
304.40	STRUCTURES AND IMPROVEMENTS - PUMPHOUSE	2012	680,506.83	1.07940	(2)	734,539.07
307.00	WELLS AND SPRINGS	1988	600,000.00	1.84163	(3)	1,104,978.54
310.00	POWER GENERATION EQUIPMENT	2006	15,000.00	1.78702	(4)	26,805.29
310.00	POWER GENERATION EQUIPMENT	2011	19,190.76	1.48285	(4)	28,456.94
310.00	POWER GENERATION EQUIPMENT	2013	21,576.00	1.33385	(4)	28,779.18
320.00	WATER TREATMENT EQUIPMENT	2009	17,500.00	1.20223	(5)	21,039.03
320.00	WATER TREATMENT EQUIPMENT	2010	158,528.98	1.17174	(5)	185,754.61
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	1988	619,263.00	4.45846	(6)	2,760,960.27
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	2010	689,091.16	1.26000	(6)	868,254.86
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	2012	765,261.67	1.07532	(6)	822,904.76
331.00	TRANSMISSION AND DISTRIBUTION MAINS	1991	1,337,172.18	2.41795	(7)	3,233,213.76
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2001	225,282.68	2.01865	(7)	454,767.88
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2003	1,475,968.61	1.93012	(7)	2,848,792.05
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2006	2,959,845.59	1.52097	(7)	4,501,829.66
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2007	69,413.93	1.42263	(7)	98,750.29
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2008	183,360.51	1.27679	(7)	234,112.71
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2012	549,132.15	1.06985	(7)	587,491.30
333.00	SERVICES	1991	12,000.90	1.95625	(8)	23,476.76
333.00	SERVICES	2002	52,147.39	1.50584	(8)	78,525.73
333.00	SERVICES	2003	150,417.71	1.48542	(8)	223,434.04
333.00	SERVICES	2004	57,881.81	1.35666	(8)	78,525.72
333.00	SERVICES	2005	63,078.63	1.24489	(8)	78,525.73
333.00	SERVICES	2006	299,993.00	1.10101	(8)	330,293.80
333.00	SERVICES	2007	5,366.78	1.05590	(8)	5,666.80
333.00	SERVICES	2008	14,988.20	1.02623	(8)	15,381.33
333.00	SERVICES	2011	2,571.62	0.94440	(8)	2,428.63
333.00	SERVICES	2012	46,261.48	0.89246	(8)	41,286.72
333.00	SERVICES	2013	31,812.74	0.89065	(8)	28,334.03
333.00	SERVICES	2014	22,307.71	0.90725	(8)	20,238.59
333.00	SERVICES	2015	16,061.55	0.90725	(8)	14,571.78
333.00	SERVICES	2016	13,467.76	0.90165	(8)	12,143.15
333.00	SERVICES	2017	12,932.01	0.87640	(8)	11,333.61
333.00	SERVICES	2018	12,320.51	0.85419	(8)	10,524.07
333.00	SERVICES	2019	14,070.02	0.80551	(8)	11,333.61
333.00	SERVICES	2020	13,905.60	0.75682	(8)	10,524.07
333.00	SERVICES	2021	25,622.00	0.72670	(8)	18,619.50
334.00	METERS AND METER INSTALLATIONS	1991	2,910.27	3.46975	(9)	10,097.92
334.00	METERS AND METER INSTALLATIONS	2002	12,438.32	2.71546	(9)	33,775.75
334.00	METERS AND METER INSTALLATIONS	2003	12,438.32	2.71546	(9)	33,775.75
334.00	METERS AND METER INSTALLATIONS	2004	12,438.32	2.71546	(9)	33,775.75
334.00	METERS AND METER INSTALLATIONS	2005	12,858.94	2.62664	(9)	33,775.75
334.00	METERS AND METER INSTALLATIONS	2006	15,977.35	2.26653	(9)	36,213.18
334.00	METERS AND METER INSTALLATIONS	2007	3,222.48	1.94498	(9)	6,267.67
334.00	METERS AND METER INSTALLATIONS	2008	4,852.30	1.50697	(9)	7,312.27
334.00	METERS AND METER INSTALLATIONS	2009	4,852.30	1.50697	(9)	7,312.27
334.00	METERS AND METER INSTALLATIONS	2010	6,987.61	1.49495	(9)	10,446.11
334.00	METERS AND METER INSTALLATIONS	2011	9,860.71	1.48311	(9)	14,624.55
334.00	METERS AND METER INSTALLATIONS	2012	15,730.18	1.48311	(9)	23,329.64
334.00	METERS AND METER INSTALLATIONS	2013	17,465.31	1.47533	(9)	25,767.06
334.00	METERS AND METER INSTALLATIONS	2014	15,303.36	1.45622	(9)	22,285.02
334.00	METERS AND METER INSTALLATIONS	2015	9,191.06	1.40175	(9)	12,883.53
334.00	METERS AND METER INSTALLATIONS	2016	14,978.76	1.39479	(9)	20,892.21
334.00	METERS AND METER INSTALLATIONS	2017	15,313.89	1.34153	(9)	20,544.00
334.00	METERS AND METER INSTALLATIONS	2018	15,665.13	1.28922	(9)	20,195.80
334.00	METERS AND METER INSTALLATIONS	2019	16,337.26	1.25749	(9)	20,544.01
334.00	METERS AND METER INSTALLATIONS	2020	16,743.01	1.20622	(9)	20,195.81

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

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

ACCOUNT (1)	DESCRIPTION (2)	VINTAGE YEAR (3)	BASE COST (4)	TRANSITION FACTOR (5)	FACTOR REFERENCE (6)	REPLACEMENT COST (7)
334.00	METERS AND METER INSTALLATIONS	2021	22,750.00	0.99487	(9)	22,633.23
335.00	HYDRANTS	2012	525,000.00	1.57919	(10)	829,074.59
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	2008	17,480.00	0.69068	(11)	12,073.12
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	2009	7,400.00	0.68985	(11)	5,104.91
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	2014	17,331.80	0.70122	(11)	12,153.32
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	2018	25,500.00	0.72043	(11)	18,370.88
346.00	COMMUNICATION EQUIPMENT	2012	280,000.00	0.81131	(12)	227,165.49
	TOTAL COMPANY		**14,873,313.96**			**24,954,002.99**

NOTES : (1) Not trended
(2) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, South Atlantic Region, Line 8
(3) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, South Atlantic Region, Line 2
(4) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, South Atlantic Region, Line 9
(5) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, South Atlantic Region, Line 16
(6) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, South Atlantic Region, Line 24
(7) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, South Atlantic Region, Line 34
(8) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, South Atlantic Region, Line 39
(9) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, South Atlantic Region, Line 40
(10) Handy-Whitman Index of Public Utility Costs, 1/1/22, Cost Trends of Water Utility Construction, South Atlantic Region, Line 42
(11) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry group data for Communications equipment mfg, not seasonally adjusted
(12) U.S. Bureau of Labor Statistics, Producer Price Index, Series Title: PPI industry data for Industrial process variable instruments-Process control instruments, not seasonally adjusted

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 303.00 LAND AND LAND RIGHTS

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
NONDEPRECIABLE							
1988	51,525.00						
2003	57,220.00						
2010	20,615.00						
2012	240,362.00						
	369,722.00						

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 0.00

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 304.30 STRUCTURES - TREATMENT

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

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 55-R3							
NET SALVAGE PERCENT.. 0							
2003	3,487,093.53	55.00	1.82	63,465.10	37.39	0.3202	1,116,498
	3,487,093.53			63,465.10			1,116,498

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.82

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 304.40 STRUCTURES AND IMPROVEMENTS - PUMPHOUSE

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 45-R2							
NET SALVAGE PERCENT.. 0							
2012	734,539.07	45.00	2.22	16,306.77	36.66	0.1853	136,132
	734,539.07			16,306.77			136,132

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.22

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 307.00 WELLS AND SPRINGS

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

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 55-R4							
NET SALVAGE PERCENT.. 0							
1988	1,104,978.54	55.00	1.82	20,110.61	22.88	0.5840	645,307
	1,104,978.54			20,110.61			645,307

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.82

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 310.00 POWER GENERATION EQUIPMENT

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 25-S3							
NET SALVAGE PERCENT.. 0							
2006	26,805.29	25.00	4.00	1,072.21	10.27	0.5892	15,794
2011	28,456.94	25.00	4.00	1,138.28	14.60	0.4160	11,838
2013	28,779.18	25.00	4.00	1,151.17	16.53	0.3388	9,750
	84,041.41			3,361.66			37,382

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 4.00

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 320.00 WATER TREATMENT EQUIPMENT

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 35-S0.5							
NET SALVAGE PERCENT.. 0							
2009	21,039.03	35.00	2.86	601.72	24.65	0.2957	6,221
2010	185,754.61	35.00	2.86	5,312.58	25.35	0.2757	51,214
	206,793.64			5,914.30			57,435

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.86

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 330.00 DISTRIBUTION RESERVOIRS AND STANDPIPES

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 45-R2.5							
NET SALVAGE PERCENT.. 0							
1988	2,760,960.27	45.00	2.22	61,293.32	17.24	0.6169	1,703,209
2010	868,254.86	45.00	2.22	19,275.26	34.45	0.2344	203,554
2012	822,904.76	45.00	2.22	18,268.49	36.23	0.1949	160,376
	4,452,119.89			98,837.07			2,067,139

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.22

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 331.00 TRANSMISSION AND DISTRIBUTION MAINS

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. IOWA 85-R1							
NET SALVAGE PERCENT.. 0							
1991	3,233,213.76	85.00	1.18	38,151.92	63.44	0.2537	820,105
2001	454,767.88	85.00	1.18	5,366.26	70.29	0.1731	78,702
2003	2,848,792.05	85.00	1.18	33,615.75	71.68	0.1567	446,434
2006	4,501,829.66	85.00	1.18	53,121.59	73.79	0.1319	593,701
2007	98,750.29	85.00	1.18	1,165.25	74.49	0.1237	12,210
2008	234,112.71	85.00	1.18	2,762.53	75.20	0.1153	26,991
2012	587,491.30	85.00	1.18	6,932.40	78.06	0.0817	47,969
	11,958,957.65			141,115.70			2,026,112

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 1.18

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 333.00 SERVICES

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

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 40-O1							
NET SALVAGE PERCENT.. 0							
1991	23,476.76	40.00	2.50	586.92	24.75	0.3813	8,951
2002	78,525.73	40.00	2.50	1,963.14	30.25	0.2438	19,141
2003	223,434.04	40.00	2.50	5,585.85	30.75	0.2313	51,669
2004	78,525.72	40.00	2.50	1,963.14	31.25	0.2188	17,178
2005	78,525.73	40.00	2.50	1,963.14	31.75	0.2063	16,196
2006	330,293.80	40.00	2.50	8,257.34	32.25	0.1938	63,994
2007	5,666.80	40.00	2.50	141.67	32.75	0.1813	1,027
2008	15,381.33	40.00	2.50	384.53	33.25	0.1688	2,596
2011	2,428.63	40.00	2.50	60.72	34.75	0.1313	319
2012	41,286.72	40.00	2.50	1,032.17	35.25	0.1188	4,903
2013	28,334.03	40.00	2.50	708.35	35.75	0.1063	3,010
2014	20,238.59	40.00	2.50	505.96	36.25	0.0938	1,897
2015	14,571.78	40.00	2.50	364.29	36.75	0.0813	1,184
2016	12,143.15	40.00	2.50	303.58	37.25	0.0688	835
2017	11,333.61	40.00	2.50	283.34	37.75	0.0563	638
2018	10,524.07	40.00	2.50	263.10	38.25	0.0438	460
2019	11,333.61	40.00	2.50	283.34	38.75	0.0313	354
2020	10,524.07	40.00	2.50	263.10	39.25	0.0188	197
2021	18,619.50	40.00	2.50	465.49	39.75	0.0063	116
	1,015,167.67			25,379.17			194,665

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.50

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 334.00 METERS AND METER INSTALLATIONS

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

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 25-R1							
NET SALVAGE PERCENT.. 0							
1991	10,097.92	25.00	4.00	403.92	6.70	0.7320	7,392
2002	33,775.75	25.00	4.00	1,351.03	12.06	0.5176	17,482
2003	33,775.75	25.00	4.00	1,351.03	12.63	0.4948	16,712
2004	33,775.75	25.00	4.00	1,351.03	13.22	0.4712	15,915
2005	33,775.75	25.00	4.00	1,351.03	13.81	0.4476	15,118
2006	36,213.18	25.00	4.00	1,448.53	14.42	0.4232	15,325
2007	6,267.67	25.00	4.00	250.71	15.04	0.3984	2,497
2008	7,312.27	25.00	4.00	292.49	15.67	0.3732	2,729
2009	7,312.27	25.00	4.00	292.49	16.32	0.3472	2,539
2010	10,446.11	25.00	4.00	417.84	16.97	0.3212	3,355
2011	14,624.55	25.00	4.00	584.98	17.63	0.2948	4,311
2012	23,329.64	25.00	4.00	933.19	18.30	0.2680	6,252
2013	25,767.06	25.00	4.00	1,030.68	18.98	0.2408	6,205
2014	22,285.02	25.00	4.00	891.40	19.66	0.2136	4,760
2015	12,883.53	25.00	4.00	515.34	20.35	0.1860	2,396
2016	20,892.21	25.00	4.00	835.69	21.04	0.1584	3,309
2017	20,544.00	25.00	4.00	821.76	21.74	0.1304	2,679
2018	20,195.80	25.00	4.00	807.83	22.45	0.1020	2,060
2019	20,544.01	25.00	4.00	821.76	23.17	0.0732	1,504
2020	20,195.81	25.00	4.00	807.83	23.89	0.0444	897
2021	22,633.23	25.00	4.00	905.33	24.63	0.0148	335
	436,647.28			17,465.89			133,772

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 4.00

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 335.00 HYDRANTS

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

YEAR (1)	ORIGINAL COST (2)	AVG. LIFE (3)	--ANNUAL ACCRUAL-- RATE (4)	AMOUNT (5)	EXP. (6)	--ACCRUED DEPREC.-- FACTOR (7)	AMOUNT (8)
SURVIVOR CURVE.. IOWA 45-R3							
NET SALVAGE PERCENT.. 0							
2012	829,074.59	45.00	2.22	18,405.46	35.81	0.2042	169,314
	829,074.59			18,405.46			169,314

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 2.22

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 343.00 TOOLS, SHOP AND GARAGE EQUIPMENT

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 20-SQUARE							
NET SALVAGE PERCENT.. 0							
2008	12,073.12	20.00	5.00	603.66	6.50	0.6750	8,149
2009	5,104.91	20.00	5.00	255.25	7.50	0.6250	3,191
2014	12,153.32	20.00	5.00	607.67	12.50	0.3750	4,557
2018	18,370.88	20.00	5.00	918.54	16.50	0.1750	3,215
	47,702.23			2,385.12			19,112

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 5.00

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CARTERET COUNTY
CARTERET COUNTY WATER SYSTEM ASSETS

ACCOUNT 346.00 COMMUNICATION EQUIPMENT

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

YEAR	ORIGINAL COST	AVG. LIFE	--ANNUAL ACCRUAL-- RATE	AMOUNT	EXP.	--ACCRUED DEPREC.-- FACTOR	AMOUNT
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SURVIVOR CURVE.. 10-SQUARE							
NET SALVAGE PERCENT.. 0							
2012	227,165.49	10.00	10.00	22,716.55	0.50	0.9500	215,807
	227,165.49			22,716.55			215,807

COMPOSITE ANNUAL ACCRUAL RATE, PERCENT .. 10.00

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Income Approach
Carteret County Water System Assets
Pro Forma Operations
Earnings Capitalization Model

		Actual			Budget Year 0
		2019	2020	2021	2022
1.	**OPERATING REVENUES (1)**				
2.	Charges for services	680,476	676,001	733,693	1,260,000
3.	Other operating revenue	31,256	17,743	4,165	0
4.	Tap Fees	0	0	0	0
5.	**Total Operating Revenues**	711,732	693,744	737,858	1,260,000
6.	**Rate Increase**				
7.	**OPERATING EXPENSES (1)**				
8.	Operating & Maintenance Expenses	729,963	766,799	677,742	596,795
9.	**Operating Expenses Before Depreciation**	729,963	766,799	677,742	596,795
10.	Depreciation (2)	369,612	364,887	364,887	364,270
11.	**Total Operating Expenses**	1,099,575	1,131,686	1,042,629	961,065
12.	**Operating Income**	(387,843)	(437,942)	(304,771)	298,935
13.	Revenues (3)	711,732	693,744	737,858	1,260,000
14.	EBITDA (4)	(18,231)	(73,055)	60,116	663,205
15.	EBIT (5)	(387,843)	(437,942)	(304,771)	298,935
16.	EBIT	(387,843)	(437,942)	(304,771)	298,935
17.	(-) Income Taxes	0	0	0	0
18.	Debt Free Net Income	(387,843)	(437,942)	(304,771)	298,935
19.	(+) Depreciation & Amortization	369,612	364,887	364,887	364,270
20.	(-) Capital Expenditures (6)	25,500	0	0	0
21.	(-) Changes in Working Capital (7)	1,495	1,457	1,550	2,646
22.	Debt Free Net Cash Flow	($45,226)	($74,512)	$58,566	$660,559

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Income Approach
Carteret County Water System Assets
Pro Forma Operations
Earnings Capitalization Model

		2022	Pro Forma 2022 (11)
		2.85% Capitalization Rate Model (No Growth)	2.85% Capitalization Rate Model (No Growth)
23.	Debt Free Net Cash Flow (10)	$660,559	$296,289
24.	Capitalization Factor: (8)	2.85%	2.85%
25.	Indicated Value (line 23 ÷ line 24)	$23,177,509	$10,396,105
		2.75% Capitalization Rate Model (0.10% Growth)	2.75% Capitalization Rate Model (0.10% Growth)
26.	Debt Free Net Cash Flow (10)	$660,559	$296,289
27.	Capitalization Factor: (9)	2.75%	2.75%
28.	Indicated Value (line 26 ÷ line 27)	$24,020,327	$10,774,145

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Income Approach

Carteret County Water System Assets

Pro Forma Operations

Earnings Capitalization Model

Notes: (1) Assumptions:

Charges for services - Pre-2023 are actual or budget. Post-2022 based on customer growth (EDU) and average revenue per customer.

OPERATING EXPENSES - increase at 3.0% annually after 2022 unless noted elsewhere. Assumed economies of scale are shown on lines below.

(2) Depreciation - Pre-2023 based on actual depreciation rate plus same rate on half of CAPX. 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-2023 based on financials/budget. Post-2022 years are estimates at 1.80% of prior year-end GROSS Property, plant and equipment.

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

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

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

(10) Final year shown, line 22.

(11) Debt Free Net Cash Flow adjusted to assume CAPX = depreciation expense.

Terms:

CAPX - Capital Expenditures

CIP - Capital improvement plan

Dep - Depreciation expense

GROSS PPE - GROSS Property, plant and equipment

IOU - Investor owned utility

MUNI - Large regional municipally owned utility

NET PPE - NET Property, plant and equipment

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Income Approach
Carteret County Water System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Actual			Budget Year 0	Estimated Year 1	Estimated Year 2
	2019	2020	2021	2022	2023	2024
1. **OPERATING REVENUES (1)**						
2. Charges for services	680,476	676,001	733,693	1,260,000	1,260,502	1,261,004
3. Other operating revenue	31,256	17,743	4,165	0	0	0
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	0	0	0	100,880
6. **Total Operating Revenues**	711,732	693,744	737,858	1,260,000	1,260,502	1,361,884
7. **Rate Increase**						**8%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	729,963	766,799	677,742	596,795	614,699	633,140
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	0	0	0
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	0	0	0	0	(6,147)	(6,331)
14. ADD: Additional O&M	0	0	0	0	0	0
15. **Operating Expenses Before Depreciation**	729,963	766,799	677,742	596,795	608,552	626,808
16. Depreciation (2)	369,612	364,887	364,887	364,270	275,396	279,617
17. **Total Operating Expenses**	1,099,575	1,131,686	1,042,629	961,065	883,948	906,425
18. **Operating Income**	(387,843)	(437,942)	(304,771)	298,935	376,554	455,459
19. Revenues (3)	711,732	693,744	737,858	1,260,000	1,260,502	1,361,884
20. EBITDA (4)	(18,231)	(73,055)	60,116	663,205	651,950	735,076
21. EBIT (5)	(387,843)	(437,942)	(304,771)	298,935	376,554	455,459
22. EBIT	(387,843)	(437,942)	(304,771)	298,935	376,554	455,459
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	(387,843)	(437,942)	(304,771)	298,935	376,554	455,459
25. (+) Depreciation & Amortization	369,612	364,887	364,887	364,270	275,396	279,617
26. (-) Capital Expenditures (6)	25,500	0	0	0	268,196	272,306
27. (-) Changes in Working Capital (7)	1,495	1,457	1,550	2,646	2,647	2,860
28. Debt Free Net Cash Flow	($45,226)	($74,512)	$58,566	$660,559	$381,107	$459,910
29. PV Time Period (mid-year)				(0.5)	0.5	1.5
					1	2
30. Present Value Factor: 2.85% (8)					0.9860	0.9587
31. Present Value Debt Free Net Cash Flow					$375,772	$440,915
					1	2
32. Present Value Factor: 2.75% (9)					0.9865	0.9601
33. Present Value Debt Free Net Cash Flow					$375,962	$441,559

See last page of this EXHIBIT for notes and assumptions.

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Income Approach
Carteret County Water System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 3	Estimated Year 4	Estimated Year 5	Estimated Year 6	Estimated Year 7	Estimated Year 8
	2025	2026	2027	2028	2029	2030
1. **OPERATING REVENUES (1)**						
2. Charges for services	1,362,969	1,364,054	1,365,279	1,407,643	1,409,051	1,410,460
3. Other operating revenue	0	0	0	0	0	0
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	40,958	0	0	42,314
6. **Total Operating Revenues**	1,362,969	1,364,054	1,406,237	1,407,643	1,409,051	1,452,774
7. **Rate Increase**			**3%**			**3%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	652,134	671,698	691,849	712,604	733,983	756,002
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	0	0	0
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(6,521)	(6,717)	(6,918)	(7,126)	(7,340)	(7,560)
14. ADD: Additional O&M	0	0	0	0	0	0
15. **Operating Expenses Before Depreciation**	645,613	664,981	684,930	705,478	726,643	748,442
16. Depreciation (2)	283,903	288,255	292,672	297,158	301,713	306,338
17. **Total Operating Expenses**	929,516	953,236	977,603	1,002,636	1,028,356	1,054,780
18. **Operating Income**	433,453	410,818	428,634	405,007	380,695	397,994
19. Revenues (3)	1,362,969	1,364,054	1,406,237	1,407,643	1,409,051	1,452,774
20. EBITDA (4)	717,356	699,073	721,307	702,165	682,408	704,332
21. EBIT (5)	433,453	410,818	428,634	405,007	380,695	397,994
22. EBIT	433,453	410,818	428,634	405,007	380,695	397,994
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	433,453	410,818	428,634	405,007	380,695	397,994
25. (+) Depreciation & Amortization	283,903	288,255	292,672	297,158	301,713	306,338
26. (-) Capital Expenditures (6)	276,480	280,718	285,020	289,389	293,824	298,328
27. (-) Changes in Working Capital (7)	2,862	2,865	2,953	2,956	2,959	3,051
28. Debt Free Net Cash Flow	$438,014	$415,490	$433,333	$409,820	$385,625	$402,953
29. PV Time Period (mid-year)	2.5	3.5	4.5	5.5	6.5	7.5
	3	4	5	6	7	8
30. Present Value Factor: 2.85% (8)	0.9322	0.9063	0.8812	0.8568	0.8331	0.8100
31. Present Value Debt Free Net Cash Flow	$408,317	$376,559	$381,853	$351,133	$321,264	$326,392
	3	4	5	6	7	8
32. Present Value Factor: 2.75% (9)	0.9344	0.9094	0.8851	0.8614	0.8383	0.8159
33. Present Value Debt Free Net Cash Flow	$409,280	$377,847	$383,543	$353,019	$323,270	$328,769

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Income Approach
Carteret County Water System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 9	Estimated Year 10	Estimated Year 11	Estimated Year 12	Estimated Year 13	Estimated Year 14
	2031	2032	2033	2034	2035	2036
1. **OPERATING REVENUES (1)**						
2. Charges for services	1,454,227	1,455,681	1,457,136	1,502,351	1,503,854	1,505,358
3. Other operating revenue	0	0	0	0	0	0
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	43,714	0	0	45,161
6. **Total Operating Revenues**	1,454,227	1,455,681	1,500,850	1,502,351	1,503,854	1,550,519
7. **Rate Increase**			**3%**			**3%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	778,682	802,043	826,104	850,887	876,414	902,706
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	0	0	0
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(7,787)	(8,020)	(8,261)	(8,509)	(8,764)	(9,027)
14. ADD: Additional O&M	0	0	0	0	0	0
15. **Operating Expenses Before Depreciation**	770,895	794,022	817,843	842,378	867,649	893,679
16. Depreciation (2)	311,033	315,800	320,641	325,555	330,544	335,611
17. **Total Operating Expenses**	1,081,928	1,109,822	1,138,483	1,167,933	1,198,194	1,229,290
18. **Operating Income**	372,299	345,859	362,367	334,418	305,660	321,229
19. Revenues (3)	1,454,227	1,455,681	1,500,850	1,502,351	1,503,854	1,550,519
20. EBITDA (4)	683,332	661,659	683,007	659,973	636,205	656,840
21. EBIT (5)	372,299	345,859	362,367	334,418	305,660	321,229
22. EBIT	372,299	345,859	362,367	334,418	305,660	321,229
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	372,299	345,859	362,367	334,418	305,660	321,229
25. (+) Depreciation & Amortization	311,033	315,800	320,641	325,555	330,544	335,611
26. (-) Capital Expenditures (6)	302,900	307,543	312,257	317,043	321,902	326,836
27. (-) Changes in Working Capital (7)	3,054	3,057	3,152	3,155	3,158	3,256
28. Debt Free Net Cash Flow	$377,378	$351,059	$367,598	$339,775	$311,144	$326,748
29. PV Time Period (mid-year)	8.5	9.5	10.5	11.5	12.5	13.5
	9	10	11	12	13	14
30. Present Value Factor: 2.85% (8)	0.7875	0.7657	0.7445	0.7239	0.7038	0.6843
31. Present Value Debt Free Net Cash Flow	$297,185	$268,806	$273,677	$245,963	$218,983	$223,594
	9	10	11	12	13	14
32. Present Value Factor: 2.75% (9)	0.7941	0.7728	0.7521	0.7320	0.7124	0.6933
33. Present Value Debt Free Net Cash Flow	$299,676	$271,298	$276,471	$248,715	$221,659	$226,534

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	Estimated Year 15	Estimated Year 16	Estimated Year 17	Estimated Year 18	Estimated Year 19	Estimated Year 20
	2037	2038	2039	2040	2041	2042
1. **OPERATING REVENUES (1)**						
2. Charges for services	1,552,069	1,553,621	1,629,823	1,631,453	1,704,940	1,706,645
3. Other operating revenue	0	0	0	0	0	0
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	74,574	0	71,784	0	66,559
6. **Total Operating Revenues**	1,552,069	1,628,195	1,629,823	1,703,237	1,704,940	1,773,204
7. **Rate Increase**		**5%**		**4%**		**4%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	929,787	957,681	986,411	1,016,004	1,046,484	1,077,878
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	0	0	0
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(9,298)	(9,577)	(9,864)	(10,160)	(10,465)	(10,779)
14. ADD: Additional O&M	0	0	0	0	0	0
15. **Operating Expenses Before Depreciation**	920,489	948,104	976,547	1,005,844	1,036,019	1,067,099
16. Depreciation (2)	340,755	345,978	351,280	356,665	362,131	367,682
17. **Total Operating Expenses**	1,261,244	1,294,082	1,327,827	1,362,509	1,398,150	1,434,781
18. **Operating Income**	290,825	334,113	301,996	340,728	306,790	338,423
19. Revenues (3)	1,552,069	1,628,195	1,629,823	1,703,237	1,704,940	1,773,204
20. EBITDA (4)	631,580	680,091	653,276	697,393	668,921	706,105
21. EBIT (5)	290,825	334,113	301,996	340,728	306,790	338,423
22. EBIT	290,825	334,113	301,996	340,728	306,790	338,423
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	290,825	334,113	301,996	340,728	306,790	338,423
25. (+) Depreciation & Amortization	340,755	345,978	351,280	356,665	362,131	367,682
26. (-) Capital Expenditures (6)	331,846	336,932	342,096	347,339	352,663	358,068
27. (-) Changes in Working Capital (7)	3,259	3,419	3,423	3,577	3,580	3,724
28. Debt Free Net Cash Flow	$296,474	$339,740	$307,757	$346,478	$312,678	$344,313
29. PV Time Period (mid-year)	14.5	15.5	16.5	17.5	18.5	19.5
	15	16	17	18	19	20
30. Present Value Factor: 2.85% (8)	0.6653	0.6469	0.6290	0.6115	0.5946	0.5781
31. Present Value Debt Free Net Cash Flow	$197,244	$219,778	$193,579	$211,871	$185,918	$199,047
	15	16	17	18	19	20
32. Present Value Factor: 2.75% (9)	0.6748	0.6567	0.6391	0.6220	0.6054	0.5892
33. Present Value Debt Free Net Cash Flow	$200,061	$223,107	$196,688	$215,509	$189,295	$202,869

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DCF With Capitalization of Terminal Value Model @ 2.85%	
	Terminal Value
Projected Debt Free Net Cash Flow (10)	$344,313
Divided by Capitalization Factor (8)	2.85%
20th Year Terminal Value	12,081,154
20th Year Present Value Factor (11)	0.5781
Present Value of Terminal Value	6,984,115
Present Value Debt Free Net	
Cash Flow for 20 Years	5,717,852
Indicated Value	$12,701,967

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 2.85%			
		Multiples (13)	Terminal Value
Projected EBIT	$338,423	23.4	$7,919,096
Projected EBITDA	706,105	15.8	11,156,453
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			10,088,125
20th Year Present Value Factor (11)			0.5781
Present Value of Terminal Value			5,831,945
Present Value Debt Free Net			
Cash Flow for 20 Years			5,717,852
Indicated Value			$11,549,797

DCF With Capitalization of Terminal Value Model @ 2.75%	
	Terminal Value
Projected Debt Free Net Cash Flow (10)	$344,313
Divided by Capitalization Factor (9)	2.75%
20th Year Terminal Value	12,520,469
20th Year Present Value Factor (12)	0.5781
Present Value of Terminal Value	7,238,083
Present Value Debt Free Net	
Cash Flow for 20 Years	5,717,852
Indicated Value	$12,955,935

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 2.75%			
		Multiples (13)	Terminal Value
Projected EBIT	$338,423	23.4	$7,919,096
Projected EBITDA	706,105	15.8	11,156,453
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			10,088,125
20th Year Present Value Factor (12)			0.5781
Present Value of Terminal Value			5,831,945
Present Value Debt Free Net			
Cash Flow for 20 Years			5,717,852
Indicated Value			$11,549,797

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Notes: (1) Assumptions:

Charges for services - Pre-2023 are actual or budget. Post-2021 based on customer growth (EDU) and average revenue per customer. Rate increases (Other rate increase line item) are added year after they occur.

Other (Rate Increase) - Assumed purchase by MUNI at end of 2022 with shown rate increases.

OPERATING EXPENSES - increase at 3.0% annually after 2022 unless noted elsewhere. Assumed economies of scale are shown on lines below. O&M Expenses - Post-2022 assumed 10% savings due to economies of scale. Increase at 3.0% afterwards.

No Additional O&M.

(2) Depreciation - Pre-2023 based on actual depreciation rate plus same rate on half of CAPX. 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-2023 based on financials/budget. Post-2022 years are estimates at 1.80% of prior year-end GROSS Property, plant and equipment.

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

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

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

(10) Final year shown, line 28.

(11) Final year shown, line 30.

(12) Final year shown, line 30.

(13) Developed on Market Multiples EXHIBIT 17.

Terms:

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

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	Actual			Budget	Estimated	Estimated
				Year 0	Year 1	Year 2
	2019	2020	2021	2022	2023	2024
1. **OPERATING REVENUES (1)**						
2. Charges for services	680,476	676,001	733,693	1,260,000	1,260,502	1,261,004
3. Other operating revenue	31,256	17,743	4,165	0	0	0
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	0	0	0	630,502
6. **Total Operating Revenues**	711,732	693,744	737,858	1,260,000	1,260,502	1,891,506
7. **Rate Increase**						**50%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	729,963	766,799	677,742	596,795	614,699	633,140
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	0	0	0
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	0	0	0	0	(6,147)	(6,331)
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: Prop Tax & Reg Assessment	0	0	0	0	135,919	135,884
16. **Operating Expenses Before Depreciation**	729,963	766,799	677,742	596,795	744,471	762,692
17. Depreciation (2)	369,612	364,887	364,887	364,270	275,396	279,617
18. **Total Operating Expenses**	1,099,575	1,131,686	1,042,629	961,065	1,019,867	1,042,309
19. **Operating Income**	(387,843)	(437,942)	(304,771)	298,935	240,635	849,197
20. Revenues (3)	711,732	693,744	737,858	1,260,000	1,260,502	1,891,506
21. EBITDA (4)	(18,231)	(73,055)	60,116	663,205	516,031	1,128,814
22. EBIT (5)	(387,843)	(437,942)	(304,771)	298,935	240,635	849,197
23. EBIT	(387,843)	(437,942)	(304,771)	298,935	240,635	849,197
24. (-) Income Taxes	0	0	0	68,695	55,298	195,145
25. Debt Free Net Income	(387,843)	(437,942)	(304,771)	230,240	185,337	654,052
26. (+) Depreciation & Amortization	369,612	364,887	364,887	364,270	275,396	279,617
27. (-) Capital Expenditures (6)	25,500	0	0	0	268,196	272,306
28. (-) Changes in Working Capital (7)	1,495	1,457	1,550	2,646	2,647	3,972
29. Debt Free Net Cash Flow	($45,226)	($74,512)	$58,566	$591,864	$189,890	$657,390
30. PV Time Period (mid-year)				(0.5)	0.5	1.5
31. Present Value Factor: 6.59% (8)					0.9686	0.9087
32. Present Value Debt Free Net Cash Flow					$183,928	$597,371
					1	2
33. Present Value Factor: 8.50% (9)					0.9600	0.8848
34. Present Value Debt Free Net Cash Flow					$182,294	$581,659
					1	2
35. Present Value Factor: 6.49% (8)					0.9690	0.9100
36. Present Value Debt Free Net Cash Flow					$184,003	$598,225
					1	2
37. Present Value Factor: 8.40% (9)					0.9605	0.8860
38. Present Value Debt Free Net Cash Flow					$182,389	$582,448

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Income Approach
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DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 3	Estimated Year 4	Estimated Year 5	Estimated Year 6	Estimated Year 7	Estimated Year 8
	2025	2026	2027	2028	2029	2030
1. **OPERATING REVENUES (1)**						
2. Charges for services	1,893,013	1,894,519	1,896,220	1,993,022	1,995,015	1,997,010
3. Other operating revenue	0	0	0	0	0	0
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	94,811	0	0	59,910
6. **Total Operating Revenues**	1,893,013	1,894,519	1,991,031	1,993,022	1,995,015	2,056,920
7. **Rate Increase**			**5%**			**3%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	652,134	671,698	691,849	712,604	733,983	756,002
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	0	0	0
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(6,521)	(6,717)	(6,918)	(7,126)	(7,340)	(7,560)
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: Prop Tax & Reg Assessment	161,888	161,894	161,898	165,824	165,847	165,869
16. **Operating Expenses Before Depreciation**	807,501	826,875	846,828	871,302	892,490	914,311
17. Depreciation (2)	283,903	288,255	292,672	297,158	301,713	306,338
18. **Total Operating Expenses**	1,091,404	1,115,130	1,139,501	1,168,460	1,194,203	1,220,649
19. **Operating Income**	801,609	779,389	851,530	824,562	800,812	836,271
20. Revenues (3)	1,893,013	1,894,519	1,991,031	1,993,022	1,995,015	2,056,920
21. EBITDA (4)	1,085,512	1,067,644	1,144,203	1,121,720	1,102,525	1,142,609
22. EBIT (5)	801,609	779,389	851,530	824,562	800,812	836,271
23. EBIT	801,609	779,389	851,530	824,562	800,812	836,271
24. (-) Income Taxes	184,210	179,104	195,682	189,484	184,027	192,175
25. Debt Free Net Income	617,399	600,285	655,848	635,078	616,785	644,096
26. (+) Depreciation & Amortization	283,903	288,255	292,672	297,158	301,713	306,338
27. (-) Capital Expenditures (6)	276,480	280,718	285,020	289,389	293,824	298,328
28. (-) Changes in Working Capital (7)	3,975	3,978	4,181	4,185	4,190	4,320
29. Debt Free Net Cash Flow	$620,847	$603,843	$659,319	$638,661	$620,485	$647,786
30. PV Time Period (mid-year)	2.5	3.5	4.5	5.5	6.5	7.5
31. Present Value Factor: 6.59% (8)	0.8525	0.7998	0.7504	0.7040	0.6605	0.6196
32. Present Value Debt Free Net Cash Flow	$529,272	$482,954	$494,753	$449,618	$409,830	$401,368
	3	4	5	6	7	8
33. Present Value Factor: 8.50% (9)	0.8155	0.7516	0.6927	0.6385	0.5884	0.5423
34. Present Value Debt Free Net Cash Flow	$506,301	$453,849	$456,711	$407,785	$365,093	$351,295
	3	4	5	6	7	8
35. Present Value Factor: 6.49% (8)	0.8545	0.8025	0.7535	0.7076	0.6645	0.6240
36. Present Value Debt Free Net Cash Flow	$530,514	$484,584	$496,797	$451,917	$412,312	$404,219
	3	4	5	6	7	8
37. Present Value Factor: 8.40% (9)	0.8174	0.7540	0.6956	0.6417	0.5920	0.5461
38. Present Value Debt Free Net Cash Flow	$507,480	$455,298	$458,623	$409,829	$367,327	$353,756

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	Estimated Year 9	Estimated Year 10	Estimated Year 11	Estimated Year 12	Estimated Year 13	Estimated Year 14
	2031	2032	2033	2034	2035	2036
1. **OPERATING REVENUES (1)**						
2. Charges for services	2,058,978	2,061,037	2,063,098	2,147,767	2,149,915	2,152,065
3. Other operating revenue	0	0	0	0	0	0
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	82,524	0	0	86,083
6. **Total Operating Revenues**	2,058,978	2,061,037	2,145,622	2,147,767	2,149,915	2,238,148
7. **Rate Increase**			**4%**			**4%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	778,682	802,043	826,104	850,887	876,414	902,706
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	0	0	0
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(7,787)	(8,020)	(8,261)	(8,509)	(8,764)	(9,027)
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: Prop Tax & Reg Assessment	168,364	168,386	168,406	171,836	171,859	171,882
16. **Operating Expenses Before Depreciation**	939,259	962,408	986,249	1,014,214	1,039,508	1,065,561
17. Depreciation (2)	311,033	315,800	320,641	325,555	330,544	335,611
18. **Total Operating Expenses**	1,250,292	1,278,208	1,306,889	1,339,769	1,370,053	1,401,172
19. **Operating Income**	808,686	782,829	838,733	807,998	779,862	836,976
20. Revenues (3)	2,058,978	2,061,037	2,145,622	2,147,767	2,149,915	2,238,148
21. EBITDA (4)	1,119,719	1,098,629	1,159,373	1,133,553	1,110,407	1,172,587
22. EBIT (5)	808,686	782,829	838,733	807,998	779,862	836,976
23. EBIT	808,686	782,829	838,733	807,998	779,862	836,976
24. (-) Income Taxes	185,836	179,894	192,741	185,678	179,212	192,337
25. Debt Free Net Income	622,850	602,935	645,992	622,320	600,650	644,639
26. (+) Depreciation & Amortization	311,033	315,800	320,641	325,555	330,544	335,611
27. (-) Capital Expenditures (6)	302,900	307,543	312,257	317,043	321,902	326,836
28. (-) Changes in Working Capital (7)	4,324	4,328	4,506	4,510	4,515	4,700
29. Debt Free Net Cash Flow	$626,659	$606,864	$649,869	$626,322	$604,778	$648,714
30. PV Time Period (mid-year)	8.5	9.5	10.5	11.5	12.5	13.5
31. Present Value Factor: 6.59% (8)	0.5813	0.5454	0.5117	0.4800	0.4503	0.4225
32. Present Value Debt Free Net Cash Flow	$364,277	$330,983	$332,538	$300,634	$272,331	$274,082
	9	10	11	12	13	14
33. Present Value Factor: 8.50% (9)	0.4999	0.4607	0.4246	0.3913	0.3607	0.3324
34. Present Value Debt Free Net Cash Flow	$313,267	$279,582	$275,935	$245,080	$218,143	$215,633
	9	10	11	12	13	14
35. Present Value Factor: 6.49% (8)	0.5860	0.5503	0.5167	0.4852	0.4557	0.4279
36. Present Value Debt Free Net Cash Flow	$367,222	$333,957	$335,788	$303,891	$275,597	$277,585
	9	10	11	12	13	14
37. Present Value Factor: 8.40% (9)	0.5038	0.4648	0.4287	0.3955	0.3649	0.3366
38. Present Value Debt Free Net Cash Flow	$315,711	$282,070	$278,599	$247,710	$220,683	$218,357

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Income Approach
Carteret County Water System Assets
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DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 15	Estimated Year 16	Estimated Year 17	Estimated Year 18	Estimated Year 19	Estimated Year 20
	2037	2038	2039	2040	2041	2042
1. **OPERATING REVENUES (1)**						
2. Charges for services	2,240,386	2,242,626	2,300,990	2,303,291	2,374,763	2,377,137
3. Other operating revenue	0	0	0	0	0	0
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	56,066	0	69,099	0	71,314
6. **Total Operating Revenues**	2,240,386	2,298,692	2,300,990	2,372,390	2,374,763	2,448,451
7. **Rate Increase**		**3%**		**3%**		**3%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	929,787	957,681	986,411	1,016,004	1,046,484	1,077,878
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	0	0	0
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(9,298)	(9,577)	(9,864)	(10,160)	(10,465)	(10,779)
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: Prop Tax & Reg Assessment	175,458	175,482	177,820	177,844	180,721	180,746
16. **Operating Expenses Before Depreciation**	1,095,947	1,123,586	1,154,367	1,183,688	1,216,740	1,247,845
17. Depreciation (2)	340,755	345,978	351,280	356,665	362,131	367,682
18. **Total Operating Expenses**	1,436,702	1,469,564	1,505,647	1,540,353	1,578,871	1,615,527
19. **Operating Income**	803,684	829,128	795,343	832,037	795,892	832,924
20. Revenues (3)	2,240,386	2,298,692	2,300,990	2,372,390	2,374,763	2,448,451
21. EBITDA (4)	1,144,439	1,175,106	1,146,623	1,188,702	1,158,023	1,200,606
22. EBIT (5)	803,684	829,128	795,343	832,037	795,892	832,924
23. EBIT	803,684	829,128	795,343	832,037	795,892	832,924
24. (-) Income Taxes	184,687	190,534	182,770	191,202	182,896	191,406
25. Debt Free Net Income	618,997	638,594	612,573	640,835	612,996	641,518
26. (+) Depreciation & Amortization	340,755	345,978	351,280	356,665	362,131	367,682
27. (-) Capital Expenditures (6)	331,846	336,932	342,096	347,339	352,663	358,068
28. (-) Changes in Working Capital (7)	4,705	4,827	4,832	4,982	4,987	5,142
29. Debt Free Net Cash Flow	$623,201	$642,813	$616,925	$645,179	$617,477	$645,990
30. PV Time Period (mid-year)	14.5	15.5	16.5	17.5	18.5	19.5
31. Present Value Factor: 6.59% (8)	0.3964	0.3719	0.3489	0.3273	0.3071	0.2881
32. Present Value Debt Free Net Cash Flow	$247,037	$239,062	$215,245	$211,167	$189,627	$186,110
	15	16	17	18	19	20
33. Present Value Factor: 8.50% (9)	0.3064	0.2824	0.2603	0.2399	0.2211	0.2038
34. Present Value Debt Free Net Cash Flow	$190,949	$181,530	$160,586	$154,779	$136,524	$131,653
	15	16	17	18	19	20
35. Present Value Factor: 6.49% (8)	0.4018	0.3773	0.3543	0.3327	0.3125	0.2934
36. Present Value Debt Free Net Cash Flow	$250,402	$242,533	$218,576	$214,651	$192,962	$189,533
	15	16	17	18	19	20
37. Present Value Factor: 8.40% (9)	0.3105	0.2864	0.2643	0.2438	0.2249	0.2075
38. Present Value Debt Free Net Cash Flow	$193,504	$184,102	$163,053	$157,295	$138,871	$134,043

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DCF With Capitalization of Terminal Value Model and
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DCF With Capitalization of Terminal Value Model @ 6.59%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$645,990
Divided by Capitalization Factor (8)	6.59%
20th Year Terminal Value	9,802,578
20th Year Present Value Factor (11)	0.2881
Present Value of Terminal Value	2,824,123
Present Value Debt Free Net Cash Flow for 20 Years	6,712,188
Indicated Value	$9,536,310

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 6.59%		Multiples (13)	Terminal Value
Projected EBIT	$832,924	23.4	$19,490,419
Projected EBITDA	1,200,606	15.8	18,969,569
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			19,141,450
20th Year Present Value Factor (11)			0.2881
Present Value of Terminal Value			5,514,652
Present Value Debt Free Net Cash Flow for 20 Years			6,712,188
Indicated Value			$12,226,839

DCF With Capitalization of Terminal Value Model @ 8.50%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$645,990
Divided by Capitalization Factor (9)	8.50%
20th Year Terminal Value	7,599,881
20th Year Present Value Factor (12)	0.2038
Present Value of Terminal Value	1,548,856
Present Value Debt Free Net Cash Flow for 20 Years	5,808,646
Indicated Value	$7,357,501

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 8.50%		Multiples (13)	Terminal Value
Projected EBIT	$832,924	23.4	$19,490,419
Projected EBITDA	1,200,606	15.8	18,969,569
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			19,141,450
20th Year Present Value Factor (12)			0.2038
Present Value of Terminal Value			3,901,028
Present Value Debt Free Net Cash Flow for 20 Years			5,808,646
Indicated Value			$9,709,673

DCF With Capitalization of Terminal Value Model @ 6.49%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$645,990
Divided by Capitalization Factor (8)	6.49%
20th Year Terminal Value	9,953,619
20th Year Present Value Factor (11)	0.2881
Present Value of Terminal Value	2,867,638
Present Value Debt Free Net Cash Flow for 20 Years	6,712,188
Indicated Value	$9,579,825

DCF With Capitalization of Terminal Value Model @ 8.40%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$645,990
Divided by Capitalization Factor (9)	8.40%
20th Year Terminal Value	7,690,356
20th Year Present Value Factor (12)	0.2038
Present Value of Terminal Value	1,567,294
Present Value Debt Free Net Cash Flow for 20 Years	5,808,646
Indicated Value	$7,375,940

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Notes: (1) Assumptions:

Charges for services - Pre-2023 are actual or budget. Post-2022 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 2022 with shown rate increases.

OPERATING EXPENSES - increase at 3.0% annually after 2022 unless noted elsewhere. Assumed economies of scale are shown on lines below.
O&M Expenses - Post-2022 assumed 10% savings due to economies of scale. Increase at 3.0% afterwards.

No Additional O&M.

Property Tax & Reg Assessment - 2023 assumed due to IOU purchase at the end of 2022.

(2) Depreciation - Pre-2023 based on actual depreciation rate plus same rate on half of CAPX. 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-2023 based on financials/budget. Post-2022 years are estimates at 1.80% of prior year-end GROSS Property, plant and equipment.

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

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

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

(10) Final year shown, line 29.

(11) Final year shown, line 31.

(12) Final year shown, line 33.

(13) Developed on Market Multiples EXHIBIT 17.

Terms:

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

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	Actual			Budget	Estimated	Estimated
				Year 0	Year 1	Year 2
	2019	2020	2021	2022	2023	2024
1. **OPERATING REVENUES (1)**						
2. Charges for services	680,476	676,001	733,693	1,260,000	1,260,502	1,261,004
3. Other operating revenue	31,256	17,743	4,165	0	0	0
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	0	0	0	176,541
6. **Total Operating Revenues**	711,732	693,744	737,858	1,260,000	1,260,502	1,437,545
7. **Rate Increase**						**14%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	729,963	766,799	677,742	596,795	614,699	633,140
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	0	0	0
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	0	0	0	0	(6,147)	(6,331)
14. ADD: Additional O&M	0	0	0	0	0	0
15. **Operating Expenses Before Depreciation**	729,963	766,799	677,742	596,795	608,552	626,808
16. Depreciation (2)	369,612	364,887	364,887	364,270	270,887	274,836
17. **Total Operating Expenses**	1,099,575	1,131,686	1,042,629	961,065	879,439	901,645
18. **Operating Income**	(387,843)	(437,942)	(304,771)	298,935	381,063	535,900
19. Revenues (3)	711,732	693,744	737,858	1,260,000	1,260,502	1,437,545
20. EBITDA (4)	(18,231)	(73,055)	60,116	663,205	651,950	810,737
21. EBIT (5)	(387,843)	(437,942)	(304,771)	298,935	381,063	535,900
22. EBIT	(387,843)	(437,942)	(304,771)	298,935	381,063	535,900
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	(387,843)	(437,942)	(304,771)	298,935	381,063	535,900
25. (+) Depreciation & Amortization	369,612	364,887	364,887	364,270	270,887	274,836
26. (-) Capital Expenditures (6)	25,500	0	0	0	263,886	267,732
27. (-) Changes in Working Capital (7)	1,495	1,457	1,550	2,646	2,647	3,019
28. Debt Free Net Cash Flow	($45,226)	($74,512)	$58,566	$660,559	$385,417	$539,986
29. PV Time Period (mid-year)				(0.5)	0.5	1.5
					1	2
30. Present Value Factor: 2.85% (8)					0.9860	0.9587
31. Present Value Debt Free Net Cash Flow					$380,021	$517,684
					1	2
32. Present Value Factor: 2.75% (9)					0.9865	0.9601
33. Present Value Debt Free Net Cash Flow					$380,214	$518,440

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Income Approach
Carteret County Water System Assets
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DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 3	Estimated Year 4	Estimated Year 5	Estimated Year 6	Estimated Year 7	Estimated Year 8
	2025	2026	2027	2028	2029	2030
1. **OPERATING REVENUES (1)**						
2. Charges for services	1,438,690	1,439,835	1,441,127	1,504,599	1,506,104	1,507,610
3. Other operating revenue	0	0	0	0	0	0
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	61,968	0	0	64,827
6. **Total Operating Revenues**	1,438,690	1,439,835	1,503,095	1,504,599	1,506,104	1,572,437
7. **Rate Increase**			**4%**			**4%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	652,134	671,698	691,849	712,604	733,983	756,002
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	0	0	0
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(6,521)	(6,717)	(6,918)	(7,126)	(7,340)	(7,560)
14. ADD: Additional O&M	0	0	0	0	0	0
15. **Operating Expenses Before Depreciation**	645,613	664,981	684,930	705,478	726,643	748,442
16. Depreciation (2)	278,843	282,907	287,032	291,215	295,460	299,768
17. **Total Operating Expenses**	924,455	947,888	971,962	996,694	1,022,103	1,048,210
18. **Operating Income**	514,235	491,947	531,133	507,905	484,001	524,227
19. Revenues (3)	1,438,690	1,439,835	1,503,095	1,504,599	1,506,104	1,572,437
20. EBITDA (4)	793,077	774,854	818,165	799,121	779,461	823,995
21. EBIT (5)	514,235	491,947	531,133	507,905	484,001	524,227
22. EBIT	514,235	491,947	531,133	507,905	484,001	524,227
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	514,235	491,947	531,133	507,905	484,001	524,227
25. (+) Depreciation & Amortization	278,843	282,907	287,032	291,215	295,460	299,768
26. (-) Capital Expenditures (6)	271,635	275,595	279,612	283,689	287,824	292,020
27. (-) Changes in Working Capital (7)	3,021	3,024	3,156	3,160	3,163	3,302
28. Debt Free Net Cash Flow	$518,421	$496,235	$535,396	$512,272	$488,474	$528,673
29. PV Time Period (mid-year)	2.5	3.5	4.5	5.5	6.5	7.5
	3	4	5	6	7	8
30. Present Value Factor: 2.85% (8)	0.9322	0.9063	0.8812	0.8568	0.8331	0.8100
31. Present Value Debt Free Net Cash Flow	$483,272	$449,738	$471,791	$438,915	$406,948	$428,225
	3	4	5	6	7	8
32. Present Value Factor: 2.75% (9)	0.9344	0.9094	0.8851	0.8614	0.8383	0.8159
33. Present Value Debt Free Net Cash Flow	$484,413	$451,276	$473,879	$441,271	$409,488	$431,344

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	Estimated Year 9	Estimated Year 10	Estimated Year 11	Estimated Year 12	Estimated Year 13	Estimated Year 14
	2031	2032	2033	2034	2035	2036
1. **OPERATING REVENUES (1)**						
2. Charges for services	1,574,009	1,575,583	1,577,159	1,646,622	1,648,268	1,649,917
3. Other operating revenue	0	0	0	0	0	0
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	67,818	0	0	70,946
6. **Total Operating Revenues**	1,574,009	1,575,583	1,644,977	1,646,622	1,648,268	1,720,863
7. **Rate Increase**			**4%**			**4%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	778,682	802,043	826,104	850,887	876,414	902,706
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	0	0	0
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(7,787)	(8,020)	(8,261)	(8,509)	(8,764)	(9,027)
14. ADD: Additional O&M	0	0	0	0	0	0
15. **Operating Expenses Before Depreciation**	770,895	794,022	817,843	842,378	867,649	893,679
16. Depreciation (2)	304,137	308,571	313,070	317,633	322,264	326,961
17. **Total Operating Expenses**	1,075,033	1,102,593	1,130,913	1,160,011	1,189,913	1,220,640
18. **Operating Income**	498,976	472,990	514,064	486,611	458,355	500,223
19. Revenues (3)	1,574,009	1,575,583	1,644,977	1,646,622	1,648,268	1,720,863
20. EBITDA (4)	803,114	781,561	827,134	804,244	780,619	827,184
21. EBIT (5)	498,976	472,990	514,064	486,611	458,355	500,223
22. EBIT	498,976	472,990	514,064	486,611	458,355	500,223
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	498,976	472,990	514,064	486,611	458,355	500,223
25. (+) Depreciation & Amortization	304,137	308,571	313,070	317,633	322,264	326,961
26. (-) Capital Expenditures (6)	296,277	300,596	304,978	309,423	313,934	318,510
27. (-) Changes in Working Capital (7)	3,305	3,309	3,454	3,458	3,461	3,614
28. Debt Free Net Cash Flow	$503,531	$477,656	$518,702	$491,363	$463,223	$505,060
29. PV Time Period (mid-year)	8.5	9.5	10.5	11.5	12.5	13.5
	9	10	11	12	13	14
30. Present Value Factor: 2.85% (8)	0.7875	0.7657	0.7445	0.7239	0.7038	0.6843
31. Present Value Debt Free Net Cash Flow	$396,531	$365,741	$386,173	$355,698	$326,016	$345,613
	9	10	11	12	13	14
32. Present Value Factor: 2.75% (9)	0.7941	0.7728	0.7521	0.7320	0.7124	0.6933
33. Present Value Debt Free Net Cash Flow	$399,854	$369,133	$390,116	$359,678	$330,000	$350,158

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	Estimated Year 15	Estimated Year 16	Estimated Year 17	Estimated Year 18	Estimated Year 19	Estimated Year 20
	2037	2038	2039	2040	2041	2042
1. **OPERATING REVENUES (1)**						
2. Charges for services	1,722,584	1,724,307	1,788,168	1,789,956	1,856,249	1,858,105
3. Other operating revenue	0	0	0	0	0	0
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	62,075	0	64,438	0	66,892
6. **Total Operating Revenues**	1,722,584	1,786,382	1,788,168	1,854,394	1,856,249	1,924,997
7. **Rate Increase**		**4%**		**4%**		**4%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	929,787	957,681	986,411	1,016,004	1,046,484	1,077,878
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	0	0	0
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(9,298)	(9,577)	(9,864)	(10,160)	(10,465)	(10,779)
14. ADD: Additional O&M	0	0	0	0	0	0
15. **Operating Expenses Before Depreciation**	920,489	948,104	976,547	1,005,844	1,036,019	1,067,099
16. Depreciation (2)	331,728	336,564	341,470	346,447	351,498	356,622
17. **Total Operating Expenses**	1,252,217	1,284,668	1,318,017	1,352,291	1,387,517	1,423,721
18. **Operating Income**	470,367	501,714	470,151	502,103	468,732	501,276
19. Revenues (3)	1,722,584	1,786,382	1,788,168	1,854,394	1,856,249	1,924,997
20. EBITDA (4)	802,095	838,278	811,621	848,550	820,230	857,898
21. EBIT (5)	470,367	501,714	470,151	502,103	468,732	501,276
22. EBIT	470,367	501,714	470,151	502,103	468,732	501,276
23. (-) Income Taxes	0	0	0	0	0	0
24. Debt Free Net Income	470,367	501,714	470,151	502,103	468,732	501,276
25. (+) Depreciation & Amortization	331,728	336,564	341,470	346,447	351,498	356,622
26. (-) Capital Expenditures (6)	323,153	327,864	332,644	337,493	342,413	347,404
27. (-) Changes in Working Capital (7)	3,617	3,751	3,755	3,894	3,898	4,042
28. Debt Free Net Cash Flow	$475,324	$506,663	$475,222	$507,163	$473,919	$506,451
29. PV Time Period (mid-year)	14.5	15.5	16.5	17.5	18.5	19.5
	15	16	17	18	19	20
30. Present Value Factor: 2.85% (8)	0.6653	0.6469	0.6290	0.6115	0.5946	0.5781
31. Present Value Debt Free Net Cash Flow	$316,233	$327,760	$298,914	$310,130	$281,792	$292,779
	15	16	17	18	19	20
32. Present Value Factor: 2.75% (9)	0.6748	0.6567	0.6391	0.6220	0.6054	0.5892
33. Present Value Debt Free Net Cash Flow	$320,749	$332,725	$303,714	$315,456	$286,911	$298,401

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Income Approach
Carteret County Water System Assets
Pro Forma and Estimted Operations With MUNI Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

DCF With Capitalization of Terminal Value Model @ 2.85%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$506,451
Divided by Capitalization Factor (8)	2.85%
20th Year Terminal Value	17,770,215
20th Year Present Value Factor (11)	0.5781
Present Value of Terminal Value	10,272,961
Present Value Debt Free Net Cash Flow for 20 Years	7,579,977
Indicated Value	$17,852,938

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 2.85%		Multiples (13)	Terminal Value
Projected EBIT	$501,276	23.4	$11,729,849
Projected EBITDA	857,898	15.8	13,554,783
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			12,952,555
20th Year Present Value Factor (11)			0.5781
Present Value of Terminal Value			7,487,872
Present Value Debt Free Net Cash Flow for 20 Years			7,579,977
Indicated Value			$15,067,849

DCF With Capitalization of Terminal Value Model @ 2.75%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$506,451
Divided by Capitalization Factor (9)	2.75%
20th Year Terminal Value	18,416,405
20th Year Present Value Factor (12)	0.5781
Present Value of Terminal Value	10,646,524
Present Value Debt Free Net Cash Flow for 20 Years	7,579,977
Indicated Value	$18,226,500

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 2.75%		Multiples (13)	Terminal Value
Projected EBIT	$501,276	23.4	$11,729,849
Projected EBITDA	857,898	15.8	13,554,783
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			12,952,555
20th Year Present Value Factor (12)			0.5781
Present Value of Terminal Value			7,487,872
Present Value Debt Free Net Cash Flow for 20 Years			7,579,977
Indicated Value			$15,067,849

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Income Approach

Carteret County Water System Assets

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DCF With Capitalization of Terminal Value Model and

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Notes: (1) Assumptions:

Charges for services - Pre-2023 are actual or budget. Post-2021 based on customer growth (EDU) and average revenue per customer. Rate increases (Other rate increase line item) are added year after they occur.

Other (Rate Increase) - Assumed purchase by MUNI at end of 2022 with shown rate increases.

OPERATING EXPENSES - increase at 3.0% annually after 2022 unless noted elsewhere. Assumed economies of scale are shown on lines below. O&M Expenses - Post-2022 assumed 10% savings due to economies of scale. Increase at 3.0% afterwards.

No Additional O&M.

(2) Depreciation - Pre-2023 based on actual depreciation rate plus same rate on half of CAPX. 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-2023 based on financials/budget. Post-2022 years are estimates at 1.72% of prior year-end GROSS Property, plant and equipment.

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

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

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

(10) Final year shown, line 28.

(11) Final year shown, line 30.

(12) Final year shown, line 30.

(13) Developed on Market Multiples EXHIBIT 17.

Terms:

CAPX - Capital Expenditures

CIP - Capital improvement plan

Dep - Depreciation expense

GROSS PPE - GROSS Property, plant and equipment

IOU - Investor owned utility

MUNI - Large regional municipally owned utility

NET PPE - NET Property, plant and equipment

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DCF With Capitalization of Terminal Value Model and
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	Actual			Budget Year 0	Estimated Year 1	Estimated Year 2
	2019	2020	2021	2022	2023	2024
1. **OPERATING REVENUES (1)**						
2. Charges for services	680,476	676,001	733,693	1,260,000	1,260,502	1,261,004
3. Other operating revenue	31,256	17,743	4,165	0	0	0
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	0	0	0	1,008,803
6. **Total Operating Revenues**	711,732	693,744	737,858	1,260,000	1,260,502	2,269,807
7. **Rate Increase**						**80%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	729,963	766,799	677,742	596,795	614,699	633,140
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	0	0	0
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	0	0	0	0	(6,147)	(6,331)
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: Prop Tax & Reg Assessment	0	0	0	0	167,712	167,679
16. **Operating Expenses Before Depreciation**	729,963	766,799	677,742	596,795	776,264	794,487
17. Depreciation (2)	369,612	364,887	364,887	364,270	270,887	274,836
18. **Total Operating Expenses**	1,099,575	1,131,686	1,042,629	961,065	1,047,151	1,069,324
19. **Operating Income**	(387,843)	(437,942)	(304,771)	298,935	213,351	1,200,483
20. Revenues (3)	711,732	693,744	737,858	1,260,000	1,260,502	2,269,807
21. EBITDA (4)	(18,231)	(73,055)	60,116	663,205	484,238	1,475,320
22. EBIT (5)	(387,843)	(437,942)	(304,771)	298,935	213,351	1,200,483
23. EBIT	(387,843)	(437,942)	(304,771)	298,935	213,351	1,200,483
24. (-) Income Taxes	0	0	0	68,695	49,028	275,871
25. Debt Free Net Income	(387,843)	(437,942)	(304,771)	230,240	164,323	924,612
26. (+) Depreciation & Amortization	369,612	364,887	364,887	364,270	270,887	274,836
27. (-) Capital Expenditures (6)	25,500	0	0	0	263,886	267,732
28. (-) Changes in Working Capital (7)	1,495	1,457	1,550	2,646	2,647	4,767
29. Debt Free Net Cash Flow	($45,226)	($74,512)	$58,566	$591,864	$168,677	$926,950
30. PV Time Period (mid-year)				(0.5)	0.5	1.5
31. Present Value Factor: 6.59% (8)					0.9686	0.9087
32. Present Value Debt Free Net Cash Flow					$163,381	$842,319
					1	2
33. Present Value Factor: 8.50% (9)					0.9600	0.8848
34. Present Value Debt Free Net Cash Flow					$161,930	$820,165
					1	2
35. Present Value Factor: 6.49% (8)					0.9690	0.9100
36. Present Value Debt Free Net Cash Flow					$163,448	$843,524
					1	2
37. Present Value Factor: 8.40% (9)					0.9605	0.8860
38. Present Value Debt Free Net Cash Flow					$162,014	$821,278

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Income Approach
Carteret County Water System Assets
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DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 3	Estimated Year 4	Estimated Year 5	Estimated Year 6	Estimated Year 7	Estimated Year 8
	2025	2026	2027	2028	2029	2030
1. **OPERATING REVENUES (1)**						
2. Charges for services	2,271,615	2,273,423	2,275,464	2,380,238	2,382,618	2,385,001
3. Other operating revenue	0	0	0	0	0	0
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	102,396	0	0	71,550
6. **Total Operating Revenues**	2,271,615	2,273,423	2,377,860	2,380,238	2,382,618	2,456,551
7. **Rate Increase**			**5%**			**3%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	652,134	671,698	691,849	712,604	733,983	756,002
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	0	0	0
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(6,521)	(6,717)	(6,918)	(7,126)	(7,340)	(7,560)
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: Prop Tax & Reg Assessment	209,309	209,328	209,346	213,602	213,643	213,682
16. **Operating Expenses Before Depreciation**	854,922	874,309	894,276	919,080	940,286	962,124
17. Depreciation (2)	278,843	282,907	287,032	291,215	295,460	299,768
18. **Total Operating Expenses**	1,133,764	1,157,216	1,181,308	1,210,296	1,235,746	1,261,892
19. **Operating Income**	1,137,851	1,116,207	1,196,552	1,169,942	1,146,872	1,194,659
20. Revenues (3)	2,271,615	2,273,423	2,377,860	2,380,238	2,382,618	2,456,551
21. EBITDA (4)	1,416,693	1,399,114	1,483,584	1,461,158	1,442,332	1,494,427
22. EBIT (5)	1,137,851	1,116,207	1,196,552	1,169,942	1,146,872	1,194,659
23. EBIT	1,137,851	1,116,207	1,196,552	1,169,942	1,146,872	1,194,659
24. (-) Income Taxes	261,478	256,504	274,968	268,853	263,551	274,533
25. Debt Free Net Income	876,373	859,703	921,584	901,089	883,321	920,126
26. (+) Depreciation & Amortization	278,843	282,907	287,032	291,215	295,460	299,768
27. (-) Capital Expenditures (6)	271,635	275,595	279,612	283,689	287,824	292,020
28. (-) Changes in Working Capital (7)	4,770	4,774	4,994	4,998	5,003	5,159
29. Debt Free Net Cash Flow	$878,810	$862,241	$924,010	$903,617	$885,954	$922,715
30. PV Time Period (mid-year)	2.5	3.5	4.5	5.5	6.5	7.5
31. Present Value Factor: 6.59% (8)	0.8525	0.7998	0.7504	0.7040	0.6605	0.6196
32. Present Value Debt Free Net Cash Flow	$749,185	$689,620	$693,377	$636,146	$585,172	$571,714
	3	4	5	6	7	8
33. Present Value Factor: 8.50% (9)	0.8155	0.7516	0.6927	0.6385	0.5884	0.5423
34. Present Value Debt Free Net Cash Flow	$716,670	$648,060	$640,062	$576,960	$521,295	$500,388
	3	4	5	6	7	8
35. Present Value Factor: 6.49% (8)	0.8545	0.8025	0.7535	0.7076	0.6645	0.6240
36. Present Value Debt Free Net Cash Flow	$750,943	$691,948	$696,242	$639,399	$588,716	$575,774
	3	4	5	6	7	8
37. Present Value Factor: 8.40% (9)	0.8174	0.7540	0.6956	0.6417	0.5920	0.5461
38. Present Value Debt Free Net Cash Flow	$718,339	$650,130	$642,741	$579,851	$524,485	$503,895

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Income Approach
Carteret County Water System Assets
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DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

	Estimated Year 9	Estimated Year 10	Estimated Year 11	Estimated Year 12	Estimated Year 13	Estimated Year 14
	2031	2032	2033	2034	2035	2036
1. **OPERATING REVENUES (1)**						
2. Charges for services	2,459,008	2,461,467	2,463,928	2,540,384	2,542,924	2,545,467
3. Other operating revenue	0	0	0	0	0	0
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	0	73,918	0	0	76,364
6. **Total Operating Revenues**	2,459,008	2,461,467	2,537,846	2,540,384	2,542,924	2,621,831
7. **Rate Increase**			**3%**			**3%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	778,682	802,043	826,104	850,887	876,414	902,706
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	0	0	0
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(7,787)	(8,020)	(8,261)	(8,509)	(8,764)	(9,027)
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: Prop Tax & Reg Assessment	216,676	216,717	216,757	219,849	219,890	219,932
16. **Operating Expenses Before Depreciation**	987,571	1,010,739	1,034,600	1,062,227	1,087,539	1,113,611
17. Depreciation (2)	304,137	308,571	313,070	317,633	322,264	326,961
18. **Total Operating Expenses**	1,291,709	1,319,310	1,347,670	1,379,860	1,409,803	1,440,572
19. **Operating Income**	1,167,299	1,142,157	1,190,176	1,160,524	1,133,121	1,181,259
20. Revenues (3)	2,459,008	2,461,467	2,537,846	2,540,384	2,542,924	2,621,831
21. EBITDA (4)	1,471,437	1,450,728	1,503,246	1,478,157	1,455,385	1,508,220
22. EBIT (5)	1,167,299	1,142,157	1,190,176	1,160,524	1,133,121	1,181,259
23. EBIT	1,167,299	1,142,157	1,190,176	1,160,524	1,133,121	1,181,259
24. (-) Income Taxes	268,245	262,468	273,502	266,688	260,391	271,453
25. Debt Free Net Income	899,054	879,689	916,674	893,836	872,730	909,806
26. (+) Depreciation & Amortization	304,137	308,571	313,070	317,633	322,264	326,961
27. (-) Capital Expenditures (6)	296,277	300,596	304,978	309,423	313,934	318,510
28. (-) Changes in Working Capital (7)	5,164	5,169	5,329	5,335	5,340	5,506
29. Debt Free Net Cash Flow	$901,751	$882,495	$919,437	$896,711	$875,719	$912,751
30. PV Time Period (mid-year)	8.5	9.5	10.5	11.5	12.5	13.5
31. Present Value Factor: 6.59% (8)	0.5813	0.5454	0.5117	0.4800	0.4503	0.4225
32. Present Value Debt Free Net Cash Flow	$524,188	$481,313	$470,476	$430,421	$394,336	$385,637
	9	10	11	12	13	14
33. Present Value Factor: 8.50% (9)	0.4999	0.4607	0.4246	0.3913	0.3607	0.3324
34. Present Value Debt Free Net Cash Flow	$450,785	$406,565	$390,393	$350,883	$315,872	$303,399
	9	10	11	12	13	14
35. Present Value Factor: 6.49% (8)	0.5860	0.5503	0.5167	0.4852	0.4557	0.4279
36. Present Value Debt Free Net Cash Flow	$528,426	$485,637	$475,073	$435,084	$399,065	$390,566
	9	10	11	12	13	14
37. Present Value Factor: 8.40% (9)	0.5038	0.4648	0.4287	0.3955	0.3649	0.3366
38. Present Value Debt Free Net Cash Flow	$454,302	$410,184	$394,163	$354,649	$319,550	$307,232

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	Estimated Year 15	Estimated Year 16	Estimated Year 17	Estimated Year 18	Estimated Year 19	Estimated Year 20
	2037	2038	2039	2040	2041	2042
1. **OPERATING REVENUES (1)**						
2. Charges for services	2,624,453	2,627,077	2,698,077	2,700,775	2,773,766	2,776,540
3. Other operating revenue	0	0	0	0	0	0
4. Tap Fees	0	0	0	0	0	0
5. Other (Rate Increase)	0	68,304	0	70,220	0	69,413
6. **Total Operating Revenues**	2,624,453	2,695,381	2,698,077	2,770,995	2,773,766	2,845,953
7. **Rate Increase**		**3%**		**3%**		**2%**
8. **OPERATING EXPENSES (1)**						
9. Operating & Maintenance Expenses	929,787	957,681	986,411	1,016,004	1,046,484	1,077,878
10. Remove Economies of Scale						
11. LESS: EOS - Wages & Benefits	0	0	0	0	0	0
12. LESS: EOS - Professional Services	0	0	0	0	0	0
13. LESS: EOS - Eliminated Expenses	(9,298)	(9,577)	(9,864)	(10,160)	(10,465)	(10,779)
14. ADD: Additional O&M	0	0	0	0	0	0
15. ADD: Prop Tax & Reg Assessment	223,125	223,168	226,030	226,074	229,016	229,061
16. **Operating Expenses Before Depreciation**	1,143,614	1,171,272	1,202,577	1,231,918	1,265,035	1,296,160
17. Depreciation (2)	331,728	336,564	341,470	346,447	351,498	356,622
18. **Total Operating Expenses**	1,475,342	1,507,836	1,544,047	1,578,365	1,616,533	1,652,782
19. **Operating Income**	1,149,111	1,187,545	1,154,030	1,192,630	1,157,233	1,193,171
20. Revenues (3)	2,624,453	2,695,381	2,698,077	2,770,995	2,773,766	2,845,953
21. EBITDA (4)	1,480,839	1,524,109	1,495,500	1,539,077	1,508,731	1,549,793
22. EBIT (5)	1,149,111	1,187,545	1,154,030	1,192,630	1,157,233	1,193,171
23. EBIT	1,149,111	1,187,545	1,154,030	1,192,630	1,157,233	1,193,171
24. (-) Income Taxes	264,066	272,898	265,196	274,066	265,932	274,191
25. Debt Free Net Income	885,045	914,647	888,834	918,564	891,301	918,980
26. (+) Depreciation & Amortization	331,728	336,564	341,470	346,447	351,498	356,622
27. (-) Capital Expenditures (6)	323,153	327,864	332,644	337,493	342,413	347,404
28. (-) Changes in Working Capital (7)	5,511	5,660	5,666	5,819	5,825	5,977
29. Debt Free Net Cash Flow	$888,108	$917,687	$891,994	$921,699	$894,561	$922,221
30. PV Time Period (mid-year)	14.5	15.5	16.5	17.5	18.5	19.5
31. Present Value Factor: 6.59% (8)	0.3964	0.3719	0.3489	0.3273	0.3071	0.2881
32. Present Value Debt Free Net Cash Flow	$352,046	$341,288	$311,217	$301,672	$274,720	$265,692
	15	16	17	18	19	20
33. Present Value Factor: 8.50% (9)	0.3064	0.2824	0.2603	0.2399	0.2211	0.2038
34. Present Value Debt Free Net Cash Flow	$272,116	$259,155	$232,186	$221,116	$197,787	$187,949
	15	16	17	18	19	20
35. Present Value Factor: 6.49% (8)	0.4018	0.3773	0.3543	0.3327	0.3125	0.2934
36. Present Value Debt Free Net Cash Flow	$356,842	$346,243	$316,033	$306,649	$279,550	$270,580
	15	16	17	18	19	20
37. Present Value Factor: 8.40% (9)	0.3105	0.2864	0.2643	0.2438	0.2249	0.2075
38. Present Value Debt Free Net Cash Flow	$275,758	$262,825	$235,754	$224,710	$201,187	$191,361

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DCF With Capitalization of Terminal Value Model @ 6.59%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$922,221
Divided by Capitalization Factor (8)	6.59%
20th Year Terminal Value	13,994,251
20th Year Present Value Factor (11)	0.2881
Present Value of Terminal Value	4,031,744
Present Value Debt Free Net Cash Flow for 20 Years	9,463,922
Indicated Value	$13,495,665

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 6.59%		Multiples (13)	Terminal Value
Projected EBIT	$1,193,171	23.4	$27,920,192
Projected EBITDA	1,549,793	15.8	24,486,724
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			25,619,768
20th Year Present Value Factor (11)			0.2881
Present Value of Terminal Value			7,381,055
Present Value Debt Free Net Cash Flow for 20 Years			9,463,922
Indicated Value			$16,844,977

DCF With Capitalization of Terminal Value Model @ 8.50%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$922,221
Divided by Capitalization Factor (9)	8.50%
20th Year Terminal Value	10,849,660
20th Year Present Value Factor (12)	0.2038
Present Value of Terminal Value	2,211,161
Present Value Debt Free Net Cash Flow for 20 Years	8,173,736
Indicated Value	$10,384,897

DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 8.50%		Multiples (13)	Terminal Value
Projected EBIT	$1,193,171	23.4	$27,920,192
Projected EBITDA	1,549,793	15.8	24,486,724
Weighted (1/3 EBIT 2/3 EBITDA) Terminal Value			25,619,768
20th Year Present Value Factor (12)			0.2038
Present Value of Terminal Value			5,221,309
Present Value Debt Free Net Cash Flow for 20 Years			8,173,736
Indicated Value			$13,395,045

DCF With Capitalization of Terminal Value Model @ 6.49%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$922,221
Divided by Capitalization Factor (8)	6.49%
20th Year Terminal Value	14,209,879
20th Year Present Value Factor (11)	0.2881
Present Value of Terminal Value	4,093,866
Present Value Debt Free Net Cash Flow for 20 Years	9,463,922
Indicated Value	$13,557,788

DCF With Capitalization of Terminal Value Model @ 8.40%	Terminal Value
Projected Debt Free Net Cash Flow (10)	$922,221
Divided by Capitalization Factor (9)	8.40%
20th Year Terminal Value	10,978,823
20th Year Present Value Factor (12)	0.2038
Present Value of Terminal Value	2,237,484
Present Value Debt Free Net Cash Flow for 20 Years	8,173,736
Indicated Value	$10,411,220

See last page of this EXHIBIT for notes and assumptions.

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Income Approach

Carteret County Water System Assets
Pro Forma and Estimted Operations With IOU Ownership
DCF With Capitalization of Terminal Value Model and
DCF With EBIT & EBITDA Terminal Value Model

Notes: (1) Assumptions:

Charges for services - Pre-2023 are actual or budget. Post-2022 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 2022 with shown rate increases.

OPERATING EXPENSES - increase at 3.0% annually after 2022 unless noted elsewhere. Assumed economies of scale are shown on lines below.
O&M Expenses - Post-2022 assumed 10% savings due to economies of scale. Increase at 3.0% afterwards.

No Additional O&M.

Property Tax & Reg Assessment - 2023 assumed due to IOU purchase at the end of 2022.

(2) Depreciation - Pre-2023 based on actual depreciation rate plus same rate on half of CAPX. 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-2023 based on financials/budget. Post-2022 years are estimates at 1.72% of prior year-end GROSS Property, plant and equipment.

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

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

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

(10) Final year shown, line 29.

(11) Final year shown, line 31.

(12) Final year shown, line 33.

(13) Developed on Market Multiples EXHIBIT 17.

Terms:

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

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Market Multiples Method
Carteret County Water System Assets
2021 Operations
Market Multiple Method

	A	B	C	D (Col B × Col C)	E (Col A × Col D)
	Subject Company Statistic (1)	Comparison Group's Valuation Multiples 12/31/2021	Carteret County's Water Growth & Risk Adjustment	Carteret County's Water Risk Adjusted Valuation Multiples 12/31/2021	Carteret County's Water Market Multiples Valuation
Risk Adjusted Multiple					
1. Carteret County Water System Assets					
2. Investor Provided Capital	$7,079,962	2.31	70.00%	1.62	$11,469,538
3. Gross PP&E	$14,873,314	1.62	80.00%	1.30	19,335,308
4. Net PP&E	$11,257,855	2.03	80.00%	1.62	18,237,725
5. Revenues	$1,260,000	9.69	70.00%	6.78	8,542,800
6. EBITDA	$663,205	22.55	70.00%	15.79	10,472,007
7. EBIT	$298,935	33.47	70.00%	23.43	7,004,047
8. Customers	1,254	$10,691	81.00%	$8,660	10,859,640
9. Population	3,092	$3,549	81.00%	$2,875	8,889,500
10.					
11. Average					$11,851,321

Conclusion of Market Multiple Method Valuation

		Low	High		Conclusion
12.	Capital Items	$11,469,538	$19,335,308		$15,402,423
13.	(Items 2-4)				
14.	Income Statement Items	7,004,047	10,472,007		-
15.	(Items 5 -7)				
16.	Demographics Items	8,889,500	10,859,640		9,874,570
17.	(Items 8-9)				
				Conclusion	$12,638,497

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Market Multiples Method
Carteret County Water System Assets
Development of Market Multiples Method for the Market Multiples Method

	Latest Quarter End			Latest 12 Months			2021		12/31/2021
	Gross PP&E	Net PP&E	Invest. Total Capital	12 Mos. Rev.	12 Mos. EBITDA	12 Mos. EBIT	Customers	Population	Enterprise Value
	($ Mill)	($ Mill)	($ Mill)	($ Mill)	($ Mill)	($ Mill)			($ Mill)
American States Water Co	$2,202.419	$1,614.705	$1,292.917	$506.429	$183.194	$143.991	287,500	1,000,000	$4,427.527
American Water Works Company Inc	$26,972.000	$20,680.000	$18,040.000	$3,902.000	$1,939.000	$1,310.000	3,530,000	14,000,000	$45,375.219
Artesian Resources Corp	$743.292	$585.751	$347.983	$89.945	$39.770	$27.949	100,640	326,700	$607.616
California Water Service Group	$4,124.024	$2,796.369	$2,305.564	$806.735	$261.185	$152.127	547,600	2,000,000	$4,829.636
Essential Utilities, Inc.	$12,348.442	$10,012.155	$10,907.411	$1,816.455	$891.370	$598.766	1,820,049	5,000,000	$19,339.578
Middlesex Water Co	$1,063.753	$865.947	$693.048	$143.744	$59.269	$36.773	121,300	500,000	$2,430.317
SJW Corp.	$3,616.710	$2,486.932	$2,569.103	$569.649	$199.528	$104.677	398,000	1,526,000	$3,737.653
York Water Company (The)	$464.886	$368.286	$285.060	$54.783	$30.849	$22.190	73,144	204,000	$786.746
Average	$6,441.941	$4,926.268	$4,555.136	$986.218	$450.521	$299.559	859,779	3,069,588	$10,191.787
Max	$26,972.000	$20,680.000	$18,040.000	$3,902.000	$1,939.000	$1,310.000	3,530,000	14,000,000	$45,375.219
Min	$464.886	$368.286	$285.060	$54.783	$30.849	$22.190	73,144	204,000	$607.616
Median	$2,909.565	$2,050.819	$1,799.241	$538.039	$191.361	$124.334	342,750	1,263,000	$4,082.590

	Enterprise Value as a Multiple of								
	Invest. Capital	Gross PP&E	Net PP&E	Rev.	EBITDA	EBIT	Customers	Population	Population Per Customer
	(x)	(x)	(x)	(x)	(x)	(x)	($)	($)	
American States Water Co	3.42	2.01	2.74	8.74	24.17	30.75	$15,400	$4,428	3.48
American Water Works Company Inc	2.52	1.68	2.19	11.63	23.40	34.64	$12,854	$3,241	3.97
Artesian Resources Corp	1.75	0.82	1.04	6.76	15.28	21.74	$6,038	$1,860	3.25
California Water Service Group	2.09	1.17	1.73	5.99	18.49	31.75	$8,820	$2,415	3.65
Essential Utilities, Inc.	1.77	1.57	1.93	10.65	21.70	32.30	$10,626	$3,868	2.75
Middlesex Water Co	3.51	2.28	2.81	16.91	41.00	66.09	$20,036	$4,861	4.12
SJW Corp.	1.45	1.03	1.50	6.56	18.73	35.71	$9,391	$2,449	3.83
York Water Company (The)	2.76	1.69	2.14	14.36	25.50	35.45	$10,756	$3,857	2.79
Average	2.41	1.53	2.01	10.20	23.53	36.05	$11,740	$3,372	3.48
Max	3.51	2.28	2.81	16.91	41.00	66.09	$20,036	$4,861	4.12
Min	1.45	0.82	1.04	5.99	15.28	21.74	$6,038	$1,860	2.75
Median	2.31	1.62	2.03	9.69	22.55	33.47	$10,691	$3,549	3.57

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Market Multiples Method
Carteret County Water System Assets
Quantification of the Effective Risk/Growth Adjustments

		Net PP&E	Gross PP&E	Invest. Capital
Comparable Group Multiple		2.03	1.62	2.31
Ratio to Net PPE			79.80%	
Not Contributed Multiple (NPPE = ICAP mult.)		2.31	1.84	
Base Risk Factor	x	70%	70%	
Subject Company Adjusted Multiple		1.62	1.29	
Subject Company Adjusted Multiple		1.62	1.29	
Comparable Group Multiple	÷	2.03	1.62	
Effective Risk/Growth Adjustment		80%	80%	

		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		2.03	1.62
Plant Assets Less Known "Cost Free" Capital	÷	74%	74%
Mulitple Without "Cost Free" Capital		2.74	2.19
Base Risk Factor	x	70%	70%
Subject Company Adjusted Multiple		1.92	1.53
Subject Company Adjusted Multiple		1.92	1.53
Comparable Group Multiple	÷	2.03	1.62
Effective Risk/Growth Adjustment		95%	94%

		Net PP&E	Customers
Comparable Group Multiple		2.03	10,691.00
Implied Capitalization Rate (1÷Multiple)		49.26%	0.0094%
Ratio of Net PP&E Mult. to Invest. Capital Mult.		113.79%	
Less 1	-	1.00	
Difference in Capital Source due to Contributions		13.79%	
Assumed Investor Financed (1-Difference in Capital Source)		86.21%	86.21%
Implied Capitalization Rate (1÷Multiple)	x		0.0094%
Not Contributed Cap. Rate			0.0081%
Not Contributed Multiple (1÷Cap. Rate)			12,401.11
Base Risk Factor	x		70%
Subject Company Adjusted Multiple			8,680.78
Subject Company Adjusted Multiple			8,680.78
Comparable Group Multiple	÷		10,691.00
Effective Risk/Growth Adjustment			81%

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Selected Transactions Method
For Carteret County Water System Assets
Summary

		Median	Mid-Point	Value
	All Selected Transactions Companies			
1.	Asset Items			$21,959,978
2.	Ex-Ante (page 2)	$23,411,195	$23,402,095	
3.	Ex-Post (page 3)	$17,687,984	$23,338,638	
4.	Demographics Items			$9,497,521
5.	Ex-Ante (page 2)	$7,488,267	$11,506,775	
6.	Ex-Post (page 3)	$7,488,267	$11,506,775	
7.			Indicated Value	$15,728,750
	Fully Integrated Selected Transactions Companies			
8.	Asset Items			$21,525,867
9.	Ex-Ante (page 2)	$23,601,920	$23,274,840	
10.	Ex-Post (page 3)	$19,595,949	$19,630,758	
11.	Demographics Items			$12,505,846
12.	Ex-Ante (page 2)	$11,551,430	$13,460,262	
13.	Ex-Post (page 3)	$11,551,430	$13,460,262	
14.			Indicated Value	$17,015,856
	Mostly Collection/Distribution Selected Transactions Companies			
15.	Asset Items			$19,237,771
16.	Ex-Ante (page 2)	$13,403,488	$23,643,691	
17.	Ex-Post (page 3)	$16,565,268	$23,338,638	
18.	Demographics Items			$5,989,124
19.	Ex-Ante (page 2)	$5,163,449	$6,814,799	
20.	Ex-Post (page 3)	$5,163,449	$6,814,799	
21.			Indicated Value	$12,613,448

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

Name	Service	System	Selected Transactions' Metrics: 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	50,570
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	13,733	133,032
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

			Subject Company's Metrics							
Carteret County Water System Assets			$7,079,962	$14,873,314	$11,257,855	$1,260,000	$663,205	$298,935	1,254	3,092

			Subject Company's Selected Transactions Multiples Valuations							
Municipal Authority of the City of Mckeesport	WW	INT	$16,401,962	$13,163,667	$25,375,587	$23,792,645	$15,064,558	$16,739,429	$12,234,467	$15,307,042	$9,538,303
New Garden Township/Authority's WW System's Assets	WW	INT	$16,030,174	$9,080,371	$16,883,069	$18,483,933	$16,437,491	$21,561,439	$17,649,944	$20,597,439	$7,547,704
Limerick Township Wastewater System's Assets	WW	INT	$18,786,311	$12,222,614	$18,357,212	$23,411,195	$21,414,532	$20,020,579	$25,123,118	$17,388,368	$12,352,867
Steelton Borough (Water) Authority	W	INT	$11,570,876	NA	NA	NA	NA	NA	NA	$11,413,835	$11,727,916
Exeter Township Wastewater System Assets	WW	INT	$11,920,862	NA	NA	NA	$15,636,416	$13,659,758	$6,157,040	$13,399,822	$10,751,277
Kane Borough Authority Wastewater System	WW	INT	$16,316,478	$11,501,786	$12,887,415	$22,217,687	$15,429,525	$17,005,505	$28,894,373	$10,906,508	$11,689,025
Borough of Royersford Wastewater System Assets	WW	INT	$20,182,920	$19,570,498	$28,090,923	$32,195,734	$18,980,301	$30,751,574	$13,861,056	$10,214,286	$7,798,991
York City Sewer Authority Wastewater System Assets	WW	INT	$18,189,291	$16,556,272	$28,968,904	$33,662,265	$12,016,470	$15,968,895	$11,421,000	$21,458,531	$5,461,994
Sadsbury Township Wastewater Utility	WW	C/D	$9,525,788	NA	NA	NA	NA	NA	NA	$11,622,745	$7,428,831
East Bradford Township Wastewater System Assets	WW	C/D	$22,667,417	$27,259,413	NA	NA	$5,573,386	$66,581,499	$30,011,144	$5,024,038	$1,555,019
Township of Mahoning Water System Assets	W	C/D	$10,507,062	NA	NA	NA	$7,913,766	$20,670,230	$15,474,200	$5,006,273	$3,470,840
Township of Mahoning Sewer System Assets	WW	C/D	($2,278,882)	NA	NA	NA	$5,032,587	($18,208,343)	($5,830,012)	$4,118,236	$3,493,124
Cheltenham Township Wastewater System Assets	WW	C/D	$5,563,294	NA	NA	NA	$6,815,026	$7,395,652	$3,333,538	$6,166,308	$4,105,943
East Norriton Township Wastewater System Assets	WW	C/D	$14,574,861	$36,664,400	NA	NA	$7,969,880	$22,726,324	$10,243,731	$5,302,859	$4,541,970
Valley Township Water System Assets	W	C/D	$22,257,053	NA	NA	NA	$13,212,368	$61,724,647	$27,821,952	$5,503,625	$3,022,674
Valley Township Wastewater System Assets	WW	C/D	($3,018,277)	NA	NA	NA	$6,405,713	($22,644,567)	($10,206,880)	$5,597,856	$5,756,493
Upper Pottsgrove Township Wastewater System Assets	WW	C/D	$10,641,719	NA	$13,370,607	$13,403,488	$12,552,147	$10,617,420	$4,785,728	$12,074,580	$7,688,065
Lower Makefield Township Wastewater System Assets	WW	C/D	$12,480,045	$22,706,726	NA	$33,916,775	$6,669,380	$8,670,807	$4,499,971	$5,960,183	$4,936,470

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

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

Name	Service	System	Announced Purchase Price was:	Investor Provided Capital	Ex-POST - OCN - Gross PP&E	Ex-Post - OCNLD - Net PP&E	Revenues	EBITDA	EBIT	Customers	Population
			Ex-Post Selected Transactions' Metrics								
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	50,570
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	13,733	133,032
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
				Subject Company's Metrics							
Carteret County Water System Assets				$7,079,962	$14,873,314	$11,257,855	$1,260,000	$663,205	$298,935	1,254	3,092
			Ex-Post Subject Company's Selected Transactions Multiples Valuations								
Municipal Authority of the City of Mckeesport	WW	INT	$15,676,816	$13,163,667	$21,437,710	$21,929,352	$15,064,558	$16,739,429	$12,234,467	$15,307,042	$9,538,303
New Garden Township/Authority's WW System's Assets	WW	INT	$15,865,398	$9,080,371	$16,162,565	$17,886,234	$16,437,491	$21,561,439	$17,649,944	$20,597,439	$7,547,704
Limerick Township Wastewater System's Assets	WW	INT	$18,054,529	$12,222,614	$17,595,759	$18,318,398	$21,414,532	$20,020,579	$25,123,118	$17,388,368	$12,352,867
Steelton Borough (Water) Authority	W	INT	$14,411,087	NA	$16,952,946	$17,549,651	NA	NA	NA	$11,413,835	$11,727,916
Exeter Township Wastewater System Assets	WW	INT	$15,114,436	NA	$20,873,501	$25,323,239	$15,636,416	$13,659,758	$6,157,040	$13,399,822	$10,751,277
Kane Borough Authority Wastewater System	WW	INT	$15,311,131	$11,501,786	$12,423,006	$14,639,320	$15,429,525	$17,005,505	$28,894,373	$10,906,508	$11,689,025
Borough of Royersford Wastewater System Assets	WW	INT	$19,154,469	$19,570,498	$25,220,539	$26,838,510	$18,980,301	$30,751,574	$13,861,056	$10,214,286	$7,798,991
York City Sewer Authority Wastewater System Assets	WW	INT	$16,020,855	$16,556,272	$22,423,168	$22,860,509	$12,016,470	$15,968,895	$11,421,000	$21,458,531	$5,461,994
Sadsbury Township Wastewater Utility	WW	C/D	$13,608,452	NA	$18,391,324	$16,990,906	NA	NA	NA	$11,622,745	$7,428,831
East Bradford Township Wastewater System Assets	WW	C/D	$19,406,616	$27,259,413	$8,965,303	$10,283,122	$5,573,386	$66,581,499	$30,011,144	$5,024,038	$1,555,019
Township of Mahoning Water System Assets	W	C/D	$11,576,502	NA	$13,301,577	$15,198,630	$7,913,766	$20,670,230	$15,474,200	$5,006,273	$3,470,840
Township of Mahoning Sewer System Assets	WW	C/D	$2,794,373	NA	$14,371,322	$16,583,700	$5,032,587	($18,208,343)	($5,830,012)	$4,118,236	$3,493,124
Cheltenham Township Wastewater System Assets	WW	C/D	$14,606,073	NA	$37,711,973	$36,714,070	$6,815,026	$7,395,652	$3,333,538	$6,166,308	$4,105,943
East Norriton Township Wastewater System Assets	WW	C/D	$16,433,432	$36,664,400	$18,463,921	$25,554,368	$7,969,880	$22,726,324	$10,243,731	$5,302,859	$4,541,970
Valley Township Water System Assets	W	C/D	$20,535,945	NA	$15,919,512	$16,546,836	$13,212,368	$61,724,647	$27,821,952	$5,503,625	$3,022,674
Valley Township Wastewater System Assets	WW	C/D	$2,597,886	NA	$15,496,382	$17,780,209	$6,405,713	($22,644,567)	($10,206,880)	$5,597,856	$5,756,493
Upper Pottsgrove Township Wastewater System Assets	WW	C/D	$10,641,719	NA	$13,370,607	$13,403,488	$12,552,147	$10,617,420	$4,785,728	$12,074,580	$7,688,065
Lower Makefield Township Wastewater System Assets	WW	C/D	$13,524,565	$22,706,726	$24,630,906	$30,122,075	$6,669,380	$8,670,807	$4,499,971	$5,960,183	$4,936,470

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

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Selected Transactions Method

For Carteret County Water System Assets

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

Connecticut Water Service Inc.			Carteret County Water System Assets			
Purchase Price was: $1,106,267			Carteret County Water System Assets's	Selected Transactions Multiples		
	Subject Company Statistics	Transaction Multiple				
Investor Provided Capital	$573,223	1.93	$7,079,962	$13,663,668		
Gross PP&E	$939,050	1.18	$14,873,314	$17,521,812		
Net PP&E	$697,723	1.59	$11,257,855	$17,849,769	$15,756,718	
Revenues	$107,054	10.33	$1,260,000	$13,020,499		
EBITDA	$48,920	22.61	$663,205	$14,997,585		
EBIT	$32,236	34.32	$298,935	$10,258,777		$12,335,462
Customers	135,645	$8,156	1,254	$10,227,129		
Population	450,000	$2,458	3,092	$7,601,284	$8,914,206	
Average				$13,142,565		

	Subject Company Statistics	Transaction Multiple				
Investor Provided Capital	$573,223	1.93	$7,079,962	$13,663,668		
Gross PP&E (Less "Cost Free" Capital)	$646,723	1.71	$14,873,314	$25,441,908		
Net PP&E (Less "Cost Free" Capital)	$480,521	2.30	$11,257,855	$25,918,106	$19,790,887	
Revenues	$107,054	10.33	$1,260,000	$13,020,499		
EBITDA	$48,920	22.61	$663,205	$14,997,585		
EBIT	$32,236	34.32	$298,935	$10,258,777		$14,352,547
Customers	135,645	$8,156	1,254	$10,227,129		
Population	450,000	$2,458	3,092	$7,601,284	$8,914,206	
Average				$15,141,119		

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Carteret County Water System Assets
Summary of Approach Results and Conclusions

Approaches and Methods	Results	
COST APPROACH		
Appraisal Report, page 31		
Final RCNLD Method	$16,024,799	
INCOME APPROACH		
Exhibit 15, page 6 (MUNI)		
DCF With Capitalization of Terminal Value Model @ 2.75%	$18,226,500	
DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 2.85%	$15,067,849	
Indicated Value (Median)	$16,647,175	
Exhibit 16, page 6 (IOU)		
DCF With Capitalization of Terminal Value Model @ 6.49%	$13,557,788	
DCF With Capitalization of Terminal Value Model @ 8.40%	$10,411,220	
DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 6.59%	$16,844,977	
DCF With EBIT & EBITDA Terminal Value Model - Discount Rate of 8.50%	$13,395,045	
Indicated Value (Median)	$13,476,416	
Conclusion		
MUNI DCF	$16,647,175	
IOU DCF	$13,476,416	
Conclusion (Median)	$15,061,795	
MARKET APPROACH		
Market Multiples Method, Exhibit 17, page 1		
Capital Based Multiples	$15,402,423	
Demographics Based Multiples	$9,874,570	
Conclusion (Median)	$12,638,497	
Selected Transactions Method, Exhibit 18, page 1		
All Selected Transactions Companies		
Asset Based Multiples	$21,959,978	
Demographics Based Multiples	$9,497,521	
Indicated Value (Median)	$15,728,750	
Fully Integrated Selected Transactions Companies		
Asset Based Multiples	$21,525,867	
Demographics Based Multiples	$12,505,846	
Indicated Value (Median)	$17,015,856	
Selected Transactions Method Conclusion		
All Selected Transactions Companies Indicated Value	$15,728,750	
Fully Integrated Selected Transactions Companies Indicated Value	$17,015,856	
Conclusion (Median)	$16,372,303	
Conclusion		Wtd.
Market Multiples Method	$12,638,497	100%
Selected Transactions Method	$16,372,303	0%
Conclusion (Wtd.)	$12,638,497	

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Carteret County Water System Assets
Summary of Approach Results and
Fair Market Value Conclusion at Appraisal Date

Valuation Approach	Indicated Value	Conclusion	Consideration
Cost Approach	$16,024,799		33.33%
Income Approach	15,061,795		33.33%
Market Approach	12,638,497		33.34%
		Conclusion $14,575,000	

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WORKPAPERS

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Daily Bond Yields and Key Indicators

Updated by 11 am ET with data from the previous business day. Data as of 6-Dec-21

Moody's Daily Long-term Corporate Bond Yield Averages

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

Moody's Daily Treasury Yield Averages

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

Moody's Daily Public Utility Common Stock Yield Averages

Price	518.33
Yield	3.74
New Dividend	19.38

Moody's Commodity and Scrap Price Indexes

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

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

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Index Name: S&P Municipal Bond Revenue Index

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

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FED H.15

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

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FED H.15

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

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

Moody's Daily Long-term Corporate Bond Yield Averages

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

S&P Municipal Bond Revenue Index

12/31/21 2.68%

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Utilities
Aa
A **3.08**
Baa

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

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

2.85

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

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

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

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

High 10.35
Low 7.87

0.80

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

1.90 30-yr T-bond

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

6/17/2022

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

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

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

CWSNC W-354 SUB 398
Carteret Fair Value Determination
Form Application Exhibit 1A

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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.

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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

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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.

CWSNC W-354 SUB 398
Carteret Fair Value Determination
Form Application Exhibit 1A

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

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

3 MIN READ

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

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

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

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

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

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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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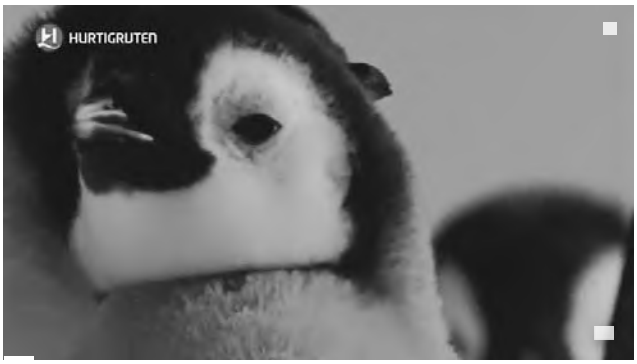

"We have converted from a stock-for-stock deal to a cash offer, which will resolve any further market distractions from the inferior proposals," SJW Chief Executive Eric Thornburg told Reuters, in reference to the actions by Eversource and CalWater.

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

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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

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($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.

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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

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Q. How many customers will the acquisition add?

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

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

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

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

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

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

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

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

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

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Q. Describe the scope and organization of your testimony.

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

II. EXECUTIVE SUMMARY

A. Overview

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

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

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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 19508-8737		A	
99991.00	DIEROLF, CANDACE 21 PINE AVENUE	BIRDSBORO PA 19508		A	
99992.00	TELFORD, MARK 19-6 CRANBERRY RIDGE	READING PA 19606-3934		A	

Total Class: R: 8,708

Class: TRAILER PARK

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

Total Class: T: 7

Total: 8,984

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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

Share

Adjust font size: A A A

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

Written by Mike Urban

Exeter Township, PA —

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

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

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

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

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

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

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

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

"It should be seamless," he said.

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

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

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

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

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

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

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

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

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

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

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

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

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

Q. Please describe the Kane wastewater utility.

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

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

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

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

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ASSET PURCHASE AGREEMENT

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

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

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

ASSETS BEING TRANSFERRED

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

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

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$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.

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MAHONING TOWNSHIP CUSTOMER LIST

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

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

5/30/18

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

Commercial Water Meters
70

Residential Water Meters
1116

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

Total Meters
=
1186

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

(a) Incorrect Use of Projected Customers

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

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

(b) Inconsistent Purchase Price Values

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

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Pittsburgh Post-Gazette

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McKeesport sewer system to be sold for $156 million

September 16, 2016 12:00 AM

By Deana Carpenter

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

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

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

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

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

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

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

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

The next step is approval of the acquisition by the Pennsylvania Public Utility Commission along with other approvals, such as from the state Department of Environmental Protection.

In June, state Auditor General Eugene DePasquale said McKeeesport erred when it accidentally spent $729,275 in state funds earmarked for pension costs and subsequently couldn't pay its $2.3 million annual pension obligation last year.

McKeesport officials said then they would remedy the shortfall through "the sale of an asset in the near future."

“The total proceeds of the pending sale of the Municipal Authority of the City of McKeesport will solidify the City of McKeesport’s financial position for years to come,” Mr. Cherepko said this week. “The down payment associated with this

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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.

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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**

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SOUTH END SEWER ACCOUNTS

Type	2015-4	2015-3	2015-2	2015-1	2014-4	2014-3	2014-2	2014-1
CO1	163,000	68,000	33,000	27,000	277,000	265,000	28,000	25,000
RES	7,444,000	7,494,000	7,172,000	7,565,000	7,109,000	7,576,000	7,233,000	7,750,000
Grand Total	**7,607,000**	**7,562,000**	**7,205,000**	**7,592,000**	**7,386,000**	**7,841,000**	**7,261,000**	**7,775,000**
# DAYS	94	90	89	91	87	94	93	91

Type	2015-4 GPD	2015-3 GPD	)15-2 GPD	2015-1 GPD	2014-4 GPD	2014-3 GPD	2014-2 GPD	2014-1 GPD
CO1	1,734	756	371	297	3,184	2,819	301	275
RES	79,191	83,267	80,584	83,132	81,713	80,596	77,774	85,165
Grand Total	**80,926**	**84,022**	**80,955**	**83,429**	**84,897**	**83,415**	**78,075**	**85,440**

Type	Total Units	Total Active Units	Total Accounts
CO1	6	2	2
RES	611	605	607
Grand Total	**617**	**607**	**609**

Type	2015 Total	2014 Total
CO1	291,000	595,000
RES	29,675,000	29,668,000
Grand Total	**29,966,000**	**30,263,000**

Service Area	Total Units	Total Active Units	Total Accounts
ES	178	174	174
HGN	129	125	125
HGS	30	29	30
MG	21	21	21
WS	259	258	259
Grand Total	**617**	**607**	**609**

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AVONDALE SEWER ACCOUNTS SEWER ACCOUNTS

Type	2015-4	2015-3	2015-2	2015-1	2014-4	2014-3	2014-2	20144
CO1	2,833,000	3,044,000	2,895,000	3,014,000	2,844,000	2,681,000	2,598,000	2,992,000
CO2	191,000	208,000	235,000	228,000	224,000	195,000	192,000	179,000
MIX	301,000	312,000	255,000	273,000	227,000	258,000	276,000	332,000
RES	4,090,000	3,750,000	3,588,000	4,089,000	3,506,000	4,183,000	4,716,000	3,705,000
TWP	31,000	24,000	20,000	19,000	21,000	22,000	19,000	74,000
Grand Total	**7,446,000**	**7,338,000**	**6,993,000**	**7,623,000**	**6,822,000**	**7,339,000**	**7,801,000**	**7,282,000**
# DAYS	94	90	89	91	87	94	93	91

Type	2015-4 GPD	2015-3 GPD	)15-2 GPD	2015-1 GPD	2014-4 GPD	2014-3 GPD	2014-2 GPD	2014-1 GPD
CO1	30,138	33,822	32,528	33,121	32,690	28,521	27,935	32,879
CO2	2,032	2,311	2,640	2,505	2,575	2,074	2,065	1,967
MIX	3,202	3,467	2,865	3,000	2,609	2,745	2,968	3,648
RES	43,511	41,667	40,315	44,934	40,299	44,500	50,710	40,714
TWP	330	267	225	209	241	234	204	813
Grand Total	**79,213**	**81,533**	**78,573**	**83,769**	**78,414**	**78,074**	**83,882**	**80,022**

Type	Total Units	Total Active Units	Total Accounts
CO1	397	48	38
CO2	4	4	4
MIX	8	22	8
RES	306	282	230
TWP	3	3	3
Grand Total	**718**	**359**	**283**

Type	2015 Total	2014 Total
CO1	11,786,000	11,115,000
CO2	862,000	790,000
MIX	1,141,000	1,093,000
RES	15,517,000	16,110,000
TWP	94,000	136,000
Grand Total	**29,400,000**	**29,244,000**

Service Area	Total Units	Total Active Units	Total Accounts
41	308	76	46
BH	123	120	121
BH2	6	6	6
RR	130	119	79
TK	151	38	31
Grand Total	**718**	**359**	**283**

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Dilworth Paxson LLP

The PA PUC Approves First Wastewater Sale Under New Act 12

06/14/2017

June 14, 2017 (Philadelphia, PA) - On June 14, 2017, the Pennsylvania Public Utility Commission approved, in a four-to-one vote, Aqua Pennsylvania Wastewater, Inc.'s application to acquire the wastewater system of New Garden Township and its Sewer Authority, and to begin providing wastewater service to the residents of New Garden and Kennett Townships in Chester County. The transaction is the first to be approved using the fair market valuation approach established by the Pennsylvania State Legislature and Governor Tom Wolf with Act 12 of 2016 (Act of Apr. 14, 2016, P.L. 76, No. 12, 66 Pa. C.S. § 1329).

Act 12 is changing the landscape for municipal sales of water and wastewater systems to PUC-regulated public utility companies. The new law allows the parties to the transaction to opt in to a new method of valuation, which takes the value of the system for ratemaking purposes as either the lower of the average of two independent fair market value appraisals—one obtained by the utility buyer and one by the municipal seller—or by the negotiated purchase price. Prior to Act 12, system value for ratemaking was based on depreciated original cost, which would likely always result in a lower sale price than fair market value. In addition, the new law requires the PUC to act within six months of the acceptance of the application.

Act 12 became effective mid-June 2016, and the PUC issued its final implementation order in October 2016. The New Garden transaction was the first Act 12 application, submitted for approval in December 2016. Aqua, New Garden, and the Authority agreed to a negotiated purchase price of $29,500,000, which turned out to be less than the average of the two appraisals commissioned by Aqua and New Garden. The valuation for ratemaking purposes was therefore set at $29,500,000.

A protest to Aqua's application for PUC approval pursuant to Act 12 in the New Garden transaction was filed by the Bureau of Investigation and Enforcement, which sought a review of both of the fair market appraisals used, additional information about the proposed rate freeze agreed to by the parties, and a determination of whether the transaction was in the public interest under Section 1102 of the Public Utility Code.

An additional protest was filed by the Office of Consumer Advocates requesting further information to determine whether supplementary conditions should be imposed on the transaction to ensure that Aqua's existing customers are treated in a fair and just manner; how the transaction will substantially and affirmatively benefit Aqua's existing customers; and whether the agreement sufficiently provides for safe, adequate, and reasonable service at just and reasonable rates.

An evidentiary hearing was held before an administrative law judge on February 16, 2017. After the hearing, the judge recommended the denial of Aqua's application, concluding that Aqua had failed to demonstrate by a preponderance of the evidence that the acquisition was in the public interest because it failed to demonstrate that the transaction will result in affirmative public benefits to its existing customers. The judge also concluded that Aqua had failed to support its rate stabilization plan with evidence to show its basis and impact. The judge did

Related Lawyers

Skye C.A. Nickalls

Marc A. Feller

Related Practices

Corporate and Business

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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

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

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

A. Yes. The APA is attached as **Appendix A-24-a** to the Application **(PAWC Exhibit KEG-1)**. The APA sets forth the terms and conditions pursuant to which the TOS will sell, and PAWC will purchase, the System, as well as substantially all assets, properties and rights

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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.

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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
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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.

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Cust No	Name	Customer Type	Group Code	Service No	Description	Unit/Share
)33438358	Morath, Christina	Commercial	None	1	SEWER	1
)33453937	Baeder, William	Commercial	None	1	SEWER	1
)33521786	Sanders, Debra	Commercial	None	1	SEWER	1
)33757653	Advanced Auto Parts	Commercial	None	1	SEWER	1
)34016546	Nelson's Ice Cream	Commercial	None	1	SEWER	1
)34030702	Pitcher, Paul	Commercial	None	1	SEWER	1
)34083232	Beck, Katharine G	Commercial	None	1	SEWER	1
)34862572	LK Miller Properties LLC	Commercial	None	1	SEWER	1
)02939458	Fuhrman, Steve	Commercial	None	1	SEWER	1
)03198199	Sarangpur Realty LLC	Commercial	None	1	SEWER	1
)03373167	Wilhelm, Rosemarie	Commercial	None	1	SEWER	1
)04397982	Pragi Enterprises LLC	Commercial	None	1	SEWER	1
)06085025	Plank Jr, Robert E	Commercial	None	1	SEWER	1
)06197065	LD Hedge Associates LLC	Commercial	None	1	SEWER	1
)06197096	LD Hedge Associates LLC	Commercial	None	1	SEWER	1
)07394708	Fissinger, Matthew	Commercial	None	1	SEWER	1
)07425268	Snyder, Joseph	Commercial	None	1	SEWER	1
)07461417	Varlotta, Michael	Commercial	None	1	SEWER	1
)07487679	CG Complex LLC	Commercial	None	1	SEWER	1
)07519040	Bristol Road Partners Inc.	Commercial	None	1	SEWER	1
)08908308	Superior Credit Union	Commercial	None	1	SEWER	1
)09217890	Hoff Properties LLC	Commercial	None	1	SEWER	1
)10722804	AMA Realty Properties LLC	Commercial	None	1	SEWER	1
)11184863	Attilio, Thomas	Commercial	None	1	SEWER	1
)12032330	310 Chestnut Street LLC	Commercial	None	1	SEWER	1
)13068080	Branch Banking & Trust Company	Commercial	None	1	SEWER	1
)13286185	White, Elaine & Bruce	Commercial	None	1	SEWER	1
)15089717	C&R Property Management LLC	Commercial	None	1	SEWER	1
)15089748	C&R Property Management LLC	Commercial	None	1	SEWER	1
)15292810	Preston, Aaron	Commercial	None	1	SEWER	1
)16240812	Shalom, Jan	Commercial	None	1	SEWER	1
)16276750	Copenhafer, Fay	Commercial	None	1	SEWER	1
)16612479	Donohue, Patrick R	Commercial	None	1	SEWER	1
)17470098	Lewis Group Ltd Partnership	Commercial	None	1	SEWER	1
)17961983	Qawasmy, John	Commercial	None	1	SEWER	1
)18085592	Christman, Lewis	Commercial	None	1	SEWER	1
)18305104	Tarquini Herrera, Rachel	Commercial	None	1	SEWER	1
)18888302	Florence Attilio Rental Acct.	Commercial	None	1	SEWER	1
)18888319	Attilio, Thomas	Commercial	None	1	SEWER	1
)19364687	Conigliaro, Vito	Commercial	None	1	SEWER	1
)21630875	Chesterview Apartments	Commercial	None	1	SEWER	1
)22621041	Main Street Royersford LLC	Commercial	None	1	SEWER	1
)22621096	Spring Mountain Brewing Co	Commercial	None	1	SEWER	1
)23796115	Kassam, Tashir	Commercial	None	1	SEWER	1
)26295581	JD Arnold LLC	Commercial	None	1	SEWER	1
)26393133	Ostebo, Kurt	Commercial	None	1	SEWER	1
		158				

Report Criteria:
Billing.Service No = 1
Customer.Customer Type = Commercial, Industrial, Residential

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Borough of Royersford | Table Lists - Master Billing List - Numeric | Page: 1
Feb 12, 2019 10:26am

Report Criteria:
Billing.Service No = 1
Customer.Customer Type = Industrial, Residential

Cust No	Name	Customer Type	Group Code	Service No	Description	Unit/Share
)28611137	Lewis Group Ltd. Partnership	Industrial	None	1	SEWER	1
)28619292	Giftwares Co Inc	Industrial	None	1	SEWER	1
)28619407	Specialty Chemical Systems Inc	Industrial	None	1	SEWER	1
)28619759	Accumetrics Limited	Industrial	None	1	SEWER	1
)28619773	Accumetrics Limited	Industrial	None	1	SEWER	1
)28620339	Nelson's Ice Cream Inc.	Industrial	None	1	SEWER	1
)28620858	American Machine & Tool Co.	Industrial	None	1	SEWER	1
)29486532	A.C. Miller Concrete Company	Industrial	None	1	SEWER	1
)29651213	Borough of Royersford	Industrial	None	1	SEWER	1
)29709754	Royersford Spring Company	Industrial	None	1	SEWER	1
)29784885	Advanced Fluid Systems Inc	Industrial	None	1	SEWER	1
		11				

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Cust No	Name	Customer Type	Group Code	Service No	Description	Unit/Share
)25581487	Sakal, Brian J	Residential	None	1	SEWER	1
)25581852	Barbara Berman Ricci	Residential	None	1	SEWER	1
)25590276	Tallman, William	Residential	None	1	SEWER	1
)25596441	Tarantino, Joseph	Residential	None	1	SEWER	1
)25635087	Benson, Merrill G	Residential	None	1	SEWER	1
)25760044	Blamey, Chad & Katrin	Residential	None	1	SEWER	1
)25762972	Whitmore, Andrew	Residential	None	1	SEWER	1
)25807684	Mecca, Jessica	Residential	None	1	SEWER	1
)25824139	Gerber, Jenna	Residential	None	1	SEWER	1
)25859012	Creciun, Peter	Residential	None	1	SEWER	1
)25869156	Seiders, Lester & Monica	Residential	None	1	SEWER	1
)25879108	Chesterview Apartments	Residential	None	1	SEWER	1
)25930898	US Bank NA	Residential	None	1	SEWER	1
)25948684	Findley, Nicole M	Residential	None	1	SEWER	1
)25987108	Craft, Elena	Residential	None	1	SEWER	1
)26021179	John McDonald & Karlyn Eyre	Residential	None	1	SEWER	1
)26043841	Blanche, Camile	Residential	None	1	SEWER	1
)26160869	Hirst, Sharon A	Residential	None	1	SEWER	1
)26161459	John Marlatt & Rebecca Gardner	Residential	None	1	SEWER	1
)26204967	Niemczuk, Joseph W	Residential	None	1	SEWER	1
)26223333	Weiss, Joseph	Residential	None	1	SEWER	1
)26239376	C&R Property Management LLC	Residential	None	1	SEWER	1
)26300278	Millard, Barry & Sheryl	Residential	None	1	SEWER	1
)26310954	Nevin, Sean	Residential	None	1	SEWER	1
)26326843	Davis, Jeff	Residential	None	1	SEWER	1
)26340238	Jacobs, Jamie	Residential	None	1	SEWER	1
)26352002	Slifer, Richard	Residential	None	1	SEWER	1
)26353432	Lynch, Heather	Residential	None	1	SEWER	1
)26380250	Tallman, William	Residential	None	1	SEWER	1
)26381130	Stem, Matt & Heather	Residential	None	1	SEWER	1
)26403078	Petaccio, Andrea	Residential	None	1	SEWER	1
)26630702	O'Donnell, Kaitlyn	Residential	None	1	SEWER	1
)26660253	Ilyas, Asif	Residential	None	1	SEWER	1
)26713911	Hernandez, S & Murphy, M	Residential	None	1	SEWER	1
)26746591	Gieske and Niemann LLC	Residential	None	1	SEWER	1
)26875659	Speck, Erin	Residential	None	1	SEWER	1
)26880804	Raser, Randy	Residential	None	1	SEWER	1
)26909682	Perez, Waldemar & Aracelis	Residential	None	1	SEWER	1
)26969219	Macelwee-Todd, Lisa	Residential	None	1	SEWER	1
		1427				

Report Criteria:
Billing.Service No = 1
Customer.Customer Type = Residential

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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

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Report Criteria:
Service.Service number = 10,16
Group Code.Group code = "A","B","C"
Customer.Final bill date = {IS NULL}
Billing.Temporary disconnect date = {IS NULL}
Billing.Final disconnect date = {IS NULL}

Customer Number	Customer Name	Service Address	Customer Type	Units
10				
UP Commercial				
18011257.01	POTTSTOWN 1257 INC	1257 N CHARLOTTE ST	UP Commercial	2
18011277.01	CONIGLIARO, VITO	1277 N CHARLOTTE ST	UP Commercial	1
18011293.01	BURGER KING #4651	1293 N CHARLOTTE ST	UP Commercial	8
24010861.02	DCM PROPERTY INVESTMENTS LLC	861 WILLOW ST	UP Commercial	1
24010929.01	CREATIVE HEALTH SERVICES	929 WILLOW ST	UP Commercial	4
25100799.01	FULTON FINANCIAL CORP	799 STATE ST - FULTON BANK	UP Commercial	1
41020175.02	POTTSTOWN PLAZA ASSOC C/O COTSWOLD GRO	RENT-A-CENTER #50	UP Commercial	2
41020177.02	POTTSTOWN PLAZA ASSOC C/O COTSWOLD GRO	DOLLAR ADVANTAGE	UP Commercial	2
41020178.02	POTTSTOWN PLAZA ASSOC C/O COTSWOLD GRO	RADIO SHACK #60	UP Commercial	2
41021066.01	GEORGE EVANS	1066 FARMINGTON AVE	UP Commercial	1
41021173.01	SHUKOWITSH, STEVEN & JESSICA	1173 FARMINGTON AVE	UP Commercial	1
41021189.01	ARTIM, ROBERT	1189 FARMINGTON AVE	UP Commercial	1
41021320.01	STROGUS, BARRY	1320 FARMINGTON AVE	UP Commercial	1
41021346.01	AMERICAN METAL FINISHERS	1346 FARMINGTON AVE	UP Commercial	1
41021359.02	BOWERS, TODD	1359 FARMINGTON AVE	UP Commercial	1
41021391.01	MCGINNIS, DENNIS	1361 FARMINGTON AVE	UP Commercial	1
41021393.01	SDM INVESTMENTS LLC	1393 FARMINGTON AVE	UP Commercial	1
41021403.01	ARTIMS AUTOMOTIVE INC	1403 FARMINGTON AVE	UP Commercial	2
41021446.02	1446 FARMINGTON AVE LLC	1446 FARMINGTON AVE	UP Commercial	4
41021507.01	RICHARDSON, GLORIA MAUGER & THOMAS	1507 FARMINGTON AVE	UP Commercial	1
41021525.01	YOUNG, SHANE & KATHY	1525 FARMINGTON AVE	UP Commercial	1
41021587.01	BURGYONE, BARRY	1587 FARMINGTON AVE	UP Commercial	1
Total UP Commercial:				
22				40
UP Mixed Use				
20010875.01	SJW PROPERTIES LLC	875 N HANOVER ST -salon & apts	UP Mixed Use	2
20010933.02	MCGONIGLE, MICHAEL	933 N HANOVER ST	UP Mixed Use	2
20010943.01	STRAUSS, PAUL	943 N HANOVER ST	UP Mixed Use	3
20010955.01	BRODI, GERALD & ELAINE	955 N HANOVER ST	UP Mixed Use	11
21070842.01	DAVIDHEISER, ALLEN & BEVERLY	842 FARMINGTON AVE	UP Mixed Use	1
24010940.01	TOLENTINO, ROBERT & ASUNCION	940 WILLOW ST	UP Mixed Use	3
41050013.01	OLOCK, ANDREW	941 N HANOVER ST	UP Mixed Use	4
Total UP Mixed Use:				
7				26
UP Public				
16030233.01	HOLY TRINITY ORTHODOX CHURCH	1256 JUNIPER ST	UP Public	1
20011351.01	POTTSGROVE SCHOOL DISTRICT - ADMIN BLDG	1351 N HANOVER ST - MULTI	UP Public	30
41230093.01	CHURCH OF LATTER - DAY SAINTS	93 MAUGERS MILL RD	UP Public	1
Total UP Public:				
3				32
UP Residential				
10140863.02	MILLS, LUCAS	863 FARMINGTON AVE	UP Residential	1
10140871.01	POLLOCK, ANTHONY FILLMAN & BRENDA	871 FARMINGTON AVE	UP Residential	1

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Customer Number	Customer Name	Service Address	Customer Type	Units
42061525.02	HUTELMYER, JULIA & GREG	1525 CLOVERHILL RD	UP Residential	1
42071000.01	HEATH, TERENCE M & CATHERINE	1000 FALLBROOK LN	UP Residential	1
42071002.02	DAVIS, STEPHEN & KATHRYN	1002 FALLBROOK LN	UP Residential	1
42071004.02	GALLINA, GAETANO	1004 FALLBROOK LN	UP Residential	1
42071006.02	LIANG, JIE LIN & XIUYAN	1006 FALLBROOK LN	UP Residential	1
42071007.01	STEELE, CORTNEY & DANIEL	1007 FALLBROOK LN	UP Residential	1
42071008.02	FENOGLIO, CASEY & RICHARD	1008 FALLBROOK LN	UP Residential	1
42071009.02	SHAW, SCOTT & THERESA	1009 FALLBROOK LN	UP Residential	1
42071010.02	JOHNSON, FRANKLIN & KIMBERLY	1010 FALLBROOK LN	UP Residential	1
42071011.01	HUBBARD, ANNA	1011 FALLBROOK LN	UP Residential	1
42071012.02	DIXON, JULIAN & ERICA	1012 FALLBROOK LN	UP Residential	1
42071013.01	HARISH, BIDADI & LAKSHMI	1013 FALLBROOK LN	UP Residential	1
42071014.02	RICHARDSON, KATRINA	1014 FALLBROOK LN	UP Residential	1
42071015.02	DZIUNYCZ, MATTHEW & EMILY	1015 FALLBROOK LN	UP Residential	1
42071016.02	ISHLER, KARI KLAUS & MICHAEL	1016 FALLBROOK LN	UP Residential	1
42071017.03	CONNER IV, SAMUEL	1017 FALLBROOK LN	UP Residential	1
42071018.01	SHORT, CHRISTOPHER & RONNA	1018 FALLBROOK LN	UP Residential	1
42071019.01	MCPHILLIMEY, MARK & ANN KOREEN	1019 FALLBROOK LN	UP Residential	1
42071020.01	MCWILLIAMS, DAVID & LAURI	1020 FALLBROOK LN	UP Residential	1
42071021.01	RIZZETTO, NINA	1021 FALLBROOK LN	UP Residential	1
42071022.02	PASQUAL, MICHAEL & MARIA	1022 FALLBROOK LN	UP Residential	1
42071024.01	COLLINGS, MARK	1024 FALLBROOK LN	UP Residential	1
42071026.01	GAINES, NICOLE	1026 FALLBROOK LN	UP Residential	1
42071028.02	SPRING HILL REALTY	1028 FALLBROOK LN	UP Residential	1
42071030.03	HOUSEAL JR, JOSEPH & CARA	1030 FALLBROOK LN	UP Residential	1
42071032.03	DAILY, ALBERT & REGINA	1032 FALLBROOK LN	UP Residential	1
42071034.01	FELTENBERGER, CHAD & HEATHER	1034 FALLBROOK LN	UP Residential	1
42071036.02	SOLIVAN, GINA & ADRIAN	1036 FALLBROOK LN	UP Residential	1
42071038.03	THAO, DAVID	1038 FALLBROOK LN	UP Residential	1
42071040.01	JORGENSON, TRISHA & ERICK	1040 FALLBROOK LN	UP Residential	1
42071042.01	KROENING, TERRY	1042 FALLBROOK LN	UP Residential	1
42071044.01	SCHURR, JEFFREY KENT	1044 FALLBROOK LN	UP Residential	1
42071045.01	PURKAYASTHA, DEBASHISH & SUDDATTA	1045 FALLBROOK LN	UP Residential	1
42071046.03	WILLIS, FRANK & FAITH	1046 FALLBROOK LN	UP Residential	1
42071047.02	CONG, MY	1047 FALLBROOK LN	UP Residential	1
42071048.01	HAINES, LARRY & DONNA	1048 FALLBROOK LN	UP Residential	1
42071050.02	MIDDLETON, JAMES	1050 FALLBROOK LN	UP Residential	1
42071052.01	SEMETER, DANIEL	1052 FALLBROOK LN	UP Residential	1
42071513.04	ROMANO, DANIEL & SARA	1513 CLOVER HILL RD	UP Residential	1
42081600.02	GOMEZ, ODETTE	1600 APPLEGATE LN	UP Residential	1
42081601.01	RODRIGUEZ, RUTH & JUAN	1601 APPLEGATE LN	UP Residential	1
42081602.02	EGARIAN, CHRISTOPHER	1602 APPLEGATE LN	UP Residential	1
42081604.01	LAWLOR, CARL & LORETTA	1604 APPLEGATE LN	UP Residential	1
42081606.01	COHEN, SIDNEY & RUTH	1606 APPLEGATE LN	UP Residential	1
42081608.01	ROCHA, WILL & CARMEN	1608 APPLEGATE LN	UP Residential	1
42081609.01	EVANS, GARETH	1609 APPLEGATE LN	UP Residential	1
42081610.01	DUNKEL, CAROL	1610 APPLEGATE LN	UP Residential	1
42081611.02	SORG, GREGORY & TRICIA	1611 APPLEGATE LN	UP Residential	1
42081612.01	MANCINI, MICHAEL & AMIE	1612 APPLEGATE LN	UP Residential	1
42091501.02	HULL, KEVIN & AMY	1501 MAYWOOD LN	UP Residential	1
42091503.02	EPSTEIN, CARL & LINDA	1503 MAYWOOD LN	UP Residential	1
410512005.01	CUTLER, ROBERT & ELIZABETH	2005 PROUT FARM RD	UP Residential	
4102152012.01	SCHAEFFER, JACK & AUDREY	1520 FARMINGTON AVE	UP Residential	1
4152006901.01	BUCK, WILLIAM	69 MICKLITZ DR	UP Residential	1
Total UP Residential: 1,390				1429

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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}

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Carteret Fair Value Determination
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https://www.pottsmerc.com/news/upper-pottsgrove-votes-4-1-to-sell-sewer-system-for-13-7m/article_f8f493d8-8408-11ea-8425-07388a90f968.html

FEATURED

Upper Pottsgrove votes 4-1 to sell sewer system for $13.7M

Evan Brandt ebrandt@21st-centurymedia.com @PottstownNews on Twitter
Apr 22, 2020

Upper Pottsgrove Township Commissioner Martin Schreiber, framed in yellow, outlines his objections to the sale of the township's sewer collection system during Monday's online meeting.

Photo from Screenshot

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UPPER POTTSGROVE — Township Commissioners voted 4-1 Monday night to sell the township's sewer collection system for $13.75 million to Pennsylvania American Water.

Commissioners Martin Schreiber cast the lone vote against the sale.

As The Mercury reported on April 8, the presentation provided at four online informational sessions earlier in the month forecast that sewer rates would drop by about 9.6 percent under Pennsylvania American Water ownership.

However, the decrease — from the current $71.87 per month to $65 per month — would be short-lived, according to Bernie Grundusky, senior director for business development for the water company.

A chart he shared as part of the online meetings showed rates would return to the current rate in three or four years after the sale, and then increase annually by an average of 4.5 to 5.2 percent.

By comparison, the township's sewer rates, which have increased in a more haphazard fashion, average out to between 4.6 to 6 percent a year, according to the presentation.

Now that the sale has been approved, the average homeowner will save $1,260 between the time rates were dropped to when they return to their current level, according to the presentation.

The deal must still be approved by the Pennsylvania Public Utility Commission, a process that could take longer than a year to be finalized.

As a result of the vote, PFM Financial Advisors LLC will be paid more than $250,000.

As noted by Commissioners' Chairman Trace Slinkerd, who, prior to the vote, praised the consultants for taking a risk, if the commissioners had voted against the sale, PFM would have been paid only its $7,500 fee for preliminary work.

Scott Shearer, managing director of PFM, insisted during Monday's meeting that the firm "did not make a recommendation. We're not trying to sell this system."

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During the four public information sessions the township staged online, not one negative aspect of the sale was identified. Township Manager Michelle Reddick said the presentations were put together by PFM and the staff.

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Carteret Fair Value Determination
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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.

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"All I have is a bunch of slides, which changed after almost every meeting, and a lot of 'take-my-word-for-it-answers. It sounds like you have a 90-day window to make a decision," said Kern, urging a delay or a no vote.

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Dustin Schreiber said his research indicates American Water, the parent company of the high bidder, "is owned by a German conglomerate called RFWAG. I'd prefer we support an American company if we sell, and I'm not convinced we should sell."

Hanover Drive resident Keith Plumadore said he sees the sale as a short-term fix for the township's finances. "It's a temporary reprieve from amateur fiscal management. The township did a good job with the (request for proposals) but I see no evidence the township will execute and bring better fiscal governance with the proceeds."

"When I moved here in 2000, the commissioners and the people all worked together," said Leach. "I implore you to at least consider the idea of tabling this motion, It would be so easy to delay this vote so we can get all our ducks in a row and demonstrate transparency we always used to have in this community."

Slinkerd closed public comment and then called on Schreiber to outline the objections he has been posting on his Facebook page and the Turnberry Farms Facebook page.

However, as Schreiber spoke, Slinkerd repeatedly interrupted him, talked over him and told him his points were not relevant to the subject at hand.

"The sewer customers paid for the sewer, if they were stockholders, they should be getting a bonus check, they're getting the short end of the stick," said Schreiber.

"What about people who pay school taxes but don't have any children in the system," Slinkerd interjected. "Should they not be taxed?"

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The areas in green on this map of Upper Pottsgrove show the areas served by the township sewer system.

Official township sewer map

"Everyone has a chance to send to send students to school," Schreiber replied. "What about open space, Martin?" Slinkerd interrupted again. "That's paid with earned income tax, but seniors don't pay that. Should we put signs up telling them they can't use the open space?" Slinkerd asked.

"We taxed ourselves for that," Schreiber started to reply and Slinkerd pressed on. "We don't separate our residents into septic or sewer residents. Are you saying that's the way we should go?"

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As Schreiber tried to raise further points, Slinkerd continued to interrupt him. "That's what you've been doing, going down this rabbit hole trying to dislodge what we're talking about," Slinkerd said.

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"You keep trying to throw things at the wall at the 11th hour to see what sticks to make it seem like you did research," he continued. "You've had a year to think about this stuff."

"Are you going to let me finish?" Schreiber finally asked. "I never stopped you," Slinkerd replied, finally allowing Schreiber to speak uninterrupted.

The other commissioners, Dave Waldt, Cathy Paretti and Renee Spaide all were permitted to speak uninterrupted, except when Schrieber spoke, thinking Paretti was finished with her point.

He apologized for interrupting her and urged her to go on.

The other commissioners joined in disputing Schreiber's points.

Spaide, who has served on the board for many years with Schreiber, read from a prepared statement that noted, in part, "all the commissioners have been involved."

She said she agrees with Read that running the sewer system is a risk. "We have a road crew, not a sewer crew and Pennsylvania American Water does this for a living," said Spaide.

Waldt said he and Paretti "ran on concern about the township's finances. People were very unhappy." He disputed Schreiber's characterization that he was left out of discussions. "We've spent hours on the budget and I never see you. You never participate," said Waldt.

"Dave and I started to get to get acquainted with this while we were running," said Paretti. "We don't have any business running a sewer business. If we keep it, our taxes would rise and the rates would be higher than if we didn't own it."

She added, "I don't wait to be invited into things, I ask for the information I need."

When Schreiber tried to point out he had asked Reddick for information and it took two days to get an answer, the other commissioners leaped to her defense. "Michelle has a lot on her plate," said Paretti.

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"Michelle has done an outstanding job," said Slinkerd.

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Paretti 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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03/25/2020

Billing Report - 1
Va Township

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

Service	Charge	Rate	Current Charge	Prior Due	Total Billed	w\Penalty

Billing Summary By Class

Class	# of Units	# of Accounts	Consumption charges	Fixed charges	Special charges	Unit charges	Taxes	Prior Due	Total	Consumption
CH	0.00	6	$1,903.57	$0.00	$0.00	$0.00	$0.00	$588.17	$2,491.74	0.00
COM	0.00	119	$57,834.48	$0.00	$0.00	$0.00	$0.00	$4,543.43	$62,377.91	1,636.00
DAY	0.00	2	$2,006.87	$0.00	$0.00	$0.00	$0.00	$0.00	$2,006.87	0.00
IND	0.00	13	$11,785.09	$0.00	$0.00	$0.00	$0.00	-$967.10	$10,817.99	27.00
MH	0.00	4	$1,087.76	$0.00	$0.00	$0.00	$0.00	$1,003.61	$2,091.37	0.00
RES	1.00	3,022	$943,941.94	$0.00	$0.00	$0.00	$0.00	$224,214.75	$1,168,156.69	31,458.00
SCH	0.00	3	$4,074.10	$0.00	$0.00	$0.00	$0.00	$0.00	$4,074.10	338.00
Grand Totals	1.00		$1,022,633.81	$0.00	$0.00	$0.00	$0.00	$229,382.86	$1,252,016.67	33,459.00

	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	Metered Sewer	Sewer	Trash	Water	Total
RES	0.00	0.00	1.00	0.00	1.00
	1,638	1,344	2,741	1,641	3,022
	$326585.47	$274835.00	$178743.69	$163777.78	$943941.94
	15,718.00	0.00	0.00	15,740.00	31,458.00
SCH	0.00	0.00	0.00	0.00	0.00
	2	1	0	2	3
	$2026.80	$627.00	$0.00	$1420.30	$4074.10
	169.00	0.00	0.00	169.00	338.00
Total	0.00	0.00	1.00	0.00	1.00
	1,666	1,459	2,770	1,671	3,169
	$338059.87	$332476.82	$180883.59	$171213.53	$1022633.81
	16,442.00	526.00	0.00	16,491.00	33,459.00

Billing Summary By District

District	Accounts	Consumption charges	Fixed charges	Special charges	Unit charges	Total Taxes	Prior Due	Total	Consumption
	98	$31,793.07	$0.00	$0.00	$0.00	$0.00	$7,493.77	$39,286.84	1,308.00
01	227	$89,098.00	$0.00	$0.00	$0.00	$0.00	$11,780.00	$100,878.00	5,375.00
02	180	$66,337.00	$0.00	$0.00	$0.00	$0.00	$7,045.26	$73,382.26	3,734.00
03	373	$140,804.30	$0.00	$0.00	$0.00	$0.00	$12,388.59	$153,192.89	8,152.00
04	128	$45,371.52	$0.00	$0.00	$0.00	$0.00	$3,462.92	$48,834.44	2,402.00
05	79	$29,618.51	$0.00	$0.00	$0.00	$0.00	$1,527.02	$31,145.53	1,676.00
06	507	$168,878.38	$0.00	$0.00	$0.00	$0.00	-$1,009.62	$167,868.76	7,332.00
A	522	$156,120.45	$0.00	$0.00	$0.00	$0.00	$53,216.98	$209,337.43	1,346.00
B	662	$191,212.44	$0.00	$0.00	$0.00	$0.00	$96,144.83	$287,357.27	1,172.00
C	364	$92,570.36	$0.00	$0.00	$0.00	$0.00	$36,930.04	$129,500.40	436.00
EF	9	$3,446.52	$0.00	$0.00	$0.00	$0.00	$91.36	$3,537.88	218.00
WC	20	$7,383.26	$0.00	$0.00	$0.00	$0.00	$311.71	$7,694.97	308.00
Grand Totals		$1,022,633.81	$0.00	$0.00	$0.00	$0.00	$229,382.86	$1,252,016.67	33,459.00

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(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

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Billing Report - 1
Va Township

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

Service	Charge	Rate	Current Charge	Prior Due	Total Billed	w\Penalty

Billing Summary By Class

Class	# of Units	# of Accounts	Consumption charges	Fixed charges	Special charges	Unit charges	Taxes	Prior Due	Total	Consumption
CH	0.00	6	$1,903.57	$0.00	$0.00	$0.00	$0.00	$588.17	$2,491.74	0.00
COM	0.00	119	$57,834.48	$0.00	$0.00	$0.00	$0.00	$4,543.43	$62,377.91	1,636.00
DAY	0.00	2	$2,006.87	$0.00	$0.00	$0.00	$0.00	$0.00	$2,006.87	0.00
IND	0.00	13	$11,785.09	$0.00	$0.00	$0.00	$0.00	-$967.10	$10,817.99	27.00
MH	0.00	4	$1,087.76	$0.00	$0.00	$0.00	$0.00	$1,003.61	$2,091.37	0.00
RES	1.00	3,022	$943,941.94	$0.00	$0.00	$0.00	$0.00	$224,214.75	$1,168,156.69	31,458.00
SCH	0.00	3	$4,074.10	$0.00	$0.00	$0.00	$0.00	$0.00	$4,074.10	338.00
Grand Totals	1.00		$1,022,633.81	$0.00	$0.00	$0.00	$0.00	$229,382.86	$1,252,016.67	33,459.00

	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

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03/25/2020

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

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03	373	$140,804.30	$0.00	$0.00	$0.00	$0.00	$12,388.59	$153,192.89	8,152.00
04	128	$45,371.52	$0.00	$0.00	$0.00	$0.00	$3,462.92	$48,834.44	2,402.00
05	79	$29,618.51	$0.00	$0.00	$0.00	$0.00	$1,527.02	$31,145.53	1,676.00
06	507	$168,878.38	$0.00	$0.00	$0.00	$0.00	-$1,009.62	$167,868.76	7,332.00
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B	662	$191,212.44	$0.00	$0.00	$0.00	$0.00	$96,144.83	$287,357.27	1,172.00
C	364	$92,570.36	$0.00	$0.00	$0.00	$0.00	$36,930.04	$129,500.40	436.00
EF	9	$3,446.52	$0.00	$0.00	$0.00	$0.00	$91.36	$3,537.88	218.00
WC	20	$7,383.26	$0.00	$0.00	$0.00	$0.00	$311.71	$7,694.97	308.00
	Grand Totals	$1,022,633.81	$0.00	$0.00	$0.00	$0.00	$229,382.86	$1,252,016.67	33,459.00

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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

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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

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Application of Pennsylvania-American Water Company for the Acquisition of the Wastewater Collection and Treatment System Owned by the York City Sewer Authority (the "Authority") and Operated by the City of York (the "City") (collectively "York")

66 Pa. C.S. § 1329
Application Filing Checklist – Water/Wastewater
Docket No. A-2021-3024681

17. Customers.

a. State the seller's actual number of customers by class and quantify the related consumption or gallons treated in the current calendar year and future number of connections anticipated for the next 10 years.

RESPONSE:

a. As of April 2021, York provided direct wastewater service to approximately 13,747 customers and seven bulk customers:

1. Manchester Township
2. West Manchester Township
3. York Township
4. North York Borough
5. The York Water Company (owner of the West York Borough Collection System)
6. Spring Garden Township
7. Springettsbury Township

The York does not differentiate by customer class.

Consumption (annual):

Based on 2020 monthly average flow data from the 2020 Chapter 94 Report, the annual gallon treated is 3,341,575,000 gallons, inclusive of the seven bulk customers' sewage.

Please refer to **Appendix A-20-c,** Chapter 94 Report for future EDU projections.

	York, PA Data & Demographics (As of July 1, 2020)	*Township Of Manchester Data & Demographics (As of July 1, 2020)*	*North York, PA Data & Demographics (As of July 1, 2020)*	*Township Of Spring Garden Data & Demographics (As of July 1, 2020)*	*Township Of West Manchester Data & Demographics (As of July 1, 2020)*	*West York, PA Data & Demographics (As of July 1, 2020)*	*Township Of York Data & Demographics (As of July 1, 2020)*
POPULATION							
Total Population	45,431 (100%)	19,023	2,123 (100%)	13,128	19,211	4,888 (100%)	29,228
Population in Households	44,277 (97.5%)	18,887	2,105 (99.2%)	11,033	18,869	4,888 (100.0%)	28,964
Population in Families	32,103 (70.7%)	16,281	1,537 (72.4%)	9,141	15,010	3,513 (71.9%)	23,148
Population in Group Quarters[1]	1,154 (2.5%)	136	18 (0.8%)	2,095	342	0	264
Population Density	8,583	1,198	6,961	1,941	963	9,307	1,158
Diversity Index[2]	85	39	61	30	31	57	31
INCOME							
Median Household Income	$31,354	$81,734	$43,955	$82,974	$61,253	$44,169	$68,134
Average Household Income	$43,670	$106,345	$55,262	$121,726	$76,342	$55,513	$92,430
% of Income for Mortgage[4]	11%	11%	9%	9%	12%	10%	13%
Per Capita Income	$16,097	$39,859	$21,861	$42,029	$32,321	$22,952	$39,265
Wealth Index[5]	31	139	40	190	80	40	119
HOUSING							
Total HU (Housing Units)	19,268 (100%)	7,413 (100%)	918 (100%)	4,777 (100%)	8,555 (100%)	2,143 (100%)	12,937 (100%)
Owner Occupied HU	6,444 (33.4%)	6,219 (83.9%)	438 (47.7%)	3,903 (81.7%)	6,214 (72.6%)	1,084 (50.6%)	8,495 (65.7%)
Renter Occupied HU	10,244 (53.2%)	909 (12.3%)	402 (43.8%)	605 (12.7%)	1,908 (22.3%)	937 (43.7%)	3,917 (30.3%)
Vacant Housing Units	2,580 (13.4%)	285 (3.8%)	78 (8.5%)	269 (5.6%)	433 (5.1%)	122 (5.7%)	525 (4.1%)
Median Home Value	$80,655	$208,273	$90,676	$186,383	$172,881	$108,753	$206,026
Average Home Value	$98,157	$236,145	$105,638	$251,006	$199,513	$119,373	$260,636
Housing Affordability Index[3]	159	188	227	204	162	186	147
HOUSEHOLDS							
Total Households	16,688	7,128	840	4,508	8,122	2,021	12,412
Average Household Size	2.65	2.65	2.51	2.45	2.32	2.42	2.33
Family Households	9,494	5,306	490	3,168	5,271	1,134	8,049
Average Family Size	3	3	3	3	3	3	3

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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.

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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

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Township Of Lower Makefield Data & Demographics (As of July 1, 2020)

POPULATION

Total Population	33,219 (100%)
Population in Households	33,004 (99.4%)
Population in Families	29,270 (88.1%)
Population in Group Quarters[1]	215 (0.6%)
Population Density	1,859
Diversity Index[2]	31

INCOME

Median Household Income	$150,466
Average Household Income	$195,168
% of Income for Mortgage[4]	13%
Per Capita Income	$72,302
Wealth Index[5]	302

HOUSING

Total HU (Housing Units)	12,638 (100%)
Owner Occupied HU	10,628 (84.1%)
Renter Occupied HU	1,677 (13.3%)
Vacant Housing Units	333 (2.6%)
Median Home Value	$464,690
Average Home Value	$496,307
Housing Affordability Index[3]	153

HOUSEHOLDS

Total Households	12,305
Average Household Size	2.68
Family Households	9,462
Average Family Size	3

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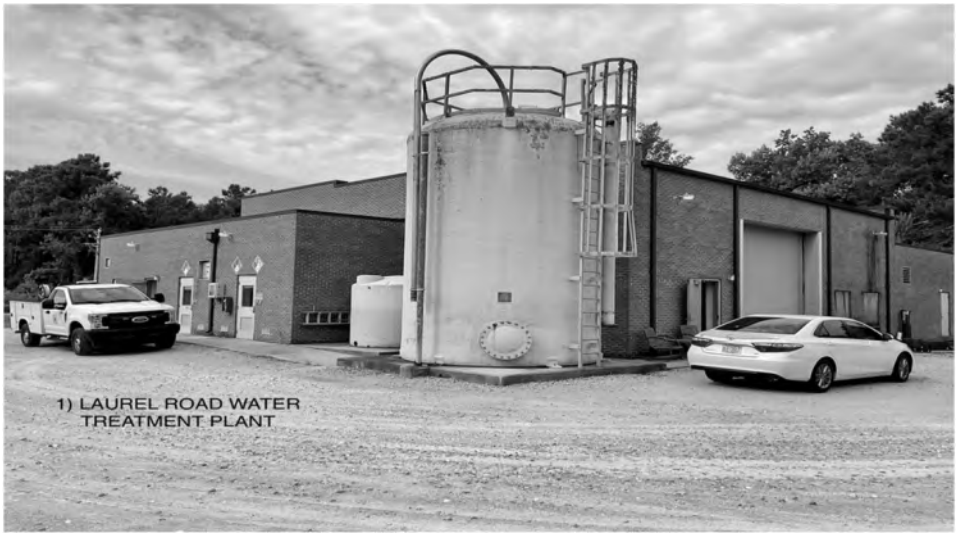

Laurel Road Water Treatment Plant - WTP Building and Water Tank - 534 Laurel Road

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Laurel Road Water Treatment Plant - WTP Equipment - 534 Laurel Road

Laurel Road Water Treatment Plant - WTP - Lab Equipment - 534 Laurel Road

Laurel Road Water Treatment Plant - WTP Equipment - 534 Laurel Road

Laurel Road Water Treatment Plant - WTP Equipment - 534 Laurel Road

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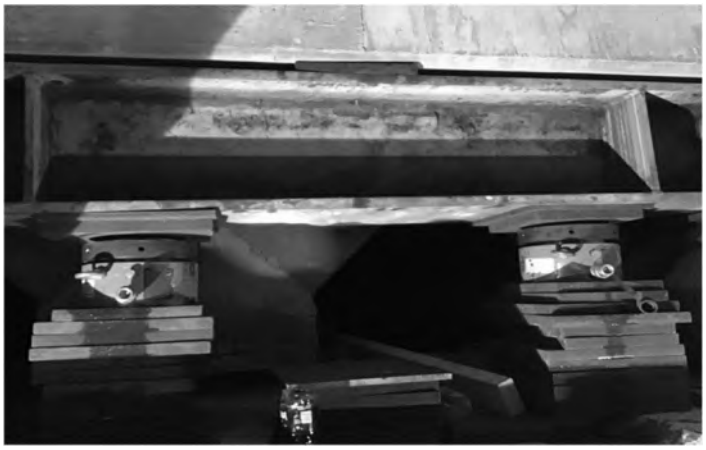

Laurel Road Water Treatment Plant - WTP Equipment - 534 Laurel Road

Laurel Road Water Treatment Plant - WTP Equipment - 534 Laurel Road

Laurel Road Water Treatment Plant - WTP Equipment - 534 Laurel Road

Laurel Road Water Treatment Plant - Pumping Equipment - 534 Laurel Road

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Laurel Road Water Treatment Plant - WTP Equipment - 534 Laurel Road

Laurel Road Tank and Well - Tank and Well - 534 Laurel Road

Taylor Farm - Water Tank #3 - Tank - 209 Taylor Farm

Mayflower Road Tank - Tank - 104 Mayflower Drive

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State Rte. 101 - Pump Station #1 - Pump Station - 3510 State Rte 101

Shell Landing - Pump Station #2 - Pump Station

State Rte. 101 - Pump Station #3 - Pump Station - 1109 State Rte 101

Taylor Farm Hydrant - Hydrant - 209 Taylor Farm

Hydrant - Shell Landing

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METERS	Quantity	Install yr Index	Price Yr Index	Price Adjustment	Price Yr Cost	OCN
1991	29	162	565	0.286726	$ 350.00	$ 2,910.27
2002	97	207	565	0.366372	$ 350.00	$ 12,438.32
2003	97	207	565	0.366372	$ 350.00	$ 12,438.32
2004	97	207	565	0.366372	$ 350.00	$ 12,438.32
2005	97	214	565	0.378761	$ 350.00	$ 12,858.94
2006	104	248	565	0.438938	$ 350.00	$ 15,977.35
2007	18	289	565	0.511504	$ 350.00	$ 3,222.48
2008	21	373	565	0.660177	$ 350.00	$ 4,852.30
2009	21	373	565	0.660177	$ 350.00	$ 4,852.30
2010	30	376	565	0.665487	$ 350.00	$ 6,987.61
2011	42	379	565	0.670796	$ 350.00	$ 9,860.71
2012	67	379	565	0.670796	$ 350.00	$ 15,730.18
2013	74	381	565	0.674336	$ 350.00	$ 17,465.31
2014	64	386	565	0.683186	$ 350.00	$ 15,303.36
2015	37	401	565	0.709735	$ 350.00	$ 9,191.06
2016	60	403	565	0.713274	$ 350.00	$ 14,978.76
2017	59	419	565	0.741593	$ 350.00	$ 15,313.89
2018	58	436	565	0.771681	$ 350.00	$ 15,665.13
2019	59	447	565	0.79115	$ 350.00	$ 16,337.26
2020	58	466	565	0.824779	$ 350.00	$ 16,743.01
2021	65	565	565	1	$ 350.00	$ 22,750.00
	1254					$ 258,314.88

SERVICES	Quantity	Install yr Index	Price Yr Index	Price Adjustment	Price Yr Cost	OCN
1991	29	224	603	0.371476	$ 1,114.00	$ 12,000.90
2002	97	291	603	0.482587	$ 1,114.00	$ 52,147.39
2003	276	295	603	0.489221	$ 1,114.00	$ 150,417.71
2004	97	323	603	0.535655	$ 1,114.00	$ 57,881.81
2005	97	352	603	0.583748	$ 1,114.00	$ 63,078.63
2006	408	398	603	0.660033	$ 1,114.00	$ 299,993.00
2007	7	415	603	0.688226	$ 1,114.00	$ 5,366.78
2008	19	427	603	0.708126	$ 1,114.00	$ 14,988.20
2011	3	464	603	0.769486	$ 1,114.00	$ 2,571.62
2012	51	491	603	0.814262	$ 1,114.00	$ 46,261.48
2013	35	492	603	0.81592	$ 1,114.00	$ 31,812.74
2014	25	483	603	0.800995	$ 1,114.00	$ 22,307.71
2015	18	483	603	0.800995	$ 1,114.00	$ 16,061.55
2016	15	486	603	0.80597	$ 1,114.00	$ 13,467.76
2017	14	500	603	0.829187	$ 1,114.00	$ 12,932.01
2018	13	513	603	0.850746	$ 1,114.00	$ 12,320.51
2019	14	544	603	0.902156	$ 1,114.00	$ 14,070.02
2020	13	579	603	0.960199	$ 1,114.00	$ 13,905.60
2021	23	603	603	1	$ 1,114.00	$ 25,622.00
	1254					$ 867,207.42

Hydrants	Quantity	Install yr Index	Price Yr Index	Price Adjustment	Price Yr Cost	OCN
2012	175	1	1	1	$ 3,000.00	$ 525,000.00

Adjustment to Asset Inventory from Depreciaion Schedule for hydrants

Item	Year	OCN
FIRE HYDRANTS & LINE EXTENSION (original item)	**2012**	1,058,177.59
FIRE HYDRANTS	**2012**	-525,000.00
LINE EXTENSION (FIRE HYDRANTS SUBTRACTED)	**2012**	533,177.59

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Avenu Capital Assets CARTERET CO FIXED ASSETS
5/03/2022 11:17:24 Depreciation Schedule FAG35R001 04.26 Pg 2
Depr. type, Category, Class and Department
Trans 6/30/2021

Item Tag Depr. /Item Descr Date Life Enterprise		Original Value
equipment	RADIO READ HANDHELD SP-SAR5002	**2009**	7,400.00
equipment	EASY LOCATOR IXM GROUND	**2008**	17,480.00
equipment	HANDHELD DEVICE DRIVE-BY	**2014**	9,856.80
equipment	TRIMBLE W/FLOODLIGHT	**2014**	7,475.00
equipment	SENSUS DRIVE RADIO UNIT/LAPTOP	**2018**	25,500.00
generator	MAGNUM MOBILE GENERATOR	**2006**	15,000.00
generator	MOBILE GENERATOR MMG35FH	**2011**	19,190.76
generator	MAGNUM GENERATOR MOBILE	**2013**	21,576.00
pipe	CDBG WATER SYSTEM	**1991**	1,337,172.18
pipe	JARRETT BAY CDBG WATER LINES	**2001**	96,581.00
pipe	EDA INDUSTRIAL PK WATER LINES	**2001**	128,701.68
pipe	WATER LINES	**2003**	1,475,968.61
pipe	PHASE II WATER PROJECT	**2006**	2,906,676.24
pipe	BRIDGE WATER AT WARE CREEK	**2006**	37,970.08
pipe	JOANS HAVEN DRIVE LOTS	**2006**	15,199.27
pipe	TRACEY GROVE SUBDIVISION	**2007**	55,209.00
pipe	MILL LANDING SUBDIVISION	**2007**	14,204.93
pipe	TRACEY GROVE SUBDIVISION	**2008**	15,703.51
pipe	CHADWICK SHORES PLANTATION	**2008**	167,657.00
pipe	LINE EXTENSION (FIRE HYDRANTS SUBTRACTED)	**2012**	533,177.59
pipe	WATER SYSTEM IMPROVEMENTS	**2012**	15,954.56
Treatment plant	WATER PLANT - LAUREL ROAD	**2003**	2,119,263.81
WATER TREATMENT	ALUM FEED SYSTEM	**2009**	17,500.00
WATER TREATMENT	WATER TREATMENT RENOVATIONS	**2010**	158,528.98

FIRE HYDRANTS & LINE EXTENSION	**2012**	1,058,177.59
FIRE HYDRANTS	**2012**	-525,000.00
LINE EXTENSION (FIRE HYDRANTS SUBTRACTED)	**2012**	533,177.59

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EQUIPMENT mostly communication and readers

Series Id: PCU3342--3342--
Series Tit PPI industry group data for Communications equipment mfg, not seasonally adjusted
Industry: Communications equipment mfg
Product: Communications equipment mfg
Base Dat 198512

Download:

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1985												100
1986	100.7	100.7	101.1	101.1	101.3	101.3	102.5	102.2	102.8	102.9	102.9	102.9
1987	103.6	103.4	103.4	103.4	103.4	103	103.6	103.6	103.4	103.6	103.7	103.8
1988	104.3	104.3	103.3	103.5	103.7	103.2	103.8	103.8	103.9	104.1	104.3	104.3
1989	105	105	104.9	105.2	105.3	105.5	106.5	106.3	106.3	106.4	106.4	106.5
1990	107.6	107.2	107.1	107.2	107.2	107.3	107.6	107.5	107.6	107.7	107.8	107.9
1991	108	108	108.2	108.4	108.4	108.4	108.7	108.7	108.7	108.7	108.9	108.9
1992	109.4	109.5	109.7	109.7	109.7	109.8	109.6	109.8	109.8	109.9	109.9	110.1
1993	111	111.3	111.4	111.1	111.1	111.2	111.6	112	112	112.6	112.3	112.6
1994	113.3	113.5	113.8	113.7	113.7	113.4	113.4	113.2	113.2	113	112.9	112.8
1995	114	114	114.1	114.3	114.3	113.8	113.7	113.8	113.8	113.8	113.7	113.6
1996	114.6	114.7	114.7	114.8	114.7	114.7	114.9	115.1	115.1	115.3	115.6	115.6
1997	115.7	115.8	115.4	115.5	115.7	115.7	116	115.7	115.8	115.8	115.7	115.7
1998	115.9	115.8	115.5	115.1	114.7	114.7	114.9	114.8	114.8	114.8	114.7	114.1
1999	114.5	113.8	113.8	113.5	113.4	113.1	113.2	113.2	111.9	112.1	111.9	111.3
2000	111.4	110.9	110.7	110.4	110.1	110.1	110.2	110.2	110.3	110.2	110.2	110.2
2001	110.4	110.4	110.4	108.5	108.6	108.5	108.1	107.6	107.8	107.8	107.7	107.7
2002	107.5	106.6	106.5	105.7	105.6	105.3	104.3	104.5	104.5	103.6	103.5	102.8
2003	102.7	101.9	102.8	102.7	102.6	102.1	101	101.1	101.4	100.5	100.9	100.9
2004	100.7	98.6	98.6	98.5	98.6	98.2	97.9	98.3	97.9	97.3	97.9	97.8
2005	97.5	97.3	97.4	97.5	97.4	97.2	97.1	97	96.6	96.6	96.5	96.4
2006	95.7	96.1	95.9	96	96	96.1	95.8	96	96.1	95.8	95.8	95.3
2007	95.5	95.7	95.9	95.8	95.8	95.8	95.8	95.8	95.8	95.9	95.8	95.8
2008	96.2	96.9	96.8	96.9	97.2	97.1	97.3	97.3	97.3	97.2	97.4	97.4
2009	97.5	97.2	97.2	97.2	97.1	97.1	97.2	97.1	97.2	97.2	97.2	97.2
2010	97.2	97.1	97.1	96.9	96.8	96.7	97	96.9	96.8	96.8	96.9	96.9
2011	96.8	96.7	96.8	96.4	96.4	96.2	96.3	96.4	96.4	95.9	95.9	95.9
2012	96	96	96	96	96.1	96.1	96	95.9	95	94.8	94.8	94.8
2013	95	95.1	95.1	95.3	95.2	95.5	95.5	95.6	95.8	95.4	95.4	95.5
2014	95.5	95.7	95.7	95.7	95.6	95.7	95.7	95.4	95.6	95.7	95.5	95.7
2015	95.8	95.8	95.9	95.9	96.1	96.1	96	95.9	95.4	95.7	95.7	95.6
2016	95.5	95.7	95.6	95.7	95.6	95.4	95.3	95.4	95.2	94.5	94.7	93.9
2017	94.1	93.9	94.1	94	93.8	93.9	93.9	93.6	93.3	93.2	93.5	93.4
2018	93.3	93.4	93.2	93.1	93.1	93.1	93	93.1	92.9	92.9	92.9	92.9
2019	93.3	93	93	93	93	93	93.1	93.1	93.1	93.3	93.5	93.6
2020	93.7	93.6	93.8	93.6	93.7	93.6	93.8	93.7	93.8	93.4	93.6	93.6
2021	93.5	93.8	93.8	93.9	93.7	93.6	94.108	94.197	94.65	95.308	95.645	95.791
2022	96.311	97.127(P)	97.233(P)	97.685(P)	98.387(P)							

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

Year	
1985	100.000
1986	101.867
1987	103.492
1988	103.875
1989	105.775
1990	107.475
1991	108.500
1992	109.742
1993	111.683
1994	113.325
1995	113.908
1996	114.983
1997	115.708
1998	114.983
1999	112.975
2000	110.408
2001	108.625
2002	105.033
2003	101.717
2004	98.358
2005	97.042
2006	95.883
2007	95.783
2008	97.083
2009	97.200
2010	96.925
2011	96.342
2012	95.625
2013	95.367
2014	95.625
2015	95.825
2016	95.208
2017	93.725
2018	93.075
2019	93.167
2020	93.658
2021	94.333
SPOT	95.791

SCADA

Series Id: PCU3345133345130
Series Tit PPI industry data for Industrial process variable instruments-Process control instruments, not seasonally adjusted
Industry: Industrial process variable instruments
Product: Process control instruments
Base Dat 200312

Download:

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2003												100
2004	100	100.1	100.1	101.3	102.2	102.3	102.4	102.4	102.4	102.4	102.4	102.6
2005	102.6	102.9	102.7	102.9	104	104.2	104.3	103.9	103.9	104.2	104.5	104.5
2006	105.5	106	106.2	106.8	106.7	106.9	107.1	107	107	107.2	107.3	108.2
2007	109.9	110	109.9	110.4	111.6	112	112.4	112.1	112	112.3	112.2	112.5
2008	113.5	113.5	113.4	114.1	114.3	114.3	114.8	115.6	116.3	116.8	117.2	117.3
2009	118.7	119	119.1	119.3	119.2	119.2	119.5	119.6	119.7	119.5	119.8	120.3
2010	120.6	120.6	120.8	120.4	120.3	120.3	120.2	120.6	120.7	120.5	121	122
2011	122.9	124.3	124.3	125.2	125.3	125.5	126.3	126.8	126.9	126.7	126.7	126.7
2012	126.8	127	127	128.1	128.2	128.4	128.4	128.3	128.4	128.4	128.4	128.3
2013	129	129.2	128.7	129	129.4	129.4	129.4	129.4	129.5	129.5	129.5	129.5
2014	130.3	130.2	130.3	130.9	132.6	132.6	132.6	132.8	133	132.9	133	132.9
2015	133.9	134.1	133.8	134.1	134	133.6	133.6	133.6	133.7	133.8	133.8	133.9
2016	134.2	134.6	134.9	135.4	135.4	136.2	136.2	136.2	136.2	136.2	136.2	136.3
2017	136.9	137.4	137.4	137	137	137	137.3	137.2	136.8	137.4	137.4	138
2018	139	138.3	138.4	139.3	139.8	139.9	140	139.1	139.2	139.9	139.9	139.9
2019	140.1	140.8	140.8	141.1	141.1	140.6	140.2	140.4	140	140	140	140.1
2020	142.1	143.9	143.9	143.9	143.8	144.1	144.1	144.1	144.1	144.6	144.9	145
2021	144.9	145	145.3	145.3	145.3	145.5	146.533	146.728	146.982	148.067	148.215	148.324
2022	151.294	151.309(P)	152.563(P)	154.711(P)	155.494(P)							

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

Year	
2003	100.000
2004	101.717
2005	103.717
2006	106.825
2007	111.442
2008	115.092
2009	119.408
2010	120.667
2011	125.633
2012	127.975
2013	129.292
2014	132.008
2015	133.825
2016	135.667
2017	137.233
2018	139.392
2019	140.433
2020	144.042
2021	146.346
SPOT	148.324

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NEW ACCT	ACCT NAME	YEAR	OC by Vintage	Vintage Index	Spot Index	Obsolescence	Account Number	Description	Original Cost	Index Factor	RCN Balances
303.00	LAND AND LAND RIGHTS	1988	51,525.00	1.00	1.00	1	30300	LAND AND LA	$51,525.00	1.0000	$51,525.00
303.00	LAND AND LAND RIGHTS	2003	57,220.00	1.00	1.00	1	30300	LAND AND LA	$57,220.00	1.0000	$57,220.00
303.00	LAND AND LAND RIGHTS	2010	20,615.00	1.00	1.00	1	30300	LAND AND LA	$20,615.00	1.0000	$20,615.00
303.00	LAND AND LAND RIGHTS	2012	240,362.00	1.00	1.00	1	30300	LAND AND LA	$240,362.00	1.0000	$240,362.00
304.30	STRUCTURES - TREATMENT	2003	2,119,263.81	328.00	771	0.7	30430	STRUCTURES	$2,119,263.81	1.6454	$3,487,093.43
304.40	STRUCTURES AND IMPROVEMENTS - PUMPHOUSE	2012	680,506.83	500.00	771	0.7	30440	STRUCTURES	$680,506.83	1.0794	$734,539.[illegible]
307.00	WELLS AND SPRINGS	1988	600,000.00	233.00	613	0.7	30700	WELLS AND S	$600,000.00	1.8416	$1,104,978.[illegible]
310.00	POWER GENERATION EQUIPMENT	2006	15,000.00	624.00	1593	0.7	31000	POWER GENE	$15,000.00	1.7870	$26,805.[illegible]
310.00	POWER GENERATION EQUIPMENT	2011	19,190.76	752.00	1593	0.7	31000	POWER GENE	$19,190.76	1.4828	$28,456.[illegible]
310.00	POWER GENERATION EQUIPMENT	2013	21,576.00	836.00	1593	0.7	31000	POWER GENE	$21,576.00	1.3339	$28,779.[illegible]
320.00	WATER TREATMENT EQUIPMENT	2009	17,500.00	538.00	924	0.7	32000	WATER TREA	$17,500.00	1.2022	$21,039.[illegible]
320.00	WATER TREATMENT EQUIPMENT	2010	158,528.98	552.00	924	0.7	32000	WATER TREA	$158,528.98	1.1717	$185,754.61
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	1988	619,263.00	260.00	1656	0.7	33000	DISTRIBUTIOI	$619,263.00	4.4585	$2,760,960.27
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	2010	689,091.16	920.00	1656	0.7	33000	DISTRIBUTIOI	$689,091.16	1.2600	$868,254.86
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	2012	765,261.67	1078.00	1656	0.7	33000	DISTRIBUTIOI	$765,261.67	1.0753	$822,904.76
331.00	TRANSMISSION AND DISTRIBUTION MAINS	1991	1,337,172.18	273.00	943	0.7	33100	TRANSMISSIC	$1,337,172.18	2.4179	$3,233,213.76
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2001	225,282.68	327.00	943	0.7	33100	TRANSMISSIC	$225,282.68	2.0187	$454,767.88
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2003	1,475,968.61	342.00	943	0.7	33100	TRANSMISSIC	$1,475,968.61	1.9301	$2,848,792.[illegible]
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2006	2,959,845.59	434.00	943	0.7	33100	TRANSMISSIC	$2,959,845.59	1.5210	$4,501,829.[illegible]
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2007	69,413.93	464.00	943	0.7	33100	TRANSMISSIC	$69,413.93	1.4226	$98,750.[illegible]
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2008	183,360.51	517.00	943	0.7	33100	TRANSMISSIC	$183,360.51	1.2768	$234,112.71
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2012	549,132.15	617.00	943	0.7	33100	TRANSMISSIC	$549,132.15	1.0699	$587,491.[illegible]
333.00	SERVICES	1991	12,000.90	224.00	626	0.7	33300	SERVICES	$12,000.90	1.9563	$23,476.[illegible]
333.00	SERVICES	2002	52,147.39	291.00	626	0.7	33300	SERVICES	$52,147.39	1.5058	$78,525.[illegible]
333.00	SERVICES	2003	150,417.71	295.00	626	0.7	33300	SERVICES	$150,417.71	1.4854	$223,434.00
333.00	SERVICES	2004	57,881.81	323.00	626	0.7	33300	SERVICES	$57,881.81	1.3567	$78,525.[illegible]
333.00	SERVICES	2005	63,078.63	352.00	626	0.7	33300	SERVICES	$63,078.63	1.2449	$78,525.73
333.00	SERVICES	2006	299,993.00	398.00	626	0.7	33300	SERVICES	$299,993.00	1.1010	$330,293.80
333.00	SERVICES	2007	5,366.78	415.00	626	0.7	33300	SERVICES	$5,366.78	1.0559	$5,666.80
333.00	SERVICES	2008	14,988.20	427.00	626	0.7	33300	SERVICES	$14,988.20	1.0262	$15,381.33
333.00	SERVICES	2011	2,571.62	464.00	626	0.7	33300	SERVICES	$2,571.62	0.9444	$2,428.63
333.00	SERVICES	2012	46,261.48	491.00	626	0.7	33300	SERVICES	$46,261.48	0.8925	$41,286.72
333.00	SERVICES	2013	31,812.74	492.00	626	0.7	33300	SERVICES	$31,812.74	0.8907	$28,334.03
333.00	SERVICES	2014	22,307.71	483.00	626	0.7	33300	SERVICES	$22,307.71	0.9072	$20,238.59
333.00	SERVICES	2015	16,061.55	483.00	626	0.7	33300	SERVICES	$16,061.55	0.9072	$14,571.78
333.00	SERVICES	2016	13,467.76	486.00	626	0.7	33300	SERVICES	$13,467.76	0.9016	$12,143.15
333.00	SERVICES	2017	12,932.01	500.00	626	0.7	33300	SERVICES	$12,932.01	0.8764	$11,333.61
333.00	SERVICES	2018	12,320.51	513.00	626	0.7	33300	SERVICES	$12,320.51	0.8542	$10,524.07
333.00	SERVICES	2019	14,070.02	544.00	626	0.7	33300	SERVICES	$14,070.02	0.8055	$11,333.61
333.00	SERVICES	2020	13,905.60	579.00	626	0.7	33300	SERVICES	$13,905.60	0.7568	$10,524.07
333.00	SERVICES	2021	25,622.00	603.00	626	0.7	33300	SERVICES	$25,622.00	0.7267	$18,619.50
334.00	METERS AND METER INSTALLATIONS	1991	2,910.27	162.00	803	0.7	33400	METERS AND	$2,910.27	3.4698	$10,097.92
334.00	METERS AND METER INSTALLATIONS	2002	12,438.32	207.00	803	0.7	33400	METERS AND	$12,438.32	2.7155	$33,775.75
334.00	METERS AND METER INSTALLATIONS	2003	12,438.32	207.00	803	0.7	33400	METERS AND	$12,438.32	2.7155	$33,775.75
334.00	METERS AND METER INSTALLATIONS	2004	12,438.32	207.00	803	0.7	33400	METERS AND	$12,438.32	2.7155	$33,775.75
334.00	METERS AND METER INSTALLATIONS	2005	12,858.94	214.00	803	0.7	33400	METERS AND	$12,858.94	2.6266	$33,775.75
334.00	METERS AND METER INSTALLATIONS	2006	15,977.35	248.00	803	0.7	33400	METERS AND	$15,977.35	2.2665	$36,213.18
334.00	METERS AND METER INSTALLATIONS	2007	3,222.48	289.00	803	0.7	33400	METERS AND	$3,222.48	1.9450	$6,267.67
334.00	METERS AND METER INSTALLATIONS	2008	4,852.30	373.00	803	0.7	33400	METERS AND	$4,852.30	1.5070	$7,312.27
334.00	METERS AND METER INSTALLATIONS	2009	4,852.30	373.00	803	0.7	33400	METERS AND	$4,852.30	1.5070	$7,312.27
334.00	METERS AND METER INSTALLATIONS	2010	6,987.61	376.00	803	0.7	33400	METERS AND	$6,987.61	1.4949	$10,446.11
334.00	METERS AND METER INSTALLATIONS	2011	9,860.71	379.00	803	0.7	33400	METERS AND	$9,860.71	1.4831	$14,624.55
334.00	METERS AND METER INSTALLATIONS	2012	15,730.18	379.00	803	0.7	33400	METERS AND	$15,730.18	1.4831	$23,329.64
334.00	METERS AND METER INSTALLATIONS	2013	17,465.31	381.00	803	0.7	33400	METERS AND	$17,465.31	1.4753	$25,767.06
334.00	METERS AND METER INSTALLATIONS	2014	15,303.36	386.00	803	0.7	33400	METERS AND	$15,303.36	1.4562	$22,285.02
334.00	METERS AND METER INSTALLATIONS	2015	9,191.06	401.00	803	0.7	33400	METERS AND	$9,191.06	1.4017	$12,883.53
334.00	METERS AND METER INSTALLATIONS	2016	14,978.76	403.00	803	0.7	33400	METERS AND	$14,978.76	1.3948	$20,892.21
334.00	METERS AND METER INSTALLATIONS	2017	15,313.89	419.00	803	0.7	33400	METERS AND	$15,313.89	1.3415	$20,544.00
334.00	METERS AND METER INSTALLATIONS	2018	15,665.13	436.00	803	0.7	33400	METERS AND	$15,665.13	1.2892	$20,195.80
334.00	METERS AND METER INSTALLATIONS	2019	16,337.26	447.00	803	0.7	33400	METERS AND	$16,337.26	1.2575	$20,544.01
334.00	METERS AND METER INSTALLATIONS	2020	16,743.01	466.00	803	0.7	33400	METERS AND	$16,743.01	1.2062	$20,195.81
334.00	METERS AND METER INSTALLATIONS	2021	22,750.00	565.00	803	0.7	33400	METERS AND	$22,750.00	0.9949	$22,633.23
335.00	HYDRANTS	2012	525,000.00	543.00	1225	0.7	33500	HYDRANTS	$525,000.00	1.5792	$829,074.59
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	2008	17,480.00	97.08	95.791	0.7	34300	TOOLS, SHOP	$17,480.00	0.6907	$12,073.12
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	2009	7,400.00	97.20	95.791	0.7	34300	TOOLS, SHOP	$7,400.00	0.6899	$5,104.91
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	2014	17,331.80	95.63	95.791	0.7	34300	TOOLS, SHOP	$17,331.80	0.7012	$12,153.32
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	2018	25,500.00	93.08	95.791	0.7	34300	TOOLS, SHOP	$25,500.00	0.7204	$18,370.88
346.00	COMMUNICATION EQUIPMENT	2012	280,000.00	127.98	148.324	0.7	34600	COMMUNICA	$280,000.00	0.8113	$227,165.49
			14,873,313.96						$14,873,313.96		$24,954,002.99

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NEW ACCT	ACCT NAME	YEAR	OC by Vintage	Vintage Index	Spot Index	Obsolescence	Account Number	Description	Original Cost	Index Factor	RCN Balances
303.00	LAND AND LAND RIGHTS	1988	51,525.00	1.00	1.00	1	30300	LAND AND LA	$51,525.00	1.0000	$51,525.00
303.00	LAND AND LAND RIGHTS	2003	57,220.00	1.00	1.00	1	30300	LAND AND LA	$57,220.00	1.0000	$57,220.00
303.00	LAND AND LAND RIGHTS	2010	20,615.00	1.00	1.00	1	30300	LAND AND LA	$20,615.00	1.0000	$20,615.00
303.00	LAND AND LAND RIGHTS	2012	240,362.00	1.00	1.00	1	30300	LAND AND LA	$240,362.00	1.0000	$240,362.00
304.30	STRUCTURES - TREATMENT	2003	2,119,263.81	328.00	771	1	30430	STRUCTURES	$2,119,263.81	2.3506	$4,981,562.4
304.40	STRUCTURES AND IMPROVEMENTS - PUMPHOUSE	2012	680,506.83	500.00	771	1	30440	STRUCTURES	$680,506.83	1.5420	$1,049,341.2
307.00	WELLS AND SPRINGS	1988	600,000.00	233.00	613	1	30700	WELLS AND S	$600,000.00	2.6309	$1,578,540.0
310.00	POWER GENERATION EQUIPMENT	2006	15,000.00	624.00	1593	1	31000	POWER GENE	$15,000.00	2.5529	$38,293.5
310.00	POWER GENERATION EQUIPMENT	2011	19,190.76	752.00	1593	1	31000	POWER GENE	$19,190.76	2.1184	$40,652.1
310.00	POWER GENERATION EQUIPMENT	2013	21,576.00	836.00	1593	1	31000	POWER GENE	$21,576.00	1.9055	$41,113.3
320.00	WATER TREATMENT EQUIPMENT	2009	17,500.00	538.00	924	1	32000	WATER TREA	$17,500.00	1.7175	$30,055.7
320.00	WATER TREATMENT EQUIPMENT	2010	158,528.98	552.00	924	1	32000	WATER TREA	$158,528.98	1.6739	$265,363.73
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	1988	619,263.00	260.00	1656	1	33000	DISTRIBUTIOI	$619,263.00	6.3692	$3,944,228.95
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	2010	689,091.16	920.00	1656	1	33000	DISTRIBUTIOI	$689,091.16	1.8000	$1,240,364.09
330.00	DISTRIBUTION RESERVOIRS AND STANDPIPES	2012	765,261.67	1078.00	1656	1	33000	DISTRIBUTIOI	$765,261.67	1.5362	$1,175,578.22
331.00	TRANSMISSION AND DISTRIBUTION MAINS	1991	1,337,172.18	273.00	943	1	33100	TRANSMISSIC	$1,337,172.18	3.4542	$4,618,876.80
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2001	225,282.68	327.00	943	1	33100	TRANSMISSIC	$225,282.68	2.8838	$649,668.40
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2003	1,475,968.61	342.00	943	1	33100	TRANSMISSIC	$1,475,968.61	2.7573	$4,069,702.3
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2006	2,959,845.59	434.00	943	1	33100	TRANSMISSIC	$2,959,845.59	2.1728	$6,431,185.2
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2007	69,413.93	464.00	943	1	33100	TRANSMISSIC	$69,413.93	2.0323	$141,071.1
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2008	183,360.51	517.00	943	1	33100	TRANSMISSIC	$183,360.51	1.8240	$334,446.73
331.00	TRANSMISSION AND DISTRIBUTION MAINS	2012	549,132.15	617.00	943	1	33100	TRANSMISSIC	$549,132.15	1.5284	$839,273.3
333.00	SERVICES	1991	12,000.90	224.00	626	1	33300	SERVICES	$12,000.90	2.7946	$33,538.9
333.00	SERVICES	2002	52,147.39	291.00	626	1	33300	SERVICES	$52,147.39	2.1512	$112,179.2
333.00	SERVICES	2003	150,417.71	295.00	626	1	33300	SERVICES	$150,417.71	2.1220	$319,191.4
333.00	SERVICES	2004	57,881.81	323.00	626	1	33300	SERVICES	$57,881.81	1.9381	$112,179.6
333.00	SERVICES	2005	63,078.63	352.00	626	1	33300	SERVICES	$63,078.63	1.7784	$112,179.61
333.00	SERVICES	2006	299,993.00	398.00	626	1	33300	SERVICES	$299,993.00	1.5729	$471,848.29
333.00	SERVICES	2007	5,366.78	415.00	626	1	33300	SERVICES	$5,366.78	1.5084	$8,095.43
333.00	SERVICES	2008	14,988.20	427.00	626	1	33300	SERVICES	$14,988.20	1.4660	$21,973.33
333.00	SERVICES	2011	2,571.62	464.00	626	1	33300	SERVICES	$2,571.62	1.3491	$3,469.47
333.00	SERVICES	2012	46,261.48	491.00	626	1	33300	SERVICES	$46,261.48	1.2749	$58,981.03
333.00	SERVICES	2013	31,812.74	492.00	626	1	33300	SERVICES	$31,812.74	1.2724	$40,477.19
333.00	SERVICES	2014	22,307.71	483.00	626	1	33300	SERVICES	$22,307.71	1.2961	$28,912.27
333.00	SERVICES	2015	16,061.55	483.00	626	1	33300	SERVICES	$16,061.55	1.2961	$20,816.83
333.00	SERVICES	2016	13,467.76	486.00	626	1	33300	SERVICES	$13,467.76	1.2881	$17,347.36
333.00	SERVICES	2017	12,932.01	500.00	626	1	33300	SERVICES	$12,932.01	1.2520	$16,190.88
333.00	SERVICES	2018	12,320.51	513.00	626	1	33300	SERVICES	$12,320.51	1.2203	$15,034.38
333.00	SERVICES	2019	14,070.02	544.00	626	1	33300	SERVICES	$14,070.02	1.1507	$16,190.87
333.00	SERVICES	2020	13,905.60	579.00	626	1	33300	SERVICES	$13,905.60	1.0812	$15,034.38
333.00	SERVICES	2021	25,622.00	603.00	626	1	33300	SERVICES	$25,622.00	1.0381	$26,599.29
334.00	METERS AND METER INSTALLATIONS	1991	2,910.27	162.00	803	1	33400	METERS AND	$2,910.27	4.9568	$14,425.60
334.00	METERS AND METER INSTALLATIONS	2002	12,438.32	207.00	803	1	33400	METERS AND	$12,438.32	3.8792	$48,251.07
334.00	METERS AND METER INSTALLATIONS	2003	12,438.32	207.00	803	1	33400	METERS AND	$12,438.32	3.8792	$48,251.07
334.00	METERS AND METER INSTALLATIONS	2004	12,438.32	207.00	803	1	33400	METERS AND	$12,438.32	3.8792	$48,251.07
334.00	METERS AND METER INSTALLATIONS	2005	12,858.94	214.00	803	1	33400	METERS AND	$12,858.94	3.7523	$48,251.07
334.00	METERS AND METER INSTALLATIONS	2006	15,977.35	248.00	803	1	33400	METERS AND	$15,977.35	3.2379	$51,733.11
334.00	METERS AND METER INSTALLATIONS	2007	3,222.48	289.00	803	1	33400	METERS AND	$3,222.48	2.7785	$8,953.81
334.00	METERS AND METER INSTALLATIONS	2008	4,852.30	373.00	803	1	33400	METERS AND	$4,852.30	2.1528	$10,446.10
334.00	METERS AND METER INSTALLATIONS	2009	4,852.30	373.00	803	1	33400	METERS AND	$4,852.30	2.1528	$10,446.10
334.00	METERS AND METER INSTALLATIONS	2010	6,987.61	376.00	803	1	33400	METERS AND	$6,987.61	2.1356	$14,923.01
334.00	METERS AND METER INSTALLATIONS	2011	9,860.71	379.00	803	1	33400	METERS AND	$9,860.71	2.1187	$20,892.22
334.00	METERS AND METER INSTALLATIONS	2012	15,730.18	379.00	803	1	33400	METERS AND	$15,730.18	2.1187	$33,328.06
334.00	METERS AND METER INSTALLATIONS	2013	17,465.31	381.00	803	1	33400	METERS AND	$17,465.31	2.1076	$36,810.09
334.00	METERS AND METER INSTALLATIONS	2014	15,303.36	386.00	803	1	33400	METERS AND	$15,303.36	2.0803	$31,835.75
334.00	METERS AND METER INSTALLATIONS	2015	9,191.06	401.00	803	1	33400	METERS AND	$9,191.06	2.0025	$18,405.04
334.00	METERS AND METER INSTALLATIONS	2016	14,978.76	403.00	803	1	33400	METERS AND	$14,978.76	1.9926	$29,846.02
334.00	METERS AND METER INSTALLATIONS	2017	15,313.89	419.00	803	1	33400	METERS AND	$15,313.89	1.9165	$29,348.58
334.00	METERS AND METER INSTALLATIONS	2018	15,665.13	436.00	803	1	33400	METERS AND	$15,665.13	1.8417	$28,851.15
334.00	METERS AND METER INSTALLATIONS	2019	16,337.26	447.00	803	1	33400	METERS AND	$16,337.26	1.7964	$29,348.59
334.00	METERS AND METER INSTALLATIONS	2020	16,743.01	466.00	803	1	33400	METERS AND	$16,743.01	1.7232	$28,851.15
334.00	METERS AND METER INSTALLATIONS	2021	22,750.00	565.00	803	1	33400	METERS AND	$22,750.00	1.4212	$32,333.19
335.00	HYDRANTS	2012	525,000.00	543.00	1225	1	33500	HYDRANTS	$525,000.00	2.2560	$1,184,392.27
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	2008	17,480.00	97.08	95.791	1	34300	TOOLS, SHOP	$17,480.00	0.9867	$17,247.31
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	2009	7,400.00	97.20	95.791	1	34300	TOOLS, SHOP	$7,400.00	0.9855	$7,292.73
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	2014	17,331.80	95.63	95.791	1	34300	TOOLS, SHOP	$17,331.80	1.0017	$17,361.89
343.00	TOOLS, SHOP AND GARAGE EQUIPMENT	2018	25,500.00	93.08	95.791	1	34300	TOOLS, SHOP	$25,500.00	1.0292	$26,244.11
346.00	COMMUNICATION EQUIPMENT	2012	280,000.00	127.98	148.324	1	34600	COMMUNICA	$280,000.00	1.1590	$324,522.13
			14,873,313.96						$14,873,313.96		$35,490,123.44

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Depreciation Schedule
Depr. type, Category, Class and Department
Trans 6/30/2021

CARTERET CO FIXED ASSETS
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Item Tag /Item Descr	Depr. Date	Life	Original Value	Depreciation MTD	Depreciation YTD	Depreciation LTD	Book Value	Disposal Date /Proceeds
Enterprise								
BUILD BUILDINGS								
7000 BUILDING/MOBILE HOMES								
7110								
9041	11/01/2003	360	2,119,263.81	5,886.84	70,642.14	1,248,010.75	871,253.06	
WATER PLANT - LAUREL ROAD								
7110			**2,119,263.81**	**5,886.84**	**70,642.14**	**1,248,010.75**	**871,253.06**	
7000 BUILDING/MOBILE HOME			**2,119,263.81**	**5,886.84**	**70,642.14**	**1,248,010.75**	**871,253.06**	
BUILD BUILDINGS			**2,119,263.81**	**5,886.84**	**70,642.14**	**1,248,010.75**	**871,253.06**	
EQUIP MACHINERY & EQUIPMENT								
0200 TRUCKS								
7110								
9181	4/01/2007	60	14,374.49	.00	.00	14,374.49	.00	
FORD RANGER 4X2 SPORT								
9472	11/01/2013	60	22,856.55	.00	.00	22,856.55	.00	
FORD F250 - 2014								
9659	1/01/2018	60	37,897.92	631.63	7,579.59	26,528.49	11,369.43	
2017 FORD 350 REGULAR CAB								
7110			**75,128.96**	**631.63**	**7,579.59**	**63,759.53**	**11,369.43**	
0200 TRUCKS			**75,128.96**	**631.63**	**7,579.59**	**63,759.53**	**11,369.43**	
0900 MISC EQUIPMENT								
7110								
9149	9/01/2006	36	15,000.00	.00	.00	15,000.00	.00	
MAGNUM MOBILE GENERATOR								
9263	4/01/2009	36	7,400.00	.00	.00	7,400.00	.00	
RADIO READ HANDHELD SP-SAR5002								
9264	8/01/2008	36	17,480.00	.00	.00	17,480.00	.00	
EASY LOCATOR IXM GROUND								
9279	5/01/2009	120	17,500.00	.00	.00	17,500.00	.00	
ALUM FEED SYSTEM								
9304	4/01/2011	60	19,190.76	.00	.00	19,190.76	.00	
MOBILE GENERATOR MMG35PH								
9425	6/01/2013	60	21,576.00	.00	.00	21,576.00	.00	
MAGNUM GENERATOR MOBILE								
9470	3/01/2014	36	9,856.80	.00	.00	9,856.80	.00	
HANDHELD DEVICE DRIVE-BY								
9471	3/01/2014	36	7,475.00	.00	.00	7,475.00	.00	
TRIMBLE W/FLOODLIGHT								
9503	9/01/2014	60	18,500.00	.00	.00	18,500.00	.00	
EXCAVATOR 3.5 TON MINI 9'-12'								
9705	9/01/2018	36	25,500.00	708.33	8,500.02	24,083.33	1,416.67	
SENSUS DRIVE RADIO UNIT/LAPTOP								
7110			**159,478.56**	**708.33**	**8,500.02**	**158,061.89**	**1,416.67**	
0900 MISC EQUIPMENT			**159,478.56**	**708.33**	**8,500.02**	**158,061.89**	**1,416.67**	
EQUIP MACHINERY & EQUIPMENT			**234,607.52**	**1,339.96**	**16,079.61**	**221,821.42**	**12,786.10**	
IMPROV LAND IMPROVEMENTS								
8000 IMPROVMENTS								
7110								

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Depreciation Schedule
Depr. type, Category, Class and Department
Trans 6/30/2021

CARTERET CO FIXED ASSETS
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Item Tag /Item Descr	Depr. Date	Life	Original Value	Depreciation MTD	Depreciation YTD	Depreciation LTD	Book Value	Disposal Date /Proceeds
Enterprise								
5825	6/30/1991	300	1,337,172.18	.00	.00	1,337,172.18	.00	
CDBG WATER SYSTEM								
8770	6/30/2001	300	96,581.00	321.94	3,863.22	77,586.84	18,994.16	
JARRETT BAY CDBG WATER LINES								
8771	6/30/2001	300	128,701.68	429.01	5,148.06	103,390.39	25,311.29	
EDA INDUSTRIAL PK WATER LINES								
9042	12/01/2003	360	1,475,968.61	4,099.92	49,198.98	865,081.28	610,887.33	
WATER LINES								
9141	6/01/2006	360	2,906,676.24	8,074.10	96,889.20	1,461,412.10	1,445,264.14	
PHASE II WATER PROJECT								
9182	5/01/2007	360	55,209.00	153.36	1,840.32	26,071.20	29,137.80	
TRACEY GROVE SUBDIVISION								
9183	11/01/2006	360	37,970.08	105.47	1,265.64	18,562.72	19,407.36	
BRIDGE WATER AT WARE CREEK								
9184	9/01/2006	360	15,199.27	42.22	506.64	7,515.16	7,684.11	
JOANS HAVEN DRIVE LOTS								
9185	5/01/2007	360	14,204.93	39.46	473.52	6,708.20	7,496.73	
MILL LANDING SUBDIVISION								
9232	3/01/2008	360	15,703.51	43.62	523.44	6,979.20	8,724.31	
TRACEY GROVE SUBDIVISION								
9265	11/01/2008	360	167,657.00	465.71	5,588.58	70,788.28	96,868.72	
CHADWICK SHORES PLANTATION								
9305	8/01/2010	360	158,528.98	440.36	5,284.32	57,687.16	100,841.82	
WATER TREATMENT RENOVATIONS								
9428	11/01/2012	360	174,283.94	484.12	5,809.44	50,348.48	123,935.46	
BOOSTER PUMP #1 3510 HWY 101								
9429	11/01/2012	360	253,111.44	703.09	8,437.08	73,121.36	179,990.08	
BOOSTER PUMP #2 142 SHELL LAND								
9430	11/01/2012	360	253,111.45	703.09	8,437.08	73,121.36	179,990.09	
BOOSTER PUMP #3 - 1109 HWY 101								
9431	11/01/2012	360	689,091.16	1,914.14	22,969.68	199,070.56	490,020.60	
WATER TANK #2 104 MAYFLOWER DR								
9432	11/01/2012	360	765,261.67	2,125.73	25,508.76	221,075.92	544,185.75	
WATER TANK #3 209 TAYLOR FM RD								
9433	11/01/2012	360	1,058,177.59	2,939.38	35,272.56	305,695.52	752,482.07	
FIRE HYDRANTS & LINE EXTENSION								
9434	11/01/2012	360	15,954.56	44.32	531.84	4,609.28	11,345.28	
WATER SYSTEM IMPROVEMENTS								
7110			**9,618,564.29**	**23,129.04**	**277,548.36**	**4,965,997.19**	**4,652,567.10**	
8000 IMPROVMENTS			**9,618,564.29**	**23,129.04**	**277,548.36**	**4,965,997.19**	**4,652,567.10**	
IMPROV LAND IMPROVEMENTS			**9,618,564.29**	**23,129.04**	**277,548.36**	**4,965,997.19**	**4,652,567.10**	
LAND LAND								
9000 PROPERTY								
7110								
8758		0	52,500.00	.00	.00	.00	52,500.00	
WATER PLANT - 534 LAUREL ROAD								
9301		0	17,798.25	.00	.00	.00	17,798.25	
BOOSTER PUMP STATION #1								
9306		0	42,086.10	.00	.00	.00	42,086.10	
BOOSTER PUMP STATION #3								

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Depreciation Schedule
Depr. type, Category, Class and Department
Trans 6/30/2021

CARTERET CO FIXED ASSETS
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Item Tag /Item Descr	Depr. Date	Life	Original Value	Depreciation MTD	Depreciation YTD	Depreciation LTD	Book Value	Disposal Date /Proceeds
Enterprise								
9307		0	51,102.50	.00	.00	.00	51,102.50	
WATER TANK - ELEVATED #3								
9308		0	59,120.95	.00	.00	.00	59,120.95	
BOOSTER PUMP STATION #2								
7110			**222,607.80**	**.00**	**.00**	**.00**	**222,607.80**	
9000 PROPERTY			**222,607.80**	**.00**	**.00**	**.00**	**222,607.80**	
LAND LAND			**222,607.80**	**.00**	**.00**	**.00**	**222,607.80**	
Enterprise			**12,195,043.42**	**30,355.84**	**364,270.11**	**6,435,829.36**	**5,759,214.06**	

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Carteret County, North Carolina

Notes to Financial Statements

Note 5. Capital Assets (Continued)

	Capital Assets July 1, 2017	Additions	Retirements	Adjustments and Transfers	Capital Assets June 30, 2018
Business-type activities:					
Capital assets, not being depreciated:					
Land	$ 222,608	$ -	$ -	$ -	$ 222,608
Total capital assets, not being depreciated	222,608	-	-	-	222,608
Capital assets, being depreciated:					
Buildings	2,119,264	-	-	-	2,119,264
Infrastructure	9,618,564	-	-	-	9,618,564
Vehicles	37,231	37,898	-	-	75,129
Equipment	140,848	-	-	-	140,848
Total capital assets, being depreciated	11,915,907	37,898	-	-	11,953,805
Less accumulated depreciation for:					
Buildings	965,442	70,642	-	-	1,036,084
Infrastructure	3,855,803	277,548	-	1	4,133,352
Vehicles	31,136	8,361	-	-	39,497
Equipment	121,202	9,635	-	-	130,837
Total accumulated depreciation	4,973,583	$ 366,186	$ -	$ 1	5,339,770
Total capital assets, being depreciated, net	6,942,324				6,614,035
Business-type activities capital assets, net	$ 7,164,932				$ 6,836,643

The above depreciation was charged to water activities and the Water Fund.

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Note 9. Long-Term Obligations (Continued)

Installment Purchase Obligations

The County has entered into various installment-financing agreements for equipment and capital improvements. The County's installment-financing agreements at June 30, 2018, are comprised of the following:

Governmental activities (serviced by the General Fund):		
$2,000,000 - Renovations of Morehead Elementary School for 15 consecutive annual debt service fund installments beginning fiscal year 2007-2008, held by Bank of America	$	**2,000,000**
$1,781,354 - Renovations of Newport Elementary School for 15 consecutive annual debt service fund installments beginning fiscal year 2009-2010, held by Galena Bank & Trust		**731,354**
$9,275,000 - 2009 governmental office space renovation and refunding of 2000 certificates of participation due on December 1 and June 1 in varying installments through June 1, 2020, interest at 3.59% collateralized by Newport Middle School and the County Health Center, held by BB&T		**1,502,859**
$4,000,000 QZAB - Renovations of East Carteret High School for 13 consecutive annual installments, beginning in fiscal year 2011-2012, including interest at 5.22%, held by BB&T		**1,846,154**
$1,653,860 QSCB - Renovations of schools for 12 consecutive annual installments, beginning in fiscal year 2011-2012, including interest at 4.81%, held by BB&T		**689,108**
$407,000 Eastern Region Loan for Morehead City economic development for 59 months; 5 consecutive annual installments beginning fiscal year 2014-15 including 0% interest		**81,400**
		6,850,875
Business-type activities (serviced by the Water Fund):		
$589,608 - Construction of water treatment and distribution facilities for 19 consecutive installments, beginning in fiscal year 2004-2005, including interest at 5.75% annual funds provided by State Revolving Fund, held by NCDENR		**155,160**
$2,800,000 - Construction of Phase II Waterline extension for 20 consecutive annual installments, beginning in fiscal year 2005 - 2006, including interest at 2.205%, funds provided by State Revolving Fund, held by NCDENR		**1,120,000**
		1,275,160
	$	**8,126,035**

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Note 9. Long-Term Obligations (Continued)

Annual debt service requirements to maturity for installment financing at June 30, 2018, are as follows:

Year Ending	Governmental Activities		Business-Type Activities		Totals	
June 30,	Principal	Interest	Principal	Interest	Principal	Interest
2019	$ 1,439,773	$ 183,468	$ 171,032	$ 33,618	$ 1,610,805	$ 217,086
2020	1,275,514	132,314	171,032	28,746	1,446,546	161,060
2021	565,514	84,134	171,032	23,875	736,546	108,009
2022	2,570,514	61,443	171,032	19,004	2,741,546	80,447
2023	570,513	38,752	171,032	14,132	741,545	52,884
2024 – 2026	429,047	16,061	420,000	18,522	849,047	34,583
	$ 6,850,875	$ 516,172	$ 1,275,160	$ 137,897	$ 8,126,035	$ 654,069

Revenue Bond

$1,046,000 USDA water revenue bond issued on November 26, 2012; interest at 2.75% bonds due on June 1 in varying installments through June 1, 2052	**$ 980,000**

Annual debt service requirements to maturity for revenue bonds June 30, 2018, are as follows:

Year Ending June 30,	Principal	Interest
2019	$ 18,000	$ 26,950
2020	18,000	26,455
2021	19,000	25,960
2022	19,000	25,438
2023	20,000	24,915
2024-2028	107,000	116,133
2029-2033	123,000	100,540
2034-2038	141,000	82,666
2038-2043	161,000	62,178
2044-2048	185,000	38,774
2049-2052	169,000	11,797
	$ 980,000	$ 541,806

The County is in compliance with the covenants contained in the USDA bond order as set forth in Article V through VII. The significant bond covenants require: a) that the net revenues (excluding depreciation) for each fiscal year shall not be less than 110% of the debt service requirement for such Fiscal Year and not less than 100% of the amount necessary to meet annual debt service obligations coming due in that Fiscal Year with respect to the County's general obligation bonds and installment financing obligations, if used to finance System Improvements and b) The County shall establish a Debt Service Reserve account to provide for at least one average annual loan installment.

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Carteret County, North Carolina

Statement of Fund Net Position - Proprietary Fund
June 30, 2018

	Water Fund
Assets	
Current assets	
Cash and cash equivalents	$ 980,626
Receivables, net	65,727
Restricted cash and cash equivalents	43,932
Total current assets	1,090,285
Noncurrent assets	
Capital assets:	
Land, improvements, and construction in progress	222,608
Other capital assets, net of depreciation	6,614,035
Total capital assets	6,836,643
Total noncurrent assets	6,836,643
Total assets	7,926,928
Deferred outflows of resources	42,770
Liabilities	
Current liabilities	
Accounts payable and accrued expenses	32,279
Customer deposits	103,800
Accrued interest payable	7,848
Current portion of long-term liabilities	204,348
Total current liabilities	348,275
Noncurrent liabilities	
Installment loan payable and long-term liabilities	2,066,758
Net pension liability	47,978
Total OPEB liability	84,159
Total noncurrent liabilities	2,198,895
Total liabilities	2,547,170
Deferred inflows of resources	5,645
Net Position	
Net investment in capital assets	4,581,483
Unrestricted	835,400
Total net position	$ 5,416,883

See Notes to Financial Statements.

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Carteret County, North Carolina

Statement of Revenues, Expenses and Changes in Fund Net Position - Proprietary Fund
Year Ended June 30, 2018

	Water Fund
Operating revenues	
Charges for services	$ 674,952
Other operating revenues	3,927
Total operating revenues	678,879
Operating expenses	
Water plant operations	828,647
Depreciation	366,186
Total operating expenses	1,194,833
Operating loss	(515,954)
Nonoperating revenues (expenses)	
Interest revenue	9,403
Interest expense	(65,056)
Total nonoperating revenues (expenses)	(55,653)
Loss before contributions and transfers	(571,607)
Transfers in	433,600
Change in net position	(138,007)
Total net position	
Net position, previously reported	5,635,176
Restatement	(80,286)
Beginning, restated	5,554,890
Ending	$ 5,416,883

See Notes to Financial Statements.

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Carteret County, North Carolina

Statement of Cash Flows - Proprietary Fund
Year Ended June 30, 2018

	Water Fund
Cash flows from operating activities	
Cash received from customers	$ 670,588
Cash paid for goods and services	(542,603)
Cash paid to employees for services	(296,432)
Customer deposits received	3,615
Other operating revenues	3,927
Net cash used by operating activities	(160,905)
Cash flows from noncapital financing	
Transfers in	433,600
Net cash provided by noncapital financing	433,600
Cash flows from capital and related financing activities	
Principal paid on installment debt	(188,032)
Interest paid on installment debt	(65,907)
Capital purchase	(37,898)
Net cash used by capital and related financing activities	(291,837)
Cash flows provided by investing activities	
Interest on investments	9,403
Net decrease in cash and cash equivalents	(9,739)
Cash and cash equivalents:	
Beginning	1,034,297
Ending (including restricted of $43,932)	$ 1,024,558

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Carteret County, North Carolina

Notes to Financial Statements

Note 5. Capital Assets (Continued)

	Capital Assets July 1, 2018	Additions	Retirements	Adjustments and Transfers	Capital Assets June 30, 2019
Business-type activities:					
Capital assets, not being depreciated:					
Land	$ 222,608	$ -	$ -	$ -	$ 222,608
Total capital assets, not being depreciated	222,608	-	-	-	222,608
Capital assets, being depreciated:					
Buildings	2,119,264	-	-	-	2,119,264
Infrastructure	9,618,564	-	-	-	9,618,564
Vehicles	75,129	-	-	-	75,129
Equipment	140,848	25,500	(6,870)	-	159,478
Total capital assets, being depreciated	11,953,805	25,500	(6,870)	-	11,972,435
Less accumulated depreciation for:					
Buildings	1,036,084	70,642	-	-	1,106,726
Infrastructure	4,133,352	277,548	-	-	4,410,900
Vehicles	39,497	9,104	-	-	48,601
Equipment	130,837	12,318	(2,710)	-	140,445
Total accumulated depreciation	5,339,770	$ 369,612	$ (2,710)	$ -	5,706,672
Total capital assets, being depreciated, net	6,614,035				6,265,763
Business-type activities capital assets, net	$ 6,836,643				$ 6,488,371

The above depreciation was charged to water activities and the Water Fund.

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Note 9. Long-Term Obligations (Continued)

Installment Purchase Obligations

As authorized by State law, G.S. 160A-20 and 153A-153.1, the County has entered into various installment-financing agreements in a direct placement for equipment and capital improvements. The installment purchases issued pursuant to a deed of trust because as long as the debt is outstanding the property is pledged as collateral for the debt. The County's installment-financing agreements at June 30, 2019, are comprised of the following:

Governmental activities (serviced by the General Fund):		
$2,000,000 - Renovations of Morehead Elementary School for 15 consecutive annual debt service fund installments beginning fiscal year 2007-2008, held by Bank of America	$	**2,000,000**
$1,781,354 - Renovations of Newport Elementary School for 15 consecutive annual debt service fund installments beginning fiscal year 2009-2010, held by Galena Bank & Trust		**611,354**
$9,275,000 - 2009 governmental office space renovation and refunding of 2000 certificates of participation due on December 1 and June 1 in varying installments through June 1, 2020, interest at 3.59% collateralized by Newport Middle School and the County Health Center, held by BB&T		**710,000**
$4,000,000 QZAB - Renovations of East Carteret High School for 13 consecutive annual installments, beginning in fiscal year 2011-2012, including interest at 5.22%, held by BB&T		**1,538,462**
$1,653,860 QSCB - Renovations of schools for 12 consecutive annual installments, beginning in fiscal year 2011-2012, including interest at 4.81%, held by BB&T		**551,286**
		5,411,102
Business-type activities (serviced by the Water Fund):		
$589,608 - Construction of water treatment and distribution facilities for 19 consecutive installments, beginning in fiscal year 2004-2005, including interest at 5.75% annual funds provided by State Revolving Fund, held by NCDENR		**124,128**
$2,800,000 - Construction of Phase II Waterline extension for 20 consecutive annual installments, beginning in fiscal year 2005 - 2006, including interest at 2.205%, funds provided by State Revolving Fund, held by NCDENR		**980,000**
		1,104,128
	$	**6,515,230**

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Note 9. Long-Term Obligations (Continued)

Annual debt service requirements to maturity for installment financing at June 30, 2019, are as follows:

Year Ending	Governmental Activities		Business-Type Activities		Totals	
June 30,	Principal	Interest	Principal	Interest	Principal	Interest
2020	$ 1,275,514	$ 132,314	$ 171,032	$ 28,746	$ 1,446,546	$ 161,060
2021	565,514	84,134	171,032	23,875	736,546	108,009
2022	2,570,514	61,443	171,032	19,004	2,741,546	80,447
2023	570,513	38,752	171,032	14,132	741,545	52,884
2024	429,047	16,061	140,000	9,261	569,047	25,322
2025 – 2029	-	-	280,000	9,261	280,000	9,261
	$ 5,411,102	$ 332,704	$ 1,104,128	$ 104,279	$ 6,515,230	$ 436,983

Revenue Bond

$1,046,000 USDA water revenue bond issued on November 26, 2012; interest at 2.75% bonds due on June 1 in varying installments through June 1, 2052	**$ 962,000**

Annual debt service requirements to maturity for revenue bonds June 30, 2019, are as follows:

Year Ending June 30,	Principal	Interest
2020	$ 18,000	$ 26,455
2021	19,000	25,960
2022	19,000	25,438
2023	20,000	24,915
2024	20,000	24,365
2025-2029	110,000	113,191
2030-2034	127,000	97,157
2035-2039	145,000	78,789
2040-2044	165,000	57,750
2045-2049	190,000	33,687
2050-2052	129,000	7,149
	$ 962,000	$ 514,856

The County has pledged future water revenues, net of specified operating expenses, to repay the revenue bond issued on November 26, 2012. The County is in compliance with the covenants contained in the USDA bond order as set forth in Article V through VII. The significant bond covenants require: a) that the net revenues (excluding depreciation) for each fiscal year shall not be less than 110% of the debt service requirement for such Fiscal Year and not less than 100% of the amount necessary to meet annual debt service obligations coming due in that Fiscal Year with respect to the County's general obligation bonds and installment financing obligations, if used to finance System Improvements and b) The County shall establish a Debt Service Reserve account to provide for at least one average annual loan installment.

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Carteret County, North Carolina

Statement of Fund Net Position - Proprietary Fund
June 30, 2019

	Water Fund
Assets	
Current assets	
Cash and cash equivalents	$ 1,139,758
Receivables, net	78,478
Restricted cash and cash equivalents	43,932
Total current assets	1,262,168
Noncurrent assets	
Capital assets:	
Land, improvements, and construction in progress	222,608
Other capital assets, net of depreciation	6,265,763
Total capital assets	6,488,371
Total noncurrent assets	6,488,371
Total assets	7,750,539
Deferred outflows of resources	58,009
Liabilities	
Current liabilities	
Accounts payable and accrued expenses	59,658
Customer deposits	107,000
Accrued interest payable	6,995
Current portion of long-term liabilities	197,049
Total current liabilities	370,702
Noncurrent liabilities	
Installment loan payable and long-term liabilities	1,887,754
Net pension liability	66,246
Total OPEB liability	81,695
Total noncurrent liabilities	2,035,695
Total liabilities	2,406,397
Deferred inflows of resources	5,930
Net Position	
Net investment in capital assets	4,422,243
Unrestricted	973,978
Total net position	$ 5,396,221

See Notes to Financial Statements.

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Carteret County, North Carolina

Statement of Revenues, Expenses and Changes in Fund Net Position - Proprietary Fund
Year Ended June 30, 2019

	Water Fund
Operating revenues	
Charges for services	$ 680,476
Other operating revenues	31,256
Total operating revenues	711,732
Operating expenses	
Water plant operations	729,963
Depreciation	369,612
Total operating expenses	1,099,575
Operating loss	(387,843)
Nonoperating revenues (expenses)	
Interest revenue	26,166
Interest expense	(59,715)
Gain on sale of asset	730
Total nonoperating revenues (expenses)	(32,819)
Loss before contributions and transfers	(420,662)
Transfers in	400,000
Change in net position	(20,662)
Total net position	
Beginning	5,416,883
Ending	$ 5,396,221

See Notes to Financial Statements.

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Carteret County, North Carolina

Statement of Cash Flows - Proprietary Fund
Year Ended June 30, 2019

	Water Fund
Cash flows from operating activities	
Cash received from customers	$ 677,970
Cash paid for goods and services	(399,081)
Cash paid to employees for services	(299,924)
Customer deposits received	3,200
Other operating revenues	21,011
Net cash provided by operating activities	3,176
Cash flows from noncapital financing	
Transfers in	400,000
Net cash provided by noncapital financing	400,000
Cash flows from capital and related financing activities	
Principal paid on installment debt	(189,032)
Interest paid on installment debt	(60,568)
Proceeds on disposal of equpment	4,890
Capital purchase	(25,500)
Net cash used by capital and related financing activities	(270,210)
Cash flows provided by investing activities	
Interest on investments	26,166
Net increase in cash and cash equivalents	159,132
Cash and cash equivalents:	
Beginning	1,024,558
Ending (including restricted of $43,932)	$ 1,183,690

(Continued)

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Carteret County, North Carolina

Notes to Financial Statements

Note 5. Capital Assets (Continued)

	Capital Assets July 1, 2019	Additions	Retirements	Adjustments and Transfers	Capital Assets June 30, 2020
Business-type activities:					
Capital assets, not being depreciated:					
Land	$ 222,608	$ -	$ -	$ -	$ 222,608
Total capital assets, not being depreciated	222,608	-	-	-	222,608
Capital assets, being depreciated:					
Buildings	2,119,264	-	-	-	2,119,264
Infrastructure	9,618,564	-	-	-	9,618,564
Vehicles	75,129	-	-	-	75,129
Equipment	159,478	-	-	-	159,478
Total capital assets, being depreciated	11,972,435	-	-	-	11,972,435
Less accumulated depreciation for:					
Buildings	1,106,726	70,642	-	-	1,177,368
Infrastructure	4,410,900	277,548	-	-	4,688,448
Vehicles	48,601	7,580	-	-	56,181
Equipment	140,445	9,117	-	-	149,562
Total accumulated depreciation	5,706,672	$ 364,887	$ -	$ -	6,071,559
Total capital assets, being depreciated, net	6,265,763				5,900,876
Business-type activities capital assets, net	$ 6,488,371				$ 6,123,484

The above depreciation was charged to water activities and the Water Fund.

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Note 9. Long-Term Obligations (Continued)

Installment Purchase Obligations

As authorized by State law, G.S. 160A-20 and 153A-153.1, the County has entered into various installment-financing agreements in a direct placement for equipment and capital improvements. The installment purchases issued pursuant to a deed of trust because as long as the debt is outstanding the property is pledged as collateral for the debt. The County's installment-financing agreements at June 30, 2020, are comprised of the following:

Governmental activities (serviced by the General Fund):		
$2,000,000 - Renovations of Morehead Elementary School for 15 consecutive annual debt service fund installments beginning fiscal year 2007-2008, held by Bank of America	$	**2,000,000**
$1,781,354 - Renovations of Newport Elementary School for 15 consecutive annual debt service fund installments beginning fiscal year 2009-2010, held by Galena Bank & Trust		**491,354**
$4,000,000 QZAB - Renovations of East Carteret High School for 13 consecutive annual installments, beginning in fiscal year 2011-2012, including interest at 5.22%, held by BB&T		**1,230,770**
$1,653,860 QSCB - Renovations of schools for 12 consecutive annual installments, beginning in fiscal year 2011-2012, including interest at 4.81%, held by BB&T		**413,464**
		4,135,588
Business-type activities (serviced by the Water Fund):		
$589,608 - Construction of water treatment and distribution facilities for 19 consecutive installments, beginning in fiscal year 2004-2005, including interest at 5.75% annual funds provided by State Revolving Fund, held by NCDENR		**93,096**
$2,800,000 - Construction of Phase II Waterline extension for 20 consecutive annual installments, beginning in fiscal year 2005 - 2006, including interest at 2.205%, funds provided by State Revolving Fund, held by NCDENR		**840,000**
		933,096
	$	**5,068,684**

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Note 9. Long-Term Obligations (Continued)

Annual debt service requirements to maturity for installment financing at June 30, 2020, are as follows:

Year Ending	Governmental Activities		Business-Type Activities		Totals	
June 30,	Principal	Interest	Principal	Interest	Principal	Interest
2021	$ 565,514	$ 84,134	$ 171,032	$ 23,875	$ 736,546	$ 108,009
2022	2,570,514	61,443	171,032	19,004	2,741,546	80,447
2023	570,513	38,752	171,032	14,132	741,545	52,884
2024	429,047	16,061	140,000	9,261	569,047	25,322
2025	-	-	140,000	6,174	140,000	6,174
2026 – 2030	-	-	140,000	3,087	140,000	3,087
	$ 4,135,588	$ 200,390	$ 933,096	$ 75,533	$ 5,068,684	$ 275,923

Revenue Bond

$1,046,000 USDA water revenue bond issued on November 26, 2012; interest at 2.75% bonds due on June 1 in varying installments through June 1, 2052	**$ 944,000**

Annual debt service requirements to maturity for revenue bonds June 30, 2020, are as follows:

Year Ending June 30,	Principal	Interest
2021	$ 19,000	$ 25,960
2022	19,000	25,438
2023	20,000	24,915
2024	20,000	24,365
2025	21,000	23,815
2026-2030	113,000	110,166
2031-2035	130,000	93,665
2036-2040	149,000	74,801
2041-2045	170,000	53,212
2046-2050	196,000	28,463
2051-2052	87,000	3,601
	$ 944,000	$ 488,401

The County has pledged future water revenues, net of specified operating expenses, to repay the revenue bond issued on November 26, 2012. The County is in compliance with the covenants contained in the USDA bond order as set forth in Article V through VII. The significant bond covenants require: a) that the net revenues (excluding depreciation) for each fiscal year shall not be less than 110% of the debt service requirement for such Fiscal Year and not less than 100% of the amount necessary to meet annual debt service obligations coming due in that Fiscal Year with respect to the County's general obligation bonds and installment financing obligations, if used to finance System Improvements and b) The County shall establish a Debt Service Reserve account to provide for at least one average annual loan installment.

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Carteret County, North Carolina

Statement of Fund Net Position - Proprietary Fund
June 30, 2020

	Water Fund
Assets	
Current assets	
Cash and cash equivalents	$ 1,341,855
Receivables, net	70,168
Restricted cash and cash equivalents	43,932
Total current assets	1,455,955
Noncurrent assets	
Capital assets:	
Land, improvements, and construction in progress	222,608
Other capital assets, net of depreciation	5,900,876
Total capital assets	6,123,484
Total noncurrent assets	6,123,484
Total assets	7,579,439
Deferred outflows of resources	58,645
Liabilities	
Current liabilities	
Accounts payable and accrued expenses	109,142
Customer deposits	109,750
Accrued interest payable	6,142
Current portion of long-term liabilities	196,387
Total current liabilities	421,421
Noncurrent liabilities	
Installment loan payable and long-term liabilities	1,700,055
Net pension liability	90,334
Total OPEB liability	82,141
Total noncurrent liabilities	1,872,530
Total liabilities	2,293,951
Deferred inflows of resources	3,790
Net Position	
Net investment in capital assets	4,246,388
Unrestricted	1,093,955
Total net position	$ 5,340,343

See Notes to Financial Statements.

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Carteret County, North Carolina

Statement of Revenues, Expenses and Changes in Fund Net Position - Proprietary Fund
Year Ended June 30, 2020

	Water Fund
Operating revenues	
Charges for services	$ 676,001
Other operating revenues	17,743
Total operating revenues	693,744
Operating expenses	
Water plant operations	766,799
Depreciation	364,887
Total operating expenses	1,131,686
Operating loss	(437,942)
Nonoperating revenues (expenses)	
Interest revenue	16,412
Interest expense	(54,348)
Total nonoperating revenues (expenses)	(37,936)
Loss before contributions and transfers	(475,878)
Transfers in	420,000
Change in net position	(55,878)
Total net position	
Beginning	5,396,221
Ending	$ 5,340,343

See Notes to Financial Statements.

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Carteret County, North Carolina

Statement of Cash Flows - Proprietary Fund
Year Ended June 30, 2020

	Water Fund
Cash flows from operating activities	
Cash received from customers	$ 674,066
Cash paid for goods and services	(350,381)
Cash paid to employees for services	(344,505)
Customer deposits received	2,750
Other operating revenues	27,988
Net cash provided by operating activities	9,918
Cash flows from noncapital financing	
Transfers in	420,000
Net cash provided by noncapital financing	420,000
Cash flows from capital and related financing activities	
Principal paid on installment debt	(189,032)
Interest paid on installment debt	(55,201)
Net cash used by capital and related financing activities	(244,233)
Cash flows provided by investing activities	
Interest on investments	16,412
Net increase in cash and cash equivalents	202,097
Cash and cash equivalents:	
Beginning	1,183,690
Ending (including restricted of $43,932)	$ 1,385,787

(Continued)

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Carteret County, North Carolina

Notes to Financial Statements

Note 5. Capital Assets (Continued)

	Capital Assets July 1, 2020	Additions	Retirements	Adjustments and Transfers	Capital Assets June 30, 2021
Business-type activities:					
Capital assets, not being depreciated:					
Land	$ 222,608	$ -	$ -	$ -	$ 222,608
Total capital assets, not being depreciated	222,608	-	-	-	**222,608**
Capital assets, being depreciated:					
Buildings	2,119,264	-	-	-	**2,119,264**
Infrastructure	9,618,564	-	-	-	**9,618,564**
Vehicles	75,129	-	-	-	**75,129**
Equipment	159,478	-	-	-	**159,478**
Total capital assets, being depreciated	11,972,435	-	-	-	**11,972,435**
Less accumulated depreciation for:					
Buildings	1,177,368	**70,642**	-	-	**1,248,010**
Infrastructure	4,688,448	**277,548**	-	-	**4,965,996**
Vehicles	56,181	**7,580**	-	-	**63,761**
Equipment	149,562	**8,500**	-	-	**158,062**
Total accumulated depreciation	6,071,559	**$ 364,270**	$ -	$ -	**6,435,829**
Total capital assets, being depreciated, net	5,900,876				**5,536,606**
Business-type activities capital assets, net	$ 6,123,484				**$ 5,759,214**

The above depreciation was charged to water activities and the Water Fund.

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Note 9. Long-Term Obligations (Continued)

Installment Purchase Obligations

As authorized by State law, G.S. 160A-20 and 153A-153.1, the County has entered into various installment-financing agreements in a direct placement for equipment and capital improvements. The installment purchases issued pursuant to a deed of trust because as long as the debt is outstanding the property is pledged as collateral for the debt. The County's installment-financing agreements at June 30, 2021, are comprised of the following:

Governmental activities (serviced by the General Fund):	
$2,000,000 - Renovations of Morehead Elementary School for 15 consecutive annual debt service fund installments beginning fiscal year 2007-2008, held by Bank of America	**$ 2,000,000**
$1,781,354 - Renovations of Newport Elementary School for 15 consecutive annual debt service fund installments beginning fiscal year 2009-2010, held by Galena Bank & Trust	**371,354**
$4,000,000 QZAB - Renovations of East Carteret High School for 13 consecutive annual installments, beginning in fiscal year 2011-2012, including interest at 5.22%, held by BB&T	**923,078**
$1,653,860 QSCB - Renovations of schools for 12 consecutive annual installments, beginning in fiscal year 2011-2012, including interest at 4.81%, held by BB&T	**275,642**
	3,570,074
Business-type activities (serviced by the Water Fund):	
$589,608 - Construction of water treatment and distribution facilities for 19 consecutive installments, beginning in fiscal year 2004-2005, including interest at 5.75% annual funds provided by State Revolving Fund, held by NCDENR	**62,064**
$2,800,000 - Construction of Phase II Waterline extension for 20 consecutive annual installments, beginning in fiscal year 2005 - 2006, including interest at 2.205%, funds provided by State Revolving Fund, held by NCDENR	**700,000**
	762,064
	$ 4,332,138

Annual debt service requirements to maturity for installment financing at June 30, 2021, are as follows:

Year Ending	Governmental Activities		Business-Type Activities		Totals	
June 30,	Principal	Interest	Principal	Interest	Principal	Interest
2022	$ 2,570,514	$ 61,443	$ 171,032	$ 19,004	$ 2,741,546	$ 80,447
2023	570,512	38,752	171,032	14,132	741,544	52,884
2024	429,048	16,061	140,000	9,261	569,048	25,322
2025	-	-	140,000	6,174	140,000	6,174
2026	-	-	140,000	3,087	140,000	3,087
	$ 3,570,074	$ 116,256	$ 762,064	$ 51,658	$ 4,332,138	$ 167,914

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Note 9. Long-Term Obligations (Continued)

Revenue Bond

$1,046,000 USDA water revenue bond issued on November 26, 2012; interest at 2.75% bonds due on June 1 in varying installments through June 1, 2052	**$ 925,000**

Annual debt service requirements to maturity for revenue bonds June 30, 2021, are as follows:

Year Ending June 30,	Principal	Interest
2022	$ 19,000	$ 25,438
2023	20,000	24,915
2024	20,000	24,365
2025	21,000	23,815
2026	21,000	23,238
2027-2031	117,000	107,058
2032-2036	133,000	90,090
2037-2041	153,000	70,703
2042-2046	175,000	48,537
2047-2051	202,000	23,073
2052	44,000	1,209
	$ 925,000	$ 462,441

The County has pledged future water revenues, net of specified operating expenses, to repay the revenue bond issued on November 26, 2012. The County is in compliance with the covenants contained in the USDA bond order as set forth in Article V through VII. The significant bond covenants require: a) that the net revenues (excluding depreciation) for each fiscal year shall not be less than 110% of the debt service requirement for such Fiscal Year and not less than 100% of the amount necessary to meet annual debt service obligations coming due in that Fiscal Year with respect to the County's general obligation bonds and installment financing obligations, if used to finance System Improvements and b) The County shall establish a Debt Service Reserve account to provide for at least one average annual loan installment.

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Carteret County, North Carolina

Statement of Fund Net Position - Proprietary Fund
June 30, 2021

	Water Fund
Assets	
Current assets	
Cash and cash equivalents	$ 1,980,691
Receivables, net	77,838
Restricted cash and cash equivalents	43,932
Total current assets	2,102,461
Noncurrent assets	
Capital assets:	
Land, improvements, and construction in progress	222,608
Other capital assets, net of depreciation	5,536,606
Total capital assets	5,759,214
Total noncurrent assets	5,759,214
Total assets	7,861,675
Deferred outflows of resources	75,385
Liabilities	
Current liabilities	
Accounts payable and accrued expenses	505,975
Customer deposits	115,765
Accrued interest payable	5,287
Current portion of long-term liabilities	199,897
Total current liabilities	826,924
Noncurrent liabilities	
Installment loan payable and long-term liabilities	1,507,071
Net pension liability	110,541
Total OPEB liability	97,310
Total noncurrent liabilities	1,714,922
Total liabilities	2,541,846
Deferred inflows of resources	2,316
Net Position	
Net investment in capital assets	4,072,150
Unrestricted	1,320,748
Total net position	$ 5,392,898

See Notes to Financial Statements.

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Carteret County, North Carolina

Statement of Revenues, Expenses and Changes in Fund Net Position - Proprietary Fund
Year Ended June 30, 2021

	Water Fund
Operating revenues	
Charges for services	$ 733,693
Other operating revenues	4,165
Total operating revenues	737,858
Operating expenses	
Water plant operations	677,742
Depreciation	364,270
Total operating expenses	1,042,012
Operating loss	(304,154)
Nonoperating revenues (expenses)	
Interest revenue	689
Interest expense	(48,980)
Total nonoperating revenues (expenses)	(48,291)
Loss before contributions and transfers	(352,445)
Transfers in	405,000
Change in net position	52,555
Total net position	
Beginning	5,340,343
Ending	$ 5,392,898

See Notes to Financial Statements.

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Carteret County, North Carolina

Statement of Cash Flows - Proprietary Fund
Year Ended June 30, 2021

	Water Fund
Cash flows from operating activities	
Cash received from customers	$ 726,023
Cash paid for goods and services	(386,331)
Cash paid to employees for services	(351,858)
Customer deposits received	6,015
Other operating revenues	4,165
Net cash used in operating activities	(1,986)
Cash flows from noncapital financing	
Transfers in	405,000
Net cash provided by noncapital financing	405,000
Cash flows from capital and related financing activities	
Principal paid on installment debt	(190,032)
Interest paid on installment debt	(49,835)
Bid deposit on potential sale of water system	475,000
Net cash provided by capital and related financing activities	235,133
Cash flows provided by investing activities	
Interest on investments	689
Net increase in cash and cash equivalents	638,836
Cash and cash equivalents:	
Beginning	1,385,787
Ending (including restricted of $43,932)	$ 2,024,623

(Continued)

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County of Carteret
2022 Carteret County Budget

Adopted version

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restricted funds, and beach municipalities beach nourishment special taxing districts revenues. In addition, the Army Corp of Engineers managed a project and nourishment Fort Macon State Park and East Atlantic Beach. When both projects are combined, 24 of Bogue Banks 25 miles of beaches was nourished and 6 million cubic yards of sand was added to the beaches. The Capital Improvements Fund decreases approximately $40.7 million from FY21 due to the completion of several major projects: Beach Nourishment Phase III and multiple waterway dredging initiatives.

Water Services

Water Taxing District Special Revenue Fund and Water Fund – Initiative #1

The recommended water fund budget is $1,220,000, 5.34% more than the FY21 amended budget. The increase is due to operational expenses. Over the last three to four fiscal years, the County has placed emphasis addressing deferred system and line maintenance. FY22 budget continues to emphasize maintaining the system and infrastructure. In addition, the budget continues debt service payments from infrastructure and system improvements years ago. Debt service is $230,000, 18.85% of the System's budget.

The recommended budget projects $681,200 user revenue and $500,000 transferred from the Water Taxing District Special Revenue Fund. No user fee increase is recommended in this budget. In the FY18 budget, the Board increased user fees. In addition, the County Commissioners are receiving bids through the upset bid process from private water providers to purchase the County's water system. At the end of the upset bid process, the County Commissioners will accept or reject the bids. If the Commissioners choose to sale the system, it will take a year to complete the entire process. If the Commissioners choose to keep the system, water user rates will need to be increased, and the County must comply with NC Session Law 2020-79. This session law authorized the State Water Infrastructure Authority and the NC Local Government Commission to assess and identify distressed local government water and wastewater systems. In April 2021, the Authority tabled declaring the County's water system a distressed system due to the possibility of selling the system. The session law requires items such as a water rate study and developing a long term and short term operational, capital, and financial plan. The last 7 fiscal years average net loss is approximately $110,000. The average net loss before the water taxing district transfer into the Water Fund is approximately $475,000.

As stated above the water system utilizes $500,000 property tax and sales tax revenues generated from the Water Taxing District Special Revenue Fund established in 2010. The FY22 proposed tax rate is 5.5 cents per $100 of assessed value, the same rate as the last nine years. The recommended budget transfers $500,000 from the fund to the Water Fund, $95,000 more than FY21. The transfer increase is due to maintenance needs.

As we look to the future, County staff will begin and or continue to work on a priority of issues. Efforts are beginning or continuing on the following:

- Update the county strategic plan for long term visioning and planning.
- Evaluating and implementing phases of the facilities master plan.
- Maintain a balance of the lowest responsible tax rate, funding the services requested by the taxpayers, funding education for the schools and community college, and addressing the capital needs of the schools, community college, and the county.
- Communicating and researching impacts of federal and state governments as well as regulatory agencies on local government and our citizens.
- Continue to review the delivery of fire and EMS services throughout the county in the most efficient and cost effective means.
- Continue to seek methods of maintaining waterways and work with the waterways committee.
- Continue implementing, streamlining, and improving consolidated human services and mental health services.

Summary

The county budget is a planning document. It presents a complex accumulation of sound fiscal policy and restraint balanced with competitive priorities for new initiatives. This annual process establishes strategic direction by allocating additional public funding levels as a commitment to quality service, program support and facility

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Addendum to the Budget Message

The Board of Commissioners' net increase to the County Manager's recommended budget is $890,940 for all funds. Below is a list of changes from the recommended budget to the adopted budget.

FY 2021 - 2022 Recommended Budget Revenues		$ 134,784,580
Revenue Summary Changes		
General Fund Revenue Changes		
Permits and Fees	$ 175,000	
Sales and Services	(125,000)	
Intergovernmental	489,665	
Other Taxes	150,000	
Miscellaneous	15,335	
Appropriated Fund Balance	120,000	
Total General Fund Changes		825,000
Other Funds Revenue Changes		
Rescue Districts Fund		
The Board of Commissioners adjusted the tax rate for Beaufort EMS district.		88,910
Fire Districts Fund		
The Board of Commissioners adjusted the tax rate for Beaufort Fire, Mitchell Village, and Wildwood Fire districts and appropriated reserve funds for Newport Fire.		439,530
Water Special Tax Fund		
The Board of Commissioners removed the 5.5 cent special revenue tax applied to the Water Special Tax district.		(503,000)
Water Fund Revenue Changes		
The Board of Commissioners set a 95% water rate increase to offset the loss of the revenues from the Water Special Tax district.		
User Charges	578,800	
Other Sources	(538,300)	
Total Water Fund Changes		40,500
FY 2021 - 2022 Adopted Budget Revenues		**$ 135,675,520**
FY 2021 - 2022 Recommended Budget Expenditures		$ 134,784,580
Expenditure Summary Changes		
General Fund Expenditure Changes		
Administration		
The Board of Commissioners increased funding for operations.	$ 11,135	
Register of Deeds		
The Board of Commissioners increased funding for operations.	10,665	
Economic Development		
The Board of Commissioners increased funding for operations.	120,000	
Health Services		
The Board of Commissioners increased funding for operations due to COVID.	445,865	
Sheriff		

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The Board of Commissioners increased funding for operations.	190,700	
Solid Waste		
The Board of Commissioners decreased funding for operations.	(125,000)	
Environmental Health		
The Board of Commissioners decreased funding for capital.	(46,000)	
Planning & Inspections		
The Board of Commissioners increased funding for operations.	57,635	
Library System		
The Board of Commissioners increased funding for operations.	115,000	
Health & Human Services		
The Board of Commissioners allocated funding for The Bridge.	45,000	
Total General Fund Changes		825,000
Other Funds Expenditure Changes		
Rescue Districts Fund		
The Board of Commissioners adjusted the tax rate for Beaufort EMS district.		88,910
Fire Districts Fund		
The Board of Commissioners adjusted the tax rate for Beaufort Fire, Mitchell Village, and Wildwood Fire districts and appropriated reserve funds for Newport Fire.		439,530
Water Special Tax Fund		
The Board of Commissioners removed the 5.5 cent special revenue tax applied to the Water Special Tax district.		(503,000)
Water Fund		
The Board of Commissioners increased contingency funding to offset the loss of the revenues from the Water Special Tax district.		40,500
FY 2021 - 2022 Adopted Budget Expenditures		**$ 135,675,520**

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	Actual FY18	Actual FY19	Actual FY20	Projected FY21	Adopted FY22
WATER FUND					
Revenues					
Operating revenues	$ 674,952	$ 711,732	$ 693,744	$ 687,200	$ 1,260,000
Nonoperating revenues	13,331	26,896	16,412	200	500
Total revenues	688,283	738,628	710,156	687,400	1,260,500
Expenditures					
Operating	1,194,833	1,099,575	1,131,686	1,206,925	961,065
Debt service	65,056	59,715	54,348	50,000	236,080
Contingency	-	-	-	-	63,355
Total expenditures	1,259,889	1,159,290	1,186,034	1,256,925	1,260,500
Revenue over expenditures	(571,606)	(420,662)	(475,878)	(569,525)	-
Other financing sources - Transfers in	433,600	400,000	420,000	405,000	-
Revenue & other financing sources over (under) expenditures & other financing sources	(138,006)	(20,662)	(55,878)	(164,525)	-
Ending Net Position	$ 5,416,883	$ 5,396,221	$ 5,340,343	$ 5,175,818	$ 5,175,818

Note:
Water Fund Actual FY18 - Projected FY21,
accrual basis of accounting
FY22 budget - modified basis of accounting

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Combined Revenue and Expenditure Summary

Governmental Combined Revenue and Expenditures and Business Type

	Actual FY20	Amended FY21	Adopted FY22	% Change FY21 to FY22	% of Fund Type Total
Governmental Funds					
Revenues					
Ad valorem taxes	$ 54,920,098	$ 62,303,530	$ 63,273,555	1.56%	47.07%
Other taxes	26,378,095	28,936,000	30,150,500	4.20%	22.43%
Permits and fees	3,833,484	3,715,900	4,189,600	12.75%	3.12%
Intergovernmental	66,599,091	42,761,827	15,680,780	-63.33%	11.67%
Sales and services	4,294,777	4,628,750	4,582,050	-1.01%	3.41%
Interest	979,978	472,600	200,000	-57.68%	0.15%
Miscellaneous	1,770,048	93,375	160,270	71.64%	0.12%
Other financing sources	19,567,904	41,472,747	16,178,265	-60.99%	12.04%
Total Revenues	**$ 178,343,475**	**$ 184,384,729**	**$ 134,415,020**	**-27.10%**	**100.00%**
Expenditures					
General government	8,751,597	11,050,209	10,679,050	-3.36%	7.94%
Public safety	23,889,544	26,619,801	28,671,185	7.71%	21.33%
Transportation	1,142,378	2,874,478	1,323,355	-53.96%	0.98%
Environmental protection	4,442,846	5,209,899	4,610,150	-11.51%	3.43%
Economic and physical development	5,841,169	7,684,126	7,604,855	-1.03%	5.66%
Human services	16,742,540	21,538,101	20,317,615	-5.67%	15.12%
Culture and recreation	3,463,928	4,133,386	4,244,410	2.69%	3.16%
Education	27,328,780	27,805,066	27,767,500	-0.14%	20.66%
Capital outlay	40,780,972	46,640,559	5,060,000	-89.15%	3.76%
Debt service	5,644,494	4,732,100	7,730,600	63.37%	5.75%
Non Departmental	19,987,904	26,097,004	16,406,300	-37.13%	12.21%
Total Expenditures	**$ 158,016,152**	**$ 184,384,729**	**$ 134,415,020**	**-27.10%**	**100.00%**
Enterprise Fund					
Revenues					
Water operating revenues	$ 693,744	$ 680,700	$ 1,260,000	85.10%	99.96%
Water nonoperating revenues	16,412	2,500	500	-80.00%	0.04%
Other financing sources	420,000	475,000	-	-100.00%	0.00%
Total Revenues	**$ 1,130,156**	**$ 1,158,200**	**$ 1,260,500**	**8.83%**	**100.00%**
Expenditures					
Water operating	1,131,686	916,120	1,024,420	11.82%	81.27%
Water non operating	54,348	242,080	236,080	-2.48%	18.73%
Total Expenditures	**$ 1,186,034**	**$ 1,158,200**	**$ 1,260,500**	**8.83%**	**100.00%**
Entity Totals					
Total entity revenues	**$ 179,473,631**	**$ 185,542,929**	**$ 135,675,520**	**-26.88%**	**100.00%**
Total entity expenditures	**$ 159,202,186**	**$ 185,542,929**	**$ 135,675,520**	**-26.88%**	**100.00%**

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Name	FY2020 Actual	FY2021 Amended Budget	FY2022 Recommended Budget	FY2022 Budgeted	FY2021 Amended Budget vs. FY2022 Budgeted (% Change)
Transfers	$1,969,300	$1,790,000	$1,500,000	$1,500,000	-16.2%
Total Facilities/Debt Reserve Fund:	**$2,028,116**	**$1,790,000**	**$1,500,000**	**$1,500,000**	**-16.2%**
County Capital Reserve Fund					
Interest	$13,449	$0	$0	$0	0%
Sale of Land	$96,150	$0	$0	$0	0%
Total County Capital Reserve Fund:	**$109,599**	**$0**	**$0**	**$0**	**0%**
School Capital Projects Fund					
Interest	$5,997	$0	$0	$0	0%
Transfers	$4,091,358	$2,756,266	$2,685,000	$2,685,000	-2.6%
Appropriated Fund Balance	$0	$524,260	$0	$0	-100%
Sales Tax Refund	$2,443	$0	$0	$0	0%
Total School Capital Projects Fund:	**$4,099,797**	**$3,280,526**	**$2,685,000**	**$2,685,000**	**-18.2%**
Water Fund					
Miscellaneous	$110	$0	$0	$0	0%
Interest	$16,413	$2,500	$500	$500	-80%
Transfers	$420,000	$405,000	$500,000	$0	-100%
Appropriated Fund Balance	$0	$70,000	$38,300	$0	-100%
Intergovernmental	$7,515	$0	$0	$0	0%
Operating Revenues	$686,118	$680,700	$681,200	$1,260,000	85.1%
Total Water Fund:	**$1,130,156**	**$1,158,200**	**$1,220,000**	**$1,260,500**	**8.8%**
Total:	**$178,750,690**	**$185,542,929**	**$134,784,580**	**$135,675,520**	**-26.9%**

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Consolidated Fund Summary
Fiscal Year 2022

The following chart presents FY22 consolidated summary of all budgeted funds, including revenue sources and expenditures.

	Governmental Fund			Enterprise Fund	
	General Fund	Special Revenue Funds	Capital Projects Fund	Water Fund	Total Budget
Financial Sources - Revenues					
Ad valorem taxes	$ 55,260,000	$ 8,013,555	$ -	$ -	$ 63,273,555
Other taxes	17,400,000	12,750,500	-	-	30,150,500
Permits and fees	3,780,500	130,000	-	-	3,910,500
Intergovernmental	14,961,880	800,000	-	-	15,761,880
Sales and services	4,339,550	242,500	-	-	4,582,050
Interest	200,000	-	-	-	200,000
Water revenue	-	-	-	1,260,500	1,260,500
Miscellaneous	160,270	-	-	-	160,270
Total Estimated Financial Sources	96,102,200	21,936,555	-	1,260,500	119,299,255
Expenditures					
Current:					
General government	10,549,050	130,000	-	-	10,679,050
Public safety	16,409,165	12,262,020	-	-	28,671,185
Transportation	1,323,355	-	-	-	1,323,355
Environmental protection	4,610,150	-	-	-	4,610,150
Economic and physical development	3,023,155	5,081,700	-	-	8,104,855
Human services	19,517,615	800,000	-	-	20,317,615
Culture and recreation	4,244,410	-	-	-	4,244,410
Education	27,767,500	-	-	-	27,767,500
Water operations	-	-	-	961,065	961,065
Capital outlay	-	-	3,560,000	-	3,560,000
Debt service:					
Principal retirement	6,759,600	-	-	190,080	6,949,680
Interest and fees	971,000	-	-	46,000	1,017,000
Total Expenditures	95,175,000	18,273,720	3,560,000	1,197,145	118,205,865
Revenues over (under) expenditures	927,200	3,662,835	(3,560,000)	63,355	1,093,390
Other Financing Sources (Uses)					
Transfers in	5,186,300	-	5,035,000	-	10,221,300
Transfers out	(5,035,000)	(5,186,300)	-	-	(10,221,300)
Contingency	(5,685,000)	-	(1,500,000)	(63,355)	(7,248,355)
Total Other Financing Sources (Uses)	(5,533,700)	(5,186,300)	3,535,000	(63,355)	(7,248,355)
Net Change in Fund Balance	(4,606,500)	(1,523,465)	(25,000)	-	(6,154,965)
Fund Balance, Beginning	58,122,485	4,830,870	10,277,731	5,175,818	78,406,904
Fund Balance, Ending	$ 53,515,985	$ 3,307,405	$ 10,252,731	$ 5,175,818	$ 72,251,939

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Section XII: Facilities/Debt Reserve Capital Fund

A. It is estimated that the following revenues will be available in the Facilities/Debt Reserve Capital Fund for the fiscal year beginning July 1, 2021 and ending June 30, 2022.

Transfer from Other Funds	1,500,000
	1,500,000

B. The following amounts are hereby appropriated in the Facilities/Debt Reserve Capital Fund for the fiscal year beginning July 1, 2021 and ending June 30, 2022.

Contingency	1,500,000
	1,500,000

Section XIII: School Special Projects

A. It is estimated that the following revenues will be available in the School Special Projects Fund for the fiscal year beginning July 1, 2021 and ending June 30, 2022.

Transfer from General Fund	2,685,000
Interest	-
Appropriated Fund Balance	-
	2,685,000

B. The following amounts are hereby appropriated in the School Special Projects Fund for the fiscal year beginning July 1, 2021 and ending June 30, 2022.

Capital	1,940,845
CHS Modular Payments	43,675
Technology	700,480
	2,685,000

Section XIV: Water Fund

A. It is estimated that the following revenues will be available for the Water System Fund for the fiscal year beginning July 1, 2021 and ending June 30, 2022.

Operating Revenues	1,260,000
Interest	500
Contribution from other Funds	-
Contribution from General Fund	-
Appropriated Fund Balance	-
	1,260,500

B. The following amount is hereby appropriated for the Water System Fund for the fiscal year beginning July 1, 2021 and ending June 30, 2022.

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SOUTHERN CORROSION
ENGINEERED TANK CARE

WATER STORAGE TANK
ANNUAL INSPECTION REPORT

Carteret County Water Utilities Division

Laurel Rd Tank

Water System Contact: Tony Cahoon, Public Works Manager, Work: (252)-728-8595, Other: (252)-728-6592

Date of Inspection: 09/15/2021

Inspector Signature: _____

CORPORATE OFFICE: 738 THELMA ROAD ROANOKE RAPIDS, NC 27870
OFFICE: (252) 535-1777 FAX: (252) 535-3215

SOUTHERN CORROSION
ENGINEERED TANK CARE

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ANNUAL WATER TANK INSPECTION REPORT

This inspection report documents the current condition of the structure, attached components, the applied protective coating systems, and regulatory compliance with common regulatory standards.
The protective coating systems applied to the exterior and interior of the structure are further evaluated based on the types of deficiencies observed, the extent of those deficiencies, and the degree to which the deficiencies affect those coated surfaces.
Under the Management Program, we use the findings from this annual inspection to confirm that the maintenance plan set for the water tank is on schedule. Should conditions warrant any repairs, touch-up, or painting, those services will be scheduled in a timely manner. Our goal is to ensure your water tank is visually appealing, protected, and compliant with regulatory standards.
Our inspection procedures adhere to SSPC, NACE, and AWWA standards relating to inspecting and maintaining water storage structures. This report is not a structural analysis or a guarantee of compliance with all state or federal regulations.
A Visual Inspection was performed on the water tank identified as the Laurel Rd Tank located at Laurel Rd, Beaufort, NC 28516, USA on 09/15/2021.
Should you have any questions about the observations and recommendations outlined in this inspection report, please contact your Account Representative or call our main office at (252) 535-1777.

INSPECTION DATA

Date of Inspection: 09/15/2021

Water Tank Owner: Carteret County Water Utilities Division

Report Submitted to: Water System Contact: Tony Cahoon, Public Works Manager, Work: (252)-728-8595, Other: (252)-728-6592

Tank Inspector: Inspector: David Evans, Inspector / Washout Technican, Work: 1-252-535-1777, Work: Davide@tankcare.net, Certified Southern Corrosion Inspector

DATA PLATE INFORMATION

Manufacturer: Phoenix

Capacity: 200,000 Gallons

Construction Date: 1988

High Water Level: 133 (FT)

Low Water Level: (FT)

SOUTHERN CORROSION
ENGINEERED TANK CARE

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EXTERIOR INSPECTION OBSERVATIONS

The exterior of the structure, its components, and the protective coating system was evaluated based on four basic criteria: (1.) Condition. (2.) Protection. (3.) Durability. (4.) Adherence to the maintenance plan.

STRUCTURE AND COMPONENTS

Overall the condition of the exterior of the structure was observed to be:**Excellent** - The structure appears to be in excellent condition.

PROTECTIVE COATING SYSTEM

The types of deficiencies observed affecting the exterior protective coating system:

Mildew - Black fungal growth. Cause: Micro-organism especially on damp and shaded paint.
Irregular Shape Rust - Deterioration at edges, corners, crevices, channels, etc. Cause: Difficult to coat surfaces; or configurations where a coating thins from service degradation.
Pinpoint Rust - Rusting at pinholes or holidays. Cause: The steel surface profile is exposed from degrading a thinning coating.

The extent of the deficiencies observed and listed above are classified as:**Minor** - Any deficiencies noted are only minor and are not adversely affecting the coating system.

The degree of those deficiencies affecting the overall coating system is estimated to be:**Proportional** - Deficiencies are proportional to the age of the coating and impact of the environment.

INSPECTOR OBSERVATIONS

The exterior of the tank is in excellent condition. The noted deficiencies are the presence of mildew, pin point corrosion, and irregular shape and surface corrosion. The mildew can be observed on some lower levels of the tank such as the leg bases. Pin point corrosion can be seen randomly throughout. Most notably on various areas of the roof and catwalk floor of the tank. Irregular shape and surface corrosion can be observed on hard edges such as some ladder rungs and bolt threads. Overall, the exterior of the tank is in excellent condition and the deficiencies noted are minor in nature.

INSPECTION PICTURES INCLUDED.

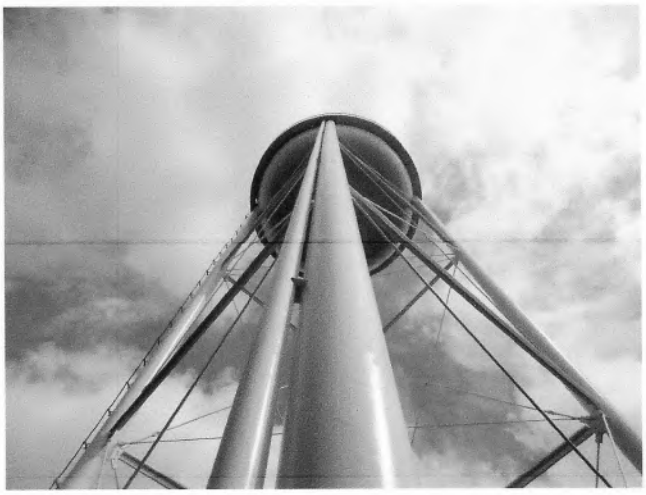
PLANNED MAINTENANCE

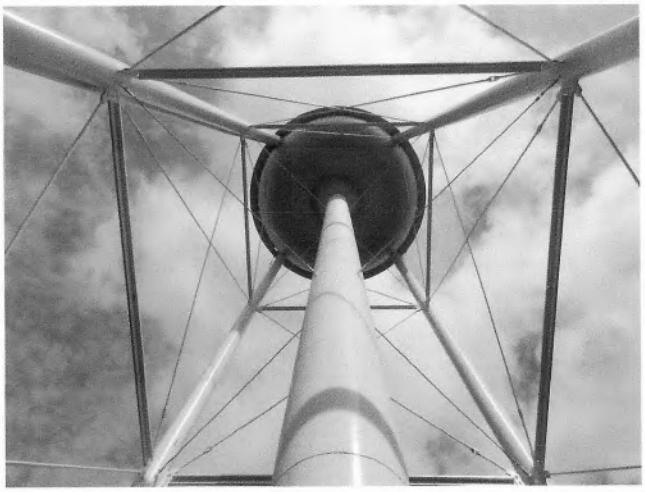
No Service Required at this Time - The protective coating system is providing acceptable protection to the exterior of the structure. No repairs or touch up is recommended at this time.

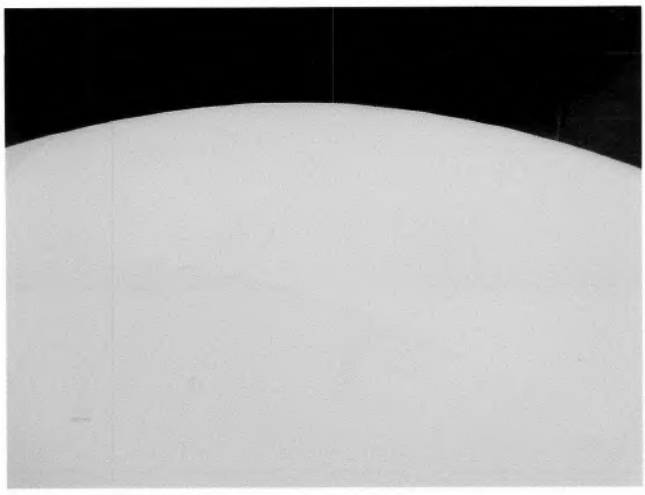
Exterior Renovations Cycle: Every 5 Years
Next Scheduled Exterior Renovation: 10/15/2020 - 10/14/2021

SOUTHERN CORROSION
ENGINEERED TANK CARE

VIEW OF EXTERIOR COATINGS







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INTERIOR WET INSPECTION OBSERVATIONS

The interior wet of the structure, its components, and the protective coating system was evaluated based on four basic criteria: (1.) Condition. (2.) Protection. (3.) Durability. (4.) Adherence to the maintenance plan.

STRUCTURE AND COMPONENTS

Overall the condition of the interior wet area of the structure was observed to be:**Excellent -** The structures interior components appear to be in excellent condition.

PROTECTIVE COATING SYSTEM

The types of deficiencies observed affecting the interior wet protective coating system:

Irregular Shape Rust - Deterioration at edges, corners, crevices, channels, etc. Cause: Difficult to coat surfaces; or configurations where the coating thins from service degradation.
Discoloration / Staining - Organic build up on the surface of the coating causing a discoloration. Cause: Typically iron and or manganese deposits in the water.

The extent of the deficiencies observed and listed above are classified as:**Minor -** Deficiencies noted are considered normal or minor but an indicator of the natural degradation of the coating system.

The degree of those deficiencies affecting the overall coating system is estimated to be:**Proportional** - Deficiencies are proportional to the age of the coating and the impact of the environment.

INSPECTOR OBSERVATIONS

The interior of the tank is in excellent condition. The noted deficiencies are the presence of discoloration/staining on the shell wall along with corrosion of some irregular shapes and surfaces. The staining can be seen on the shell wall above and below the water level and can be due mainly to elements found in the water. The corrosion can be seen on such surfaces as weld seams and the vent base. Overall, the interior of the tank is in excellent condition and the deficiencies noted are minor in nature.

INSPECTION PICTURES INCLUDED.

PLANNED MAINTENANCE

No Service Required at this Time - The interior protective coating system is providing acceptable protection to the interior of the structure. No repairs or touch-ups were recommended at this time.

Interior Wet Renovations Cycle: Every 15 Years
Next Scheduled Interior Wet Renovation: 10/15/2030 - 10/14/2031

SOUTHERN CORROSION
ENGINEERED TANK CARE

VIEW OF INTERIOR COATINGS

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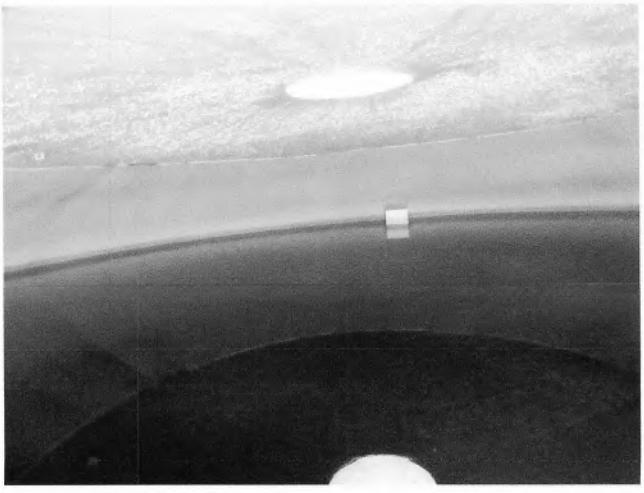
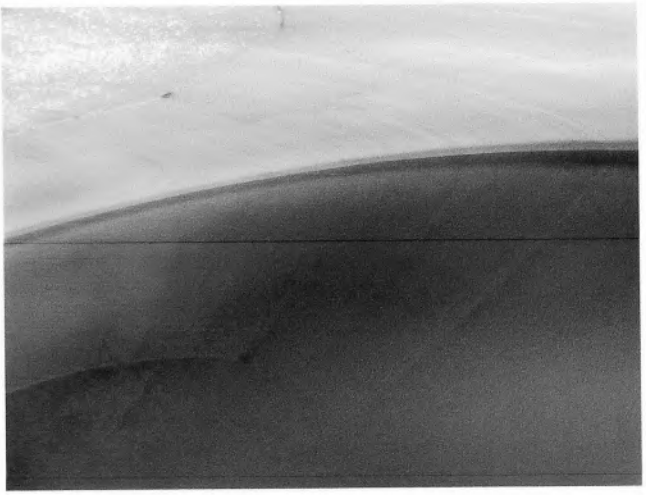
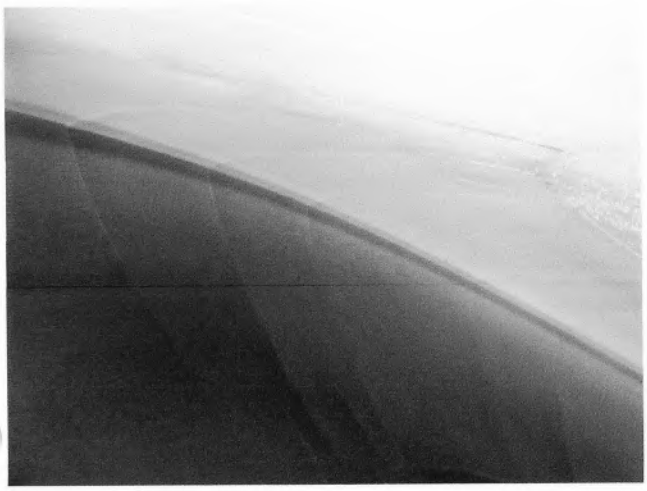
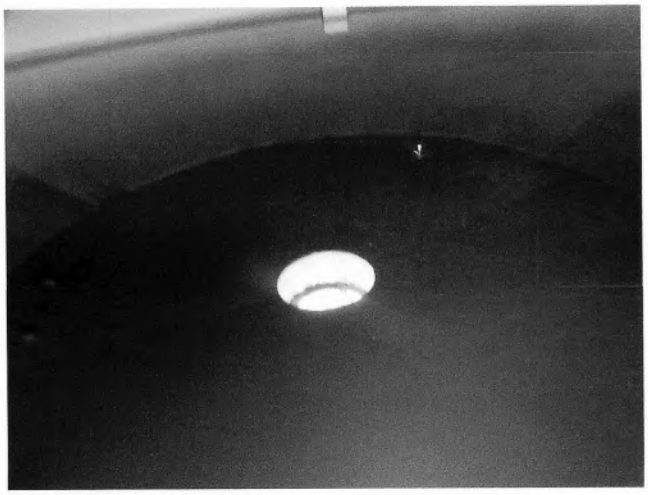


SOUTHERN CORROSION
ENGINEERED TANK CARE

VIEW OF INTERIOR COATINGS







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SOUTHERN CORROSION
ENGINEERED TANK CARE

TRUCTURE COMPONENTS

Components are integral parts of the structure and its day to day operation. The components are also evaluated based on the four basic criteria: (1.) Condition. (2.) Protection. (3.) Durability. (4.) Adherence to the maintenance plan.

STRUCTURE AND COMPONENTS

Foundation: Satisfactory
Inspection Criteria: Evaluate the condition of the surface of the foundation(s) that is visible.
Support Structure: Satisfactory
Inspection Criteria: Depending upon the design of the water tank, evaluate the condition of the legs, rods, beams, bell, stem, and catwalk components.
Storage Structure: Satisfactory
Inspection Criteria: Depending upon the design of the water tank, evaluate the bowl, sidewall, dome, or roof of the storage structure.
Hatches: Satisfactory
Inspection Criteria: Evaluate all hatches that access the interior dry or interior wet spaces for condition and compliance.
Overflow Components: Satisfactory
Inspection Criteria: Evaluate the pipe, standoffs, welds, penetration point, vertex preventer, and termination flap or screen for condition and compliance.
Level Indicator Structure: N/A
Inspection Criteria: Inspect the components of the indicator structure and test the movement of the indicator.
Vent Structure: Satisfactory
Inspection Criteria: Evaluate vent components (base, cover, and screen) for condition, proper operation, and compliance.
Ladders: Satisfactory
Inspection Criteria: All ladders are evaluated for their integrity, safety, and OSHA compliance.

The following items listed are typically not covered under the maintenance agreement. If these items are installed, as a courtesy, Southern Corrosion will inspect these components to document their condition and operation.

Antenna Components: Satisfactory
Inspection Criteria: Evaluate the install, mounts, and support structure.
Obstruction Light: Visually Inspected
Inspection Criteria: Inspect the condition of the mount and if possible the operation of the light.
Mixer: N/A
Inspection Criteria: Evaluate the installation and visual condition of the mixer.

INSPECTOR OBSERVATIONS

APPLICABLE PICTURES OF COMPONENTS IDENTIFIED FOR MAINTENANCE INCLUDED

PLANNED MAINTENANCE

Washout Inspection Cycle: Every 5 Years
Next Scheduled Washout Inspection: 10/15/2020 - 10/14/2021

SOUTHERN CORROSION
ENGINEERED TANK CARE

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COMPLIANCE REPORT

The compliance report documents the inspection on 09/15/2021 of the Laurel Rd Tank and its compliance with State Health and Environmental Control regulations related to water storage facilities. Please note that this report does not guarantee water quality or compliance with all related regulations.

Site Accessibility - **Compliant**
* Compliance Criteria: All storage tanks shall be readily accessible at all times for inspection and maintenance.

Trespass Prevention - ***Compliant***
* Compliance Criteria: Fencing, locks on access manholes, and other manholes, and other necessary precautions shall be provided to prevent trespassing, vandalism, and sabotage.

Overflow Pipe Design - **Compliant**
* Compliance Criteria: All atmospheric storage structures shall be provided with an overflow. The termination of the pipe should be covered by a screen or flap.

Access Hatch - **Compliant**
* Compliance Criteria: Any access hatch should meet AWWA design standards and the cover secured with a lock.

Vent Design and Condition - **Compliant**
* Compliance Criteria: All finished water atmospheric storage structures shall be vented. A vent structure shall be capped and all openings covered with a screen.

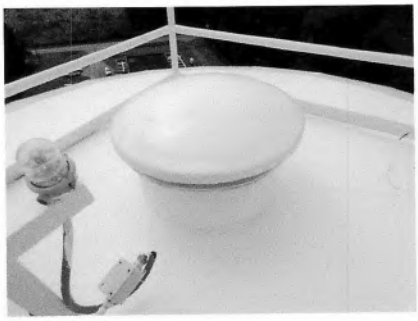
SITE ACCESSIBILITY

TRESPASS PREVENTION

OVERFLOW PIPE DESIGN

ACCESS HATCH PROTECTION

VENT DESIGN AND CONDITION



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SOUTHERN CORROSION
ENGINEERED TANK CARE

WATER STORAGE TANK
ANNUAL INSPECTION REPORT

Carteret County Water Utilities Division

Mayflower Dr Tank

Water System Contact: Tony Cahoon, Public Works Manager, Work: (252)-728-8595, Other: (252)-728-6592

Date of Inspection: 09/15/2021

Inspector Signature: _____

CORPORATE OFFICE: 738 THELMA ROAD ROANOKE RAPIDS, NC 27870
OFFICE: (252) 535-1777 FAX: (252) 535-3215

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SOUTHERN CORROSION
ENGINEERED TANK CARE

ANNUAL WATER TANK INSPECTION REPORT

This inspection report documents the current condition of the structure, attached components, the applied protective coating systems, and regulatory compliance with common regulatory standards.
The protective coating systems applied to the exterior and interior of the structure are further evaluated based on the types of deficiencies observed, the extent of those deficiencies, and the degree to which the deficiencies affect those coated surfaces.
Under the Management Program, we use the findings from this annual inspection to confirm that the maintenance plan set for the water tank is on schedule. Should conditions warrant any repairs, touch-up, or painting, those services will be scheduled in a timely manner. Our goal is to ensure your water tank is visually appealing, protected, and compliant with regulatory standards.
Our inspection procedures adhere to SSPC, NACE, and AWWA standards relating to inspecting and maintaining water storage structures. This report is not a structural analysis or a guarantee of compliance with all state or federal regulations.
A Visual Inspection was performed on the water tank identified as the Mayflower Dr Tank located at 104 Mayflower Dr, Newport, NC 28570, USA on 09/15/2021.
Should you have any questions about the observations and recommendations outlined in this inspection report, please contact your Account Representative or call our main office at (252) 535-1777.

INSPECTION DATA

Date of Inspection: 09/15/2021

Water Tank Owner: Carteret County Water Utilities Division

Report Submitted to: Water System Contact: Tony Cahoon, Public Works Manager, Work: (252)-728-8595, Other: (252)-728-6592

Tank Inspector: Inspector: David Evans, Inspector / Washout Technican, Work: 1-252-535-1777, Work: Davide@tankcare.net, Certified Southern Corrosion Inspector

DATA PLATE INFORMATION

Manufacturer: Phoenix

Capacity: 200,000 Gallons

Construction Date: 2010

High Water Level: 132 (FT)

Low Water Level: (FT)

SOUTHERN CORROSION
ENGINEERED TANK CARE

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EXTERIOR INSPECTION OBSERVATIONS

The exterior of the structure, its components, and the protective coating system was evaluated based on four basic criteria: (1.) Condition. (2.) Protection. (3.) Durability. (4.) Adherence to the maintenance plan.

STRUCTURE AND COMPONENTS

Overall the condition of the exterior of the structure was observed to be:**Excellent** - The structure appears to be in excellent condition.

PROTECTIVE COATING SYSTEM

The types of deficiencies observed affecting the exterior protective coating system:

Mildew - Black fungal growth. Cause: Micro-organism especially on damp and shaded paint.

The extent of the deficiencies observed and listed above are classified as:**Minor** - Any deficiencies noted are only minor and are not adversely affecting the coating system.

The degree of those deficiencies affecting the overall coating system is estimated to be:**Proportional** - Deficiencies are proportional to the age of the coating and impact of the environment.

INSPECTOR OBSERVATIONS

The exterior of the tank is in excellent condition. The only noted deficiency is the presence of minor mildew on some surfaces of the tank.

INSPECTION PICTURES INCLUDED.

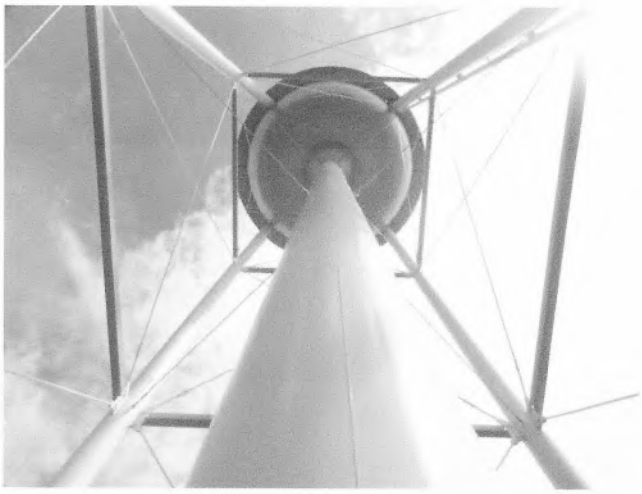
PLANNED MAINTENANCE

No Service Required at this Time - The protective coating system is providing acceptable protection to the exterior of the structure. No repairs or touch up is recommended at this time.

Exterior Renovations Cycle: Every 5 Years
Next Scheduled Exterior Renovation: 08/22/2020 - 08/21/2021

SOUTHERN CORROSION
ENGINEERED TANK CARE

VIEW OF EXTERIOR COATINGS



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SOUTHERN CORROSION
ENGINEERED TANK CARE

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INTERIOR WET INSPECTION OBSERVATIONS

The interior wet of the structure, its components, and the protective coating system was evaluated based on four basic criteria: (1.) Condition. (2.) Protection. (3.) Durability. (4.) Adherence to the maintenance plan.

STRUCTURE AND COMPONENTS

Overall the condition of the interior wet area of the structure was observed to be:**Excellent** - The structures interior components appear to be in excellent condition.

PROTECTIVE COATING SYSTEM

The types of deficiencies observed affecting the interior wet protective coating system:

Irregular Shape Rust - Deterioration at edges, corners, crevices, channels, etc. Cause: Difficult to coat surfaces; or configurations where the coating thins from service degradation.
Undercutting - Blistering and/or peeling of paint where exposed steel is rusting. Cause: Corrosion products formed where steel is exposed, undermining and lifting surrounding paint.
Discoloration / Staining - Organic build up on the surface of the coating causing a discoloration. Cause: Typically iron and or manganese deposits in the water.

The extent of the deficiencies observed and listed above are classified as:**Minor** - Deficiencies noted are considered normal or minor but an indicator of the natural degradation of the coating system.

The degree of those deficiencies affecting the overall coating system is estimated to be:**Proportional** - Deficiencies are proportional to the age of the coating and the impact of the environment.

INSPECTOR OBSERVATIONS

The interior of the tank is in excellent condition. The noted deficiencies are the presence of discoloration/staining on the shell wall, corrosion of irregular shapes and surfaces, and undercutting. The staining can be observed on the shell wall above and below the water level and can be due mainly to elements found in the water. The corrosion can be observed on hard edges such as the vent base. Undercutting is also visible randomly throughout. This can be seen inside the overflow box and the top of the fill pipe. Overall, the interior of the tank is in excellent condition and the deficiencies noted are minor in nature.

INSPECTION PICTURES INCLUDED.

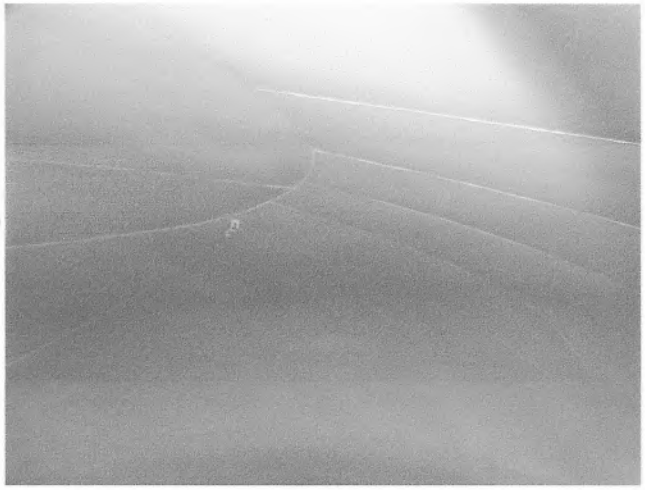
PLANNED MAINTENANCE

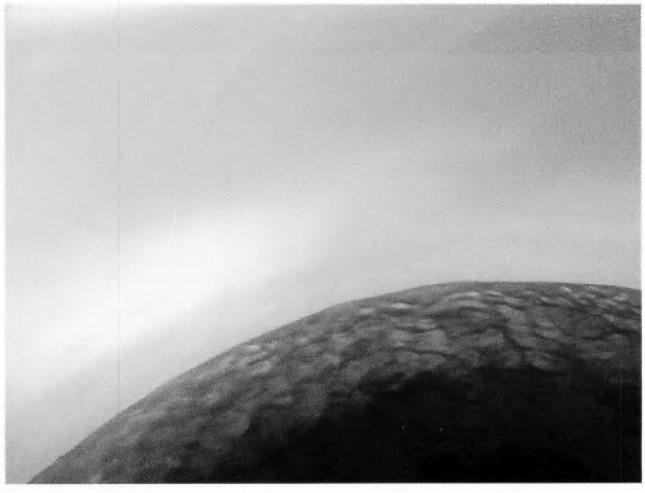
No Service Required at this Time - The interior protective coating system is providing acceptable protection to the interior of the structure. No repairs or touch-ups were recommended at this time.

Interior Wet Renovations Cycle: Every 15 Years
Next Scheduled Interior Wet Renovation: 08/22/2025 - 08/21/2026

SOUTHERN CORROSION
ENGINEERED TANK CARE

VIEW OF INTERIOR CONTAINS





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SOUTHERN CORROSION
ENGINEERED TANK CARE

VIEW OF INTERIOR COATINGS

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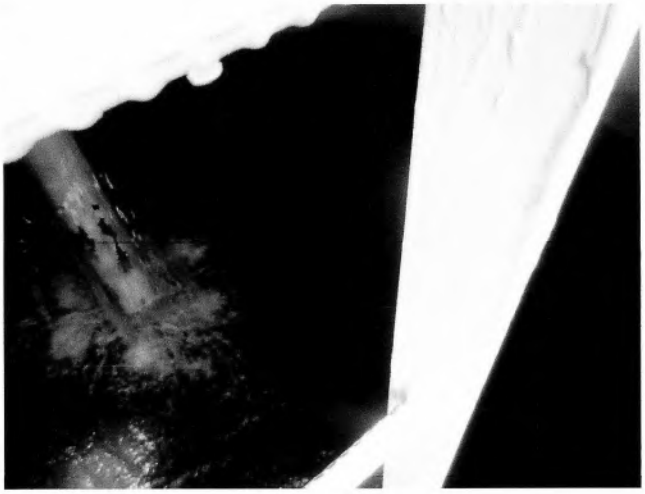
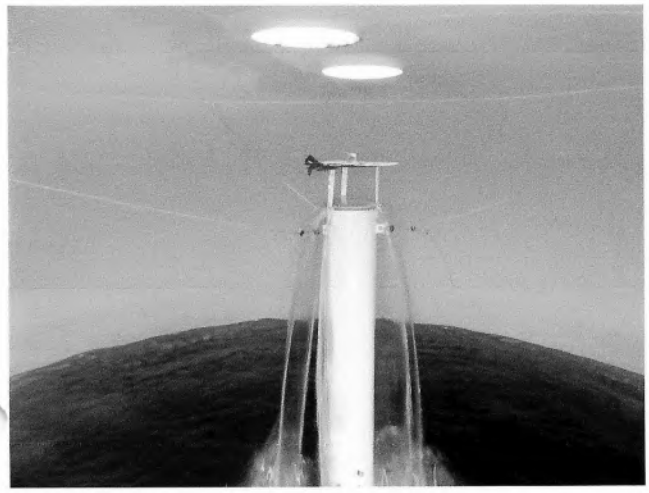
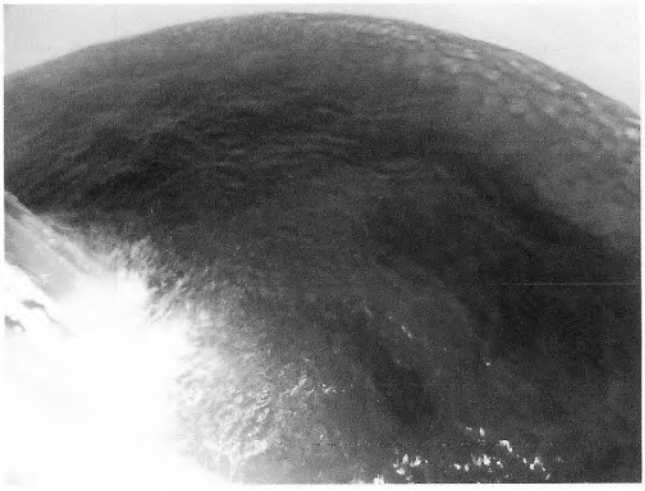
Nov 22 2022







SOUTHERN CORROSION
ENGINEERED TANK CARE

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TRUCTURE COMPONENTS

Components are integral parts of the structure and its day to day operation. The components are also evaluated based on the four basic criteria: (1.) Condition. (2.) Protection. (3.) Durability. (4.) Adherence to the maintenance plan.

STRUCTURE AND COMPONENTS

Foundation: Satisfactory
Inspection Criteria: Evaluate the condition of the surface of the foundation(s) that is visible.
Support Structure: Satisfactory
Inspection Criteria: Depending upon the design of the water tank, evaluate the condition of the legs, rods, beams, bell, stem, and catwalk components.
Storage Structure: Satisfactory
Inspection Criteria: Depending upon the design of the water tank, evaluate the bowl, sidewall, dome, or roof of the storage structure.
Hatches: Satisfactory
Inspection Criteria: Evaluate all hatches that access the interior dry or interior wet spaces for condition and compliance.
Overflow Components: Satisfactory
Inspection Criteria: Evaluate the pipe, standoffs, welds, penetration point, vertex preventer, and termination flap or screen for condition and compliance.
Level Indicator Structure: Satisfactory
Inspection Criteria: Inspect the components of the indicator structure and test the movement of the indicator.
Vent Structure: Satisfactory
Inspection Criteria: Evaluate vent components (base, cover, and screen) for condition, proper operation, and compliance.
Ladders: Satisfactory
Inspection Criteria: All ladders are evaluated for their integrity, safety, and OSHA compliance.

The following items listed are typically not covered under the maintenance agreement. If these items are installed, as a courtesy, Southern Corrosion will inspect these components to document their condition and operation.

Antenna Components: Satisfactory
Inspection Criteria: Evaluate the install, mounts, and support structure.
Obstruction Light: Operating
Inspection Criteria: Inspect the condition of the mount and if possible the operation of the light.
Mixer: N/A
Inspection Criteria: Evaluate the installation and visual condition of the mixer.

INSPECTOR OBSERVATIONS

APPLICABLE PICTURES OF COMPONENTS IDENTIFIED FOR MAINTENANCE INCLUDED.

PLANNED MAINTENANCE

Washout Inspection Cycle: Every 5 Years
Next Scheduled Washout Inspection: 08/22/2020 - 08/21/2021

SOUTHERN CORROSION
ENGINEERED TANK CARE

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COMPLIANCE REPORT

The compliance report documents the inspection on 09/15/2021 of the Mayflower Dr Tank and its compliance with State Health and Environmental Control regulations related to water storage facilities. Please note that this report does not guarantee water quality or compliance with all related regulations.

Site Accessibility - **Compliant**
* Compliance Criteria: All storage tanks shall be readily accessible at all times for inspection and maintenance.

Trespass Prevention - ***Compliant***
* Compliance Criteria: Fencing, locks on access manholes, and other manholes, and other necessary precautions shall be provided to prevent trespassing, vandalism, and sabotage.

Overflow Pipe Design - **Compliant**
* Compliance Criteria: All atmospheric storage structures shall be provided with an overflow. The termination of the pipe should be covered by a screen or flap.

Access Hatch - **Compliant**
* Compliance Criteria: Any access hatch should meet AWWA design standards and the cover secured with a lock.

Vent Design and Condition - **Compliant**
* Compliance Criteria: All finished water atmospheric storage structures shall be vented. A vent structure shall be capped and all openings covered with a screen.

SITE ACCESSIBILITY

TRESPASS PREVENTION

OVERFLOW PIPE DESIGN

ACCESS HATCH PROTECTION

VENT DESIGN AND CONDITION

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SOUTHERN CORROSION
ENGINEERED TANK CARE

WATER STORAGE TANK
ANNUAL INSPECTION REPORT

Carteret County Water Utilities Division

Taylor Farm Rd Tank

Water System Contact: Tony Cahoon, Public Works Manager, Work: (252)-728-8595, Other: (252)-728-6592

Date of Inspection: 09/15/2021

Inspector Signature:

CORPORATE OFFICE: 738 THELMA ROAD ROANOKE RAPIDS, NC 27870
OFFICE: (252) 535-1777 FAX: (252) 535-3215

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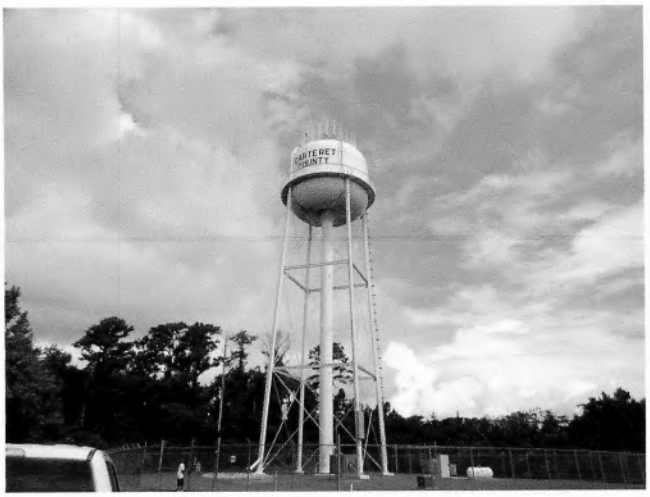
SOUTHERN CORROSION
ENGINEERED TANK CARE

ANNUAL WATER TANK INSPECTION REPORT



This inspection report documents the current condition of the structure, attached components, the applied protective coating systems, and regulatory compliance with common regulatory standards.

The protective coating systems applied to the exterior and interior of the structure are further evaluated based on the types of deficiencies observed, the extent of those deficiencies, and the degree to which the deficiencies affect those coated surfaces. Under the Management Program, we use the findings from this annual inspection to confirm that the maintenance plan set for the water tank is on schedule. Should conditions warrant any repairs, touch-up, or painting, those services will be scheduled in a timely manner. Our goal is to ensure your water tank is visually appealing, protected, and compliant with regulatory standards.

Our inspection procedures adhere to SSPC, NACE, and AWWA standards relating to inspecting and maintaining water storage structures. This report is not a structural analysis or a guarantee of compliance with all state or federal regulations.

A Visual Inspection was performed on the water tank identified as the Taylor Farm Rd Tank located at Taylor Farm Rd, Beaufort, NC 28516, USA on 09/15/2021.

Should you have any questions about the observations and recommendations outlined in this inspection report, please contact your Account Representative or call our main office at (252) 535-1777.

INSPECTION DATA

Date of Inspection: 09/15/2021

Water Tank Owner: Carteret County Water Utilities Division

Report Submitted to: Water System Contact: Tony Cahoon, Public Works Manager, Work: (252)-728-8595, Other: (252)-728-6592

Tank Inspector: Inspector: David Evans, Inspector / Washout Technican, Work: 1-252-535-1777, Work: Davide@tankcare.net, Certified Southern Corrosion Inspector

DATA PLATE INFORMATION

Manufacturer: Caldwell

Capacity: 200,000 Gallons

Construction Date: 2012

High Water Level: 132 (FT)

Low Water Level: 103 (FT)

SOUTHERN CORROSION
ENGINEERED TANK CARE

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XTERIOR INSPECTION OBSERVATIONS

The exterior of the structure, its components, and the protective coating system was evaluated based on four basic criteria: (1.) Condition. (2.) Protection. (3.) Durability. (4.) Adherence to the maintenance plan.

STRUCTURE AND COMPONENTS

Overall the condition of the exterior of the structure was observed to be:**Monitor -** Minor deficiencies were observed and noted for monitoring and possible repair in the future.

PROTECTIVE COATING SYSTEM

The types of deficiencies observed affecting the exterior protective coating system:

Mildew - Black fungal growth. Cause: Micro-organism especially on damp and shaded paint.
Chalk Erosion - Gradual thinning of the finish coat to expose the undercoat. Cause: Degradation of coating resin by sunlight leaving loose residue on its surface.
Fading - Color changes or irregularities. Cause: Ultraviolet light degrade: or moisture behind the paint film.
Irregular Shape Rust - Deterioration at edges, corners, crevices, channels, etc. Cause: Difficult to coat surfaces; or configurations where a coating thins from service degradation.
Pinpoint Rust - Rusting at pinholes or holidays. Cause: The steel surface profile is exposed from degrading a thinning coating.
Undercutting - Blistering and/or peeling of paint where exposed steel is rusting. Cause: Corrosion products formed where steel is exposed, undermining, and lifting surrounding paint.

The extent of the deficiencies observed and listed above are classified as:**Moderate** - The extent of the deficiencies noted can undermine the future integrity and affect the longevity of the coating system.

The degree of those deficiencies affecting the overall coating system is estimated to be:**Proportional** - Deficiencies are proportional to the age of the coating and impact of the environment.

INSPECTOR OBSERVATIONS

The exterior coating of the tank is nearing the end of its intended lifespan. The noted deficiencies are the presence of mildew, general fading and chalking, corrosion of irregular shapes and surfaces, pin point corrosion, and undercutting. The mildew can be observed on surfaces such as lower levels of the tank. General fading and chalking can be observed throughout. Irregular shape and surface corrosion can be seen on surfaces such as wind rods, the catwalk floor, and ladder rungs. pin point corrosion can also be seen throughout. Most notably on the legs of the tank along with the floor of the catwalk. Undercutting is also visible on the upper portions of the exterior leg ladder. Overall, the exterior coating of the tank is nearing the end of its lifespan and the deficiencies noted are moderate in nature.

INSPECTION PICTURES INCLUDED.

PLANNED MAINTENANCE

No Service Required at this Time - The protective coating system is providing acceptable protection to the exterior of the structure. No repairs or touch up is recommended at this time.

Exterior Renovations Cycle: Every 5 Years
Next Scheduled Exterior Renovation: 08/22/2022 - 08/21/2023

SOUTHERN CORROSION
ENGINEERED TANK CARE

VIEW OF EXTERIOR COATINGS

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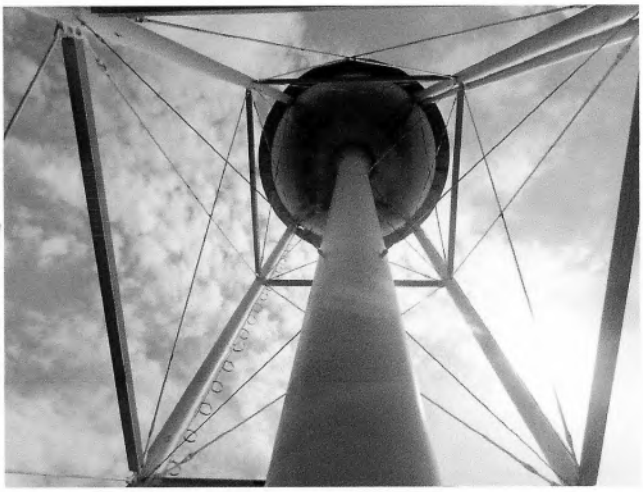

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ENGINEERED TANK CARE

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INTERIOR WET INSPECTION OBSERVATIONS

The interior wet of the structure, its components, and the protective coating system was evaluated based on four basic criteria: (1.) Condition. (2.) Protection. (3.) Durability. (4.) Adherence to the maintenance plan.

STRUCTURE AND COMPONENTS

Overall the condition of the interior wet area of the structure was observed to be:**Satisfactory** - The interior of the structure is in a satisfactory condition. No maintenance is needed at this time

PROTECTIVE COATING SYSTEM

The types of deficiencies observed affecting the interior wet protective coating system:

Irregular Shape Rust - Deterioration at edges, corners, crevices, channels, etc. Cause: Difficult to coat surfaces; or configurations where the coating thins from service degradation.
Discoloration / Staining - Organic build up on the surface of the coating causing a discoloration. Cause: Typically iron and or manganese deposits in the water.

The extent of the deficiencies observed and listed above are classified as:**Minor** - Deficiencies noted are considered normal or minor but an indicator of the natural degradation of the coating system.

The degree of those deficiencies affecting the overall coating system is estimated to be:**Proportional** - Deficiencies are proportional to the age of the coating and the impact of the environment.

INSPECTOR OBSERVATIONS

The interior of the tank is satisfactory condition. The noted deficiencies are the presence of discoloration/staining on the shell wall and corrosion of irregular shapes and surfaces. The staining can be observed on the shell wall above and below the water level and can be due mainly to elements found in the water. The corrosion can be seen on such irregular surfaces such as some weld seams and ladder rungs. Weld burns are also visible due to the installation of an exterior antenna corral. Overall, the interior of the tank is in satisfactory condition and the deficiencies noted are minor in nature.

INSPECTION PICTURES INCLUDED.

PLANNED MAINTENANCE

No Service Required at this Time - The interior protective coating system is providing acceptable protection to the interior of the structure. No repairs or touch-ups were recommended at this time.

Interior Wet Renovations Cycle: Every 15 Years
Next Scheduled Interior Wet Renovation: 08/22/2027 - 08/20/2028

SOUTHERN CORROSION
ENGINEERED TANK CARE

VIEW OF INTERIOR COATINGS

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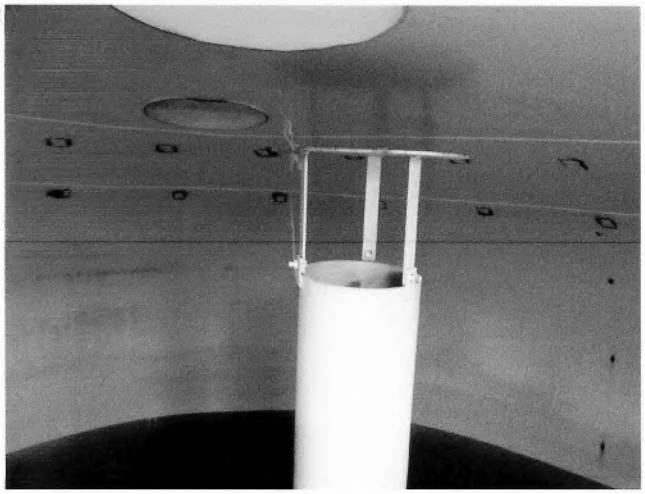

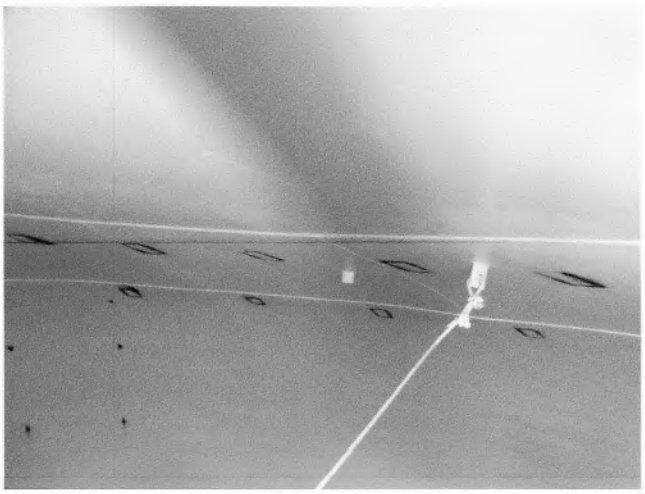

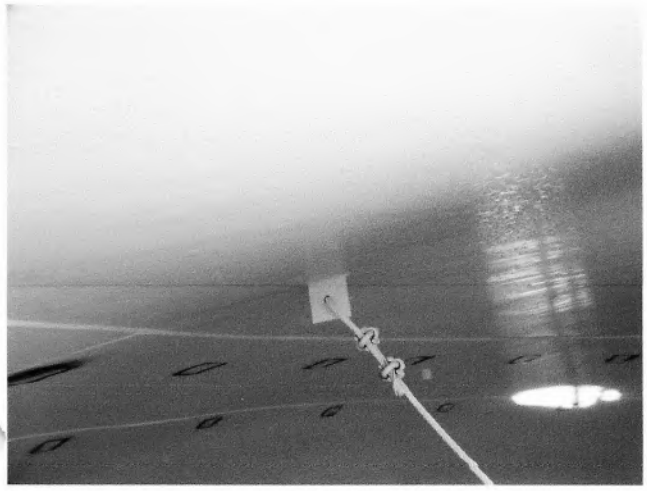

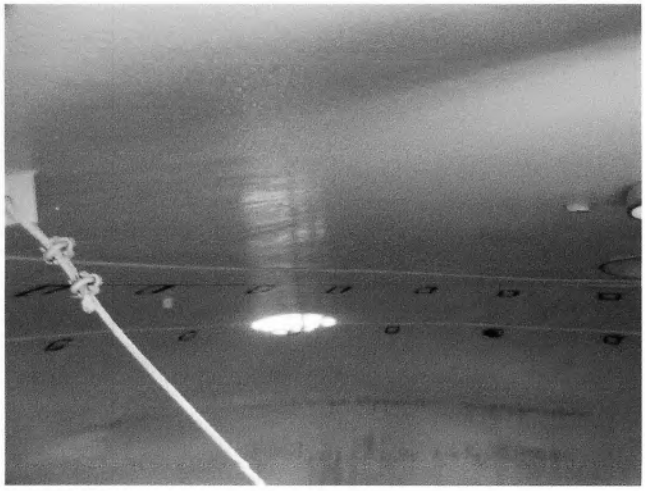

SOUTHERN CORROSION
ENGINEERED TANK CARE

VIEW OF INTERIOR COATINGS

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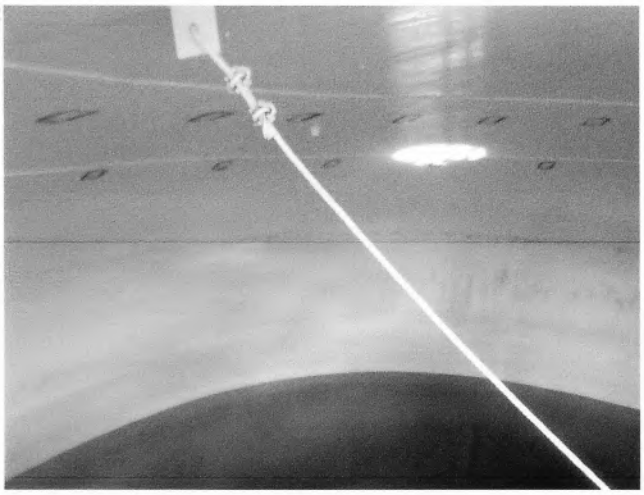

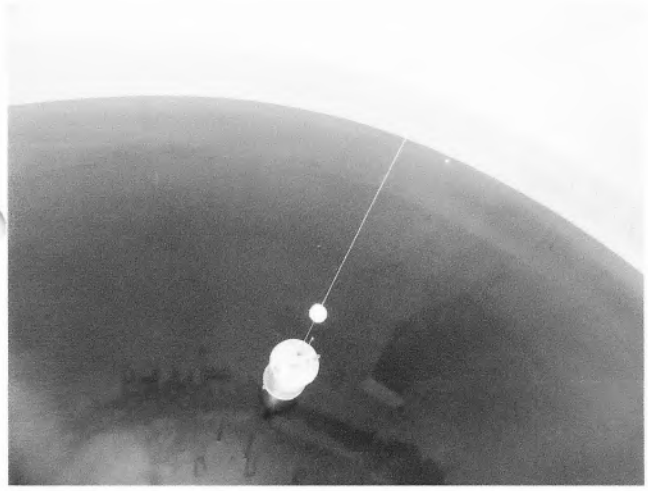

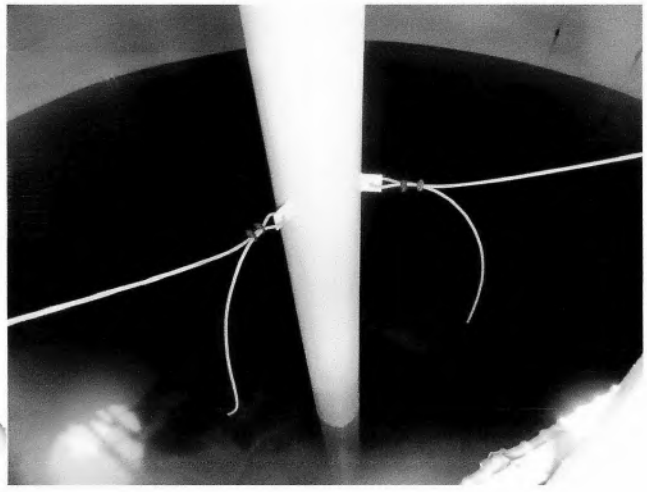

SOUTHERN CORROSION
ENGINEERED TANK CARE

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TRUCTURE COMPONENTS

Components are integral parts of the structure and its day to day operation. The components are also evaluated based on the four basic criteria: (1.) Condition. (2.) Protection. (3.) Durability. (4.) Adherence to the maintenance plan.

STRUCTURE AND COMPONENTS

Foundation: Satisfactory
Inspection Criteria: Evaluate the condition of the surface of the foundation(s) that is visible.
Support Structure: Satisfactory
Inspection Criteria: Depending upon the design of the water tank, evaluate the condition of the legs, rods, beams, bell, stem, and catwalk components.
Storage Structure: Satisfactory
Inspection Criteria: Depending upon the design of the water tank, evaluate the bowl, sidewall, dome, or roof of the storage structure.
Hatches: Satisfactory
Inspection Criteria: Evaluate all hatches that access the interior dry or interior wet spaces for condition and compliance.
Overflow Components: Satisfactory
Inspection Criteria: Evaluate the pipe, standoffs, welds, penetration point, vertex preventer, and termination flap or screen for condition and compliance.
Level Indicator Structure: Satisfactory
Inspection Criteria: Inspect the components of the indicator structure and test the movement of the indicator.
Vent Structure: Satisfactory
Inspection Criteria: Evaluate vent components (base, cover, and screen) for condition, proper operation, and compliance.
Ladders: Satisfactory
Inspection Criteria: All ladders are evaluated for their integrity, safety, and OSHA compliance.

The following items listed are typically not covered under the maintenance agreement. If these items are installed, as a courtesy, Southern Corrosion will inspect these components to document their condition and operation.

Antenna Components: Satisfactory
Inspection Criteria: Evaluate the install, mounts, and support structure.
Obstruction Light: Visually Inspected
Inspection Criteria: Inspect the condition of the mount and if possible the operation of the light.
Mixer: N/A
Inspection Criteria: Evaluate the installation and visual condition of the mixer.

INSPECTOR OBSERVATIONS

APPLICABLE PICTURES OF COMPONENTS IDENTIFIED FOR MAINTENANCE INCLUDED.

PLANNED MAINTENANCE

Washout Inspection Cycle: Every 5 Years
Next Scheduled Washout Inspection: 08/22/2022 - 08/21/2023

SOUTHERN CORROSION
ENGINEERED TANK CARE

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Nov 22 2022

COMPLIANCE REPORT

The compliance report documents the inspection on 09/15/2021 of the Taylor Farm Rd Tank and its compliance with State Health and Environmental Control regulations related to water storage facilities. Please note that this report does not guarantee water quality or compliance with all related regulations.

Site Accessibility - **Compliant**
* Compliance Criteria: All storage tanks shall be readily accessible at all times for inspection and maintenance.

Trespass Prevention - ***Compliant***
* Compliance Criteria: Fencing, locks on access manholes, and other manholes, and other necessary precautions shall be provided to prevent trespassing, vandalism, and sabotage.

Overflow Pipe Design - **Compliant**
* Compliance Criteria: All atmospheric storage structures shall be provided with an overflow. The termination of the pipe should be covered by a screen or flap.

Access Hatch - **Compliant**
* Compliance Criteria: Any access hatch should meet AWWA design standards and the cover secured with a lock.

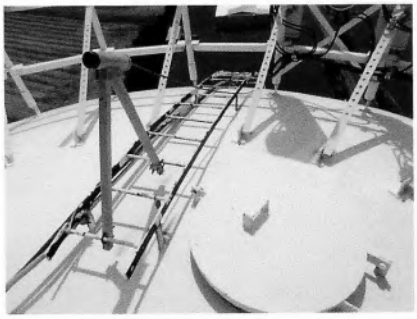
Vent Design and Condition - **Compliant**
* Compliance Criteria: All finished water atmospheric storage structures shall be vented. A vent structure shall be capped and all openings covered with a screen.

SITE ACCESSIBILITY

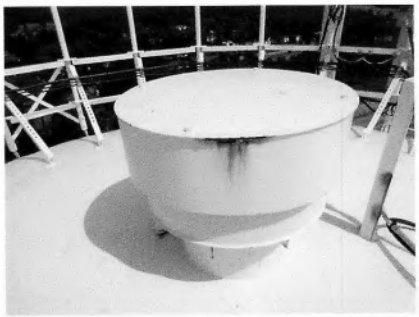
TRESPASS PREVENTION

OVERFLOW PIPE DESIGN

ACCESS HATCH PROTECTION



VENT DESIGN AND CONDITION



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IV. CONSENT AGENDA

15. APPROVAL OF ADDENDUM TO SOUTHERN CORROSION WATER TANK MAINTENANCE CONTRACT

OFFICIAL COPY
Nov 22 2022

Tony Cahoon
Director of Public Works

Tel: (252) 728-8595
Fax: (252) 728-2904
tonyc@carteretcountygov.org

www.carteretcountygov.org

August 7, 2012

MEMO

TO: Carteret County Board of Commissioners

FROM: Tony Cahoon, Public Works Director

SUBJECT: Addendum to current Tank Management Contract

In reference to Elevated Storage Tank # two (2), addendum to current contract.
Tank two is located on Old Winberry Rd in the Mill Creek area. It has been in operation one year now. The first year after the tank is constructed and brought online, the tank is under warranty by the building contractor. Just before the end of the first year, we had the tank inspected by our current elevated tank management contractor, Southern Corrosion. Southern Corrosion did a thorough job with this inspection and the tank building contractor will correct all items found in the inspection by Southern Corrosion at no cost to the county.

The original contract with Southern Corrosion for tank # 1 was adopted by the BOC in 1996 and was for a ten year period until 2006. It was then decided by staff and the BOC to extend that contract for another ten years through 2015.

I am proposing an addendum to this existing contract for tank # 1 with Southern Corrosion to include tank # 2. The price per year to maintain tank # 1 is $ 6,873.00 plus the % change in the CPI. The contract would include tank # 2 at an additional cost of $ 7,107.00 per year plus the % change in the CPI through the year 2020.

Southern Corrosion has agreed to add tank # 2 to the current contract, so the specifications, schedule, and scope of work, will be the same as the original contract for tank # 1.

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SOUTHERN CORROSION INC.
WATER TANK MANAGEMENT ADDENDUM TO CONTRACT – ADD TANK BELOW TO SERVICE

Date: May 21, 2012
Customer: Carteret County, NC
Tank: 200,000 Gallon Mill Creek Water Tank

SCHEDULE

Year 1 - 2012
1) Visual Inspection & any repairs uncovered through inspection.

Year 2 - 2013
1) Visual Inspection & any repairs uncovered through inspection.

Year 3 - 2014
1) Visual Inspection & any repairs uncovered through inspection.

Year 4 – 2015
1) Wash-out Interior:

A) Wash-out interior to remove accumulated sediment on the tank floor.

B) We will sterilize the interior by way of A.W.W.A. disinfection method #2, spray method.

2) Inspection Report

Year 5 - 2016
1) Visual Inspection & any repairs uncovered through inspection.

Year 6 - 2017
1) Visual Inspection & any repairs uncovered through inspection.

Year 7 - 2018
1) Visual Inspection & any repairs uncovered through inspection.

Year 8 - 2019
1) Visual Inspection & any repairs uncovered through inspection.

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Year 9 - 2020

1) Repaint Exterior:

A) Pressure wash all exterior surfaces using 4,000 psi pressure washers or higher.
B) Clean all rusted areas to bare metal using hand & power tools in accordance with SSPC surface preparation methods #2 & #3, hand & power tool cleaning.
C) Prime coat all bare metal surfaces with an epoxy-mastic primer applied at 2.5 to 3.5 mils dry film thickness.
D) Apply one(1) full finish coat of polyurethane paint to all exterior surfaces applied at 2 to 3 mils dry film thickness.
E) Reapply the existing sign, "CARTERET COUNTY", as it currently appears.

2) Wash-out Interior:

A) Wash-out interior to remove accumulated sediment on the tank floor.
B) We will sterilize the interior by way of A.W.W.A. disinfection method #2, spray method.

2) Inspection Report

SCHEDULE CONTINUATION

The tanks will be visually inspected every year. The tank interiors will be washed-out at 5 year intervals and an inspection report provided, until 15 years has elapsed from the last time the interior was recoated. The tank interior will be recoated at 15 year intervals. The exteriors will be recoated at 5 year intervals.

After Year 9:
The next wash-out & report is scheuled for Year 19 of the Service (Year 2030), the next repainting of the tank exterior is scheduled for Year 14 of the Service (Year 2025), and the next repainting of the tank interior is scheduled for Year 14 of the Service (2025).

At no time does the service include the complete abrasvie blasting of the exterior of the tank.

PRICING & TERMS

Necessary repair of any coatings or appurtenances noted during our inspections will be added to our service schedule at no additional cost. These necessary repairs include paint failed areas and areas of corrosion. If the coating is continuing to protect the steel from corrosion, paint repair is not necessary. The definition of paint failure does not include loss of gloss, color fading, mildew, discoloration, or any other defects that are aesthetic

Emergency service will apply during the entire period. We will guarantee a 24 hour response time. Corrective maintenance noted during our inspections will be added to our schedule at no added expense. Our annual premium for the first year of the service is $7,107.00. All subsequent year premiums will be the total of the immediate

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prior year' s premium amount plus the % change in the CPI (Consumer Price Index) for that previous year (ie. Year 2 premium equals Year 1 premium plus the % change in the CPI for Year 1).

Each year represents a 12 month period beginning with the effective date of the contract, rather than the actual calendar year. The Owner will be given the opportunity to schedule the yearly work at any time during the 12 month period that represents the contract term. The annual premium is due within 30 days of the contract date. Premiums quoted are firm for 60 days.

We agree to add this tank and maintenance schedule to the October 15, 2006 Water Tank Management contract.

ATTEST:

Asst. Secretary

(Corporate Seal)

SOUTHERN CORROSION, INC.

BY: _____

President

ATTEST:

_____

CARTERET COUNTY, NC

BY: _____

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SOUTHERN CORROSION INC.
WATER TANK MANAGEMENT ADDENDUM TO CONTRACT – ADD TANK BELOW TO SERVICE

Date: July 1, 2016
Customer: Carteret County, NC
Tank: 200,000 Gallon Taylor Farm Road Elevated Water Tank

SCHEDULE

Year 1 – 2016

1) Visual Inspection & any repairs uncovered through inspection.

Year 2 - 2017

1) Wash-out Interior:

A) Wash-out interior to remove accumulated sediment on the tank floor.
B) We will sterilize the interior by way of A.W.W.A. disinfection method #2, spray method.

Year 3 - 2018

1) Visual Inspection & any repairs uncovered through inspection.

Year 4 - 2019

1) Visual Inspection & any repairs uncovered through inspection.

Year 5 - 2020

1) Visual Inspection & any repairs uncovered through inspection.

Year 6 - 2021

1) Visual Inspection & any repairs uncovered through inspection.

Year 7 - 2022

1) Repaint Exterior:

a. Pressure wash all exterior surfaces using 4,000 psi pressure washers or higher.
b. Clean all rusted areas to bare metal using hand & power tools in accordance with SSPC surface preparation methods #2 & #3, hand & power tool cleaning.
c. Prime coat all bare metal surfaces with an epoxy-mastic primer applied at 2.5 to 3.5 mils dry film thickness.

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d. Prime coat all bare metal surfaces with an epoxy-mastic primer applied at 2.5 to 3.5 mils dry film thickness.
e. Apply one(1) full finish coat of polyurethane paint to all exterior surfaces applied at 2 to 3 mils dry film thickness.
f. Reapply the existing sign, "CARTERET COUNTY", as it currently appears.

2) Wash-out Interior:

a. Wash-out interior to remove accumulated sediment on the tank floor
b. We will sterilize the interior by way of A.W.W.A. disinfection method #2, spray method.

SCHEDULE CONTINUATION

The tank will be visually inspected every year. The tank interior will be washed-out at 5 year intervals until 15 years has elapsed from the last time the interior was recoated. The tank interior will be recoated at 15 year intervals. The exterior will be recoated at 5 year intervals.

After Year 8:
The next wash-out is scheuled for Year 8 of the Service (Year 2023), the next repainting of the tank exterior is scheduled for Year 12 of the Service (Year 2027), and the next repainting of the tank interior is scheduled for Year 12 of the Service (2027).

At no time does the service include the complete abrasive blasting of tank exterior nor the pressure washing of tank exterior as a stand alone apart from a surface preparation for painting.

PRICING & TERMS

Necessary repair of any coatings or appurtenances noted during our inspections will be added to our service schedule at no additional cost. These necessary repairs include paint failed areas and areas of corrosion. If the coating is continuing to protect the steel from corrosion, paint repair is not necessary. The definition of paint failure does not include loss of gloss, color fading, mildew, discoloration, or any other defects that are aesthetic

Emergency service will apply during the entire period. We will guarantee a 24 hour response time. Corrective maintenance noted during our inspections will be added to our schedule at no added expense. Our annual premium for the first year of the service is $8,977.00. All subsequent year premiums will be the total of the immediate prior year' s premium amount plus the % change in the CPI (Consumer Price Index) for that previous year (ie. Year 2 premium equals Year 1 premium plus the % change in the CPI for Year 1).

Each year represents a 12 month period beginning with the effective date of the contract, rather than the actual calendar year. The Owner will be given the opportunity to schedule the yearly work at any time during the 12 month period that represents the contract term. The annual premium is due within 30 days of the contract date. Actual

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payment can be made monthly, quarterly, semi-annually, or annually. Premiums quoted are firm for 60 days.

We agree to add this tank and maintenance schedule to the August 22, 2012 Water Tank Management contract.

ATTEST:

Asst. Secretary

(Corporate Seal)

SOUTHERN CORROSION, INC.

BY: _____
President

ATTEST:

CARTERET COUNTY, NC

BY:

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Nov 22 2022

payment can be made monthly, quarterly, semi-annually, or annually. Premiums quoted are firm for 60 days.

We agree to add this tank and maintenance schedule to the August 22, 2012 Water Tank Management contract.

ATTEST: **SOUTHERN CORROSION, INC.**

BY:_____

Asst. Secretary **President**

(Corporate Seal)

ATTEST: **CARTERET COUNTY, NC**

Rachel B. Hammer

BY: [signature]

This instrument has been preaudited in the manner required by the Local Government Budget and Fiscal Control Act.

[signature]

Carteret County Finance Director

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payment can be made monthly, quarterly, semi-annually, or annually. Premiums quoted are firm for 60 days.

We agree to add this tank and maintenance schedule to the August 22, 2012 Water Tank Management contract.

ATTEST:

Asst. Secretary

(Corporate Seal)

SOUTHERN CORROSION, INC.

BY: _____
President

ATTEST:

CARTERET COUNTY, NC

BY: _____

This instrument has been preaudited in the manner required by the Local Government Budget and Fiscal Control Act.

_____
Carteret County Finance Director

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SOUTHERN CORROSION INC.

WATER TANK MANAGEMENT SCHEDULE

Date: February 13, 2006
Customer: Carteret County, NC
Tanks: 200,000 Gallon Elevated Tank

Year 1 - 2006

1) **Visual inspection and repairs uncovered through inspection.**

Year 2 – 2007

1) **Visual inspection and repairs uncovered through inspection.**

Year 3 - 2008

1) **Visual inspection and repairs uncovered through inspection.**

Year 4 – 2009

1) **Visual inspection and repairs uncovered through inspection.**

Year 5 – 2010

1) **Visual inspection and repairs uncovered through inspection.**
2) **Repaint Exterior:**
   a) Pressure wash all exterior surfaces using 4,000 psi pressure washers.
   b) Spot clean all bare metal surfaces using hand and power tools in accordance with SSPC surface preparation methods #2 & #3.
   c) Spot prime coat all bare metal surfaces using an epoxy-mastic primer at 2.5 to 3.5 mils dry film thickness.
   d) Apply a full finish coat of polyurethane to all exterior surfaces at 2 to 3 mils dry film thickness.
   e) Reapply the existing sign, "CARTERET COUNTY", as it currently appears.
3) **Wash-out Interor:**
   a) Wash-out interior using 4,000 psi pressure washers to remove accumulated mud and sediment.
   b) Disinfect interior using AWWA Disinfection Method #2, spray method.
4) **Inspection Report**

Year 6 - 2011

1) **Visual inspection and repairs uncovered through inspection.**

Year 7 – 2012

1) **Visual inspection and repairs uncovered through inspection.**

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Year 8 - 2013

1) Visual inspection and repairs uncovered through inspection.

Year 9 – 2014

1) Visual inspection and repairs uncovered through inspection.

Year 10 – 2015

1) Visual inspection and repairs uncovered through inspection.
2) Inspection Report
3) Repaint Interior:

a) Abrasive blast all interior surfaces to bare metal in accordance with SSPC surface preparation method #10, near white grade.
b) Apply a full prime coat of epoxy that is NSF approved for contact with potable water at 4 to 5 mils dry film thickness.
c) Apply a "stripe" coat of epoxy that is NSF approved for contact with potable water to all weld seams below the high water level using paint brushes and rollers.
d) Apply a full finish coat of epoxy that is NSF approved for contact with potable water at 4 to 5 mils dry film thickness.
e) Disinfect interior using AWWA Disinfection Method #2, spray method.
f) Test abrasive blast debris for the 8 RCRA Heavy metals using the TCLP Method.
g) Dispose of abrasive blast debris in accordance with Federal, State, and Local regulations.

4) Repaint Exterior:

a) Pressure wash all exterior surfaces using 4,000 psi pressure washers.
b) Spot clean all bare metal surfaces using hand and power tools in accordance with SSPC surface preparation methods #2 & #3.
c) Spot prime coat all bare metal surfaces using an epoxy-mastic primer at 2.5 to 3.5 mils dry film thickness.
d) Apply a full finish coat of polyurethane to all exterior surfaces at 2 to 3 mils dry film thickness.
e) Reapply the existing sign, "CARTERET COUNTY", as it currently appears.

SCHEDULE CONTINUATION

The tank will be visually inspected every year. The tank interior will be washed-out at 5 year intervals and an inspection report provided, until 15 years has elapsed from the last time the interior was recoated. The tank interior will be recoated at 15 year intervals. The exterior will be recoated at 5 year intervals.

After Year 10:

Tthe next wash-out & report is scheuled for Year 15 of the Service (Year 2020), the next repainting of the tank exterior is scheduled for Year 15 of the Service (Year 2020),

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and the next repainting of the tank interior is scheduled for Year 25 of the Service (2040).

At no time does the service include the complete abrasvie blasting of the exteriors of any of the tanks.

PRICING & TERMS

Necessary repair of any coatings or appurtenances noted during our inspections will be added to our service schedule at no additional cost. These necessary repairs include paint failed areas and areas of corrosion. If the coating is continuing to protect the steel from corrosion, paint repair is not necessary. The definition of paint failure does not include loss of gloss, color fading, mildew, discoloration, or any other defects that are aesthetic

Emergency service will apply during the entire period. We will guarantee a 24 hour response time. Corrective maintenance noted during our inspections will be added to our schedule at no added expense. Our annual premium for the first year of the service is $6,873.00 per year. All subsequent year premiums will be the total of the immediate prior year' s premium amount plus the % change in the CPI (Consumer Price Index) for that previous year (ie. Year 2 premium equals Year 1 premium plus the % change in the CPI for Year 1).

Each year represents a 12 month period beginning with the effective date of the contract, rather than the actual calendar year. The Owner will be given the opportunity to schedule the yearly work at any time during the 12 month period that represents the contract term. The annual premium is due within 30 days of the contract date. Premiums quoted are firm for 60 days.

James A. St. Hilaire
President

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SOUTHERN CORROSION INCORPORATED

WATER TANK MANAGEMENT AGREEMENT

This Agreement made and entered into as of the Effective Date: 10-16-06 by and between SOUTHERN CORROSION ,INC., a North Carolina corporation, having its principal office at 738 Thelma Rd, Roanoke Rapids, North Carolina, (hereinafter referred to as "Southern Corrosion") and Carteret County, NC (hereinafter referred to as the "Owner"):

WITNESSETH:

The Owner desires that Southern Corrosion perform certain maintenance service on the water tank known as the 200,000 Gallon Elevated Tank as described in the proposal which is attached hereto and by reference made a part here of (the "Maintenance Services"); and

Southern Corrosion desires to perform such Maintenance Services described in said proposal selected by the Owner upon the terms and conditions set forth in this Agreement.

Now, Therefore, in consideration of the mutual promises and covenants set forth herein the parties hereto agree as follow:

1. DEFINITIONS. For the purposes of this Agreement the following definitions shall apply:

(a) "Effective date" shall mean the date on which this Agreement, executed by the Owner, is accepted by Southern Corrosion by the execution thereof by its appropriate corporate officers at its principal office.

2. TERMS OF MANAGEMENT AGREEMENT. The initial term of this Agreement shall be for a period of twelve (12) months commencing on the Effective Date, unless otherwise terminated or canceled as provided in Paragraph 7. The initial term shall be automatically extended successive additional periods of twelve (12) months each unless the Owner notifies Southern Corrosion in writing sixty (60) days prior to the expiration of the then existing term that it does not extend this Agreement.

3. PERFORMANCE OF MAINTENANCE SERVICES. Southern Corrosion shall

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perform the Maintenance Services selected by the Owner and described in proposal attached hereto and by reference made a part hereof.

4. CHARGES. The Owner shall pay Southern Corrosion charges for Maintenance Services selected by Owner as set forth on the proposal attached hereto and by reference made a part hereof. All charges shall be due and payable upon receipt of Southern Corrosion's invoice therefor.

5. REPRESENTATIONS BY THE OWNER. The Owner hereby makes the following representations and warranties:

(a) The Owner has full power and lawful authority to execute and deliver this Agreement and to consummate and perform the transactions contemplated hereby. This Agreement constitutes the valid obligation of the Owner legally binding upon the Owner and enforceable against the Owner in accordance with its terms.

6. REPRESENTATIONS BY SOUTHERN CORROSION. Southern Corrosion represents and warrants to Owner all of which represents and warranties that:

(a) That Southern Corrosion is fully authorized to enter into this Management Agreement. Southern Corrosion has full corporate power and lawful authority to execute and deliver this Agreement and to consummate and perform the transactions contemplated hereby. This Agreement constitutes the valid obligation of Southern Corrosion legally binding upon Southern Corrosion and enforceable against Southern Corrosion in accordance with its terms.

7. TERMINATION/CANCELLATION. This Agreement may be terminated/canceled by Southern Corrosion if Owner is in default of any provision hereof and such default has not been cured within twenty (20) days after notice of default is given to Owner or Owner becomes insolvent or seeks protection voluntarily or involuntarily under any Bankruptcy Law.

(a) In the event of any termination/cancellation of this Agreement, Southern Corrosion may (1) declare all amounts owed to Southern Corrosion to be immediately due and payable, (2) cease performance of all Maintenance Service hereunder without liability to Owner.

(b) In the event of default hereunder, Owner agrees to pay interest at the highest legal rate on all sums due under the Agreement and all costs of collection including a reasonable attorney's fee of fifteen percent(15%) of said amount due Southern Corrosion.

(c) The foregoing rights and remedies shall be cumulative and in addition to all other rights and remedies available in law or in equity to Southern Corrosion.

8. LIMITATION OF LIABILITY. In no event shall Southern Corrosion be liable to Owner for indirect, special or consequential damages or lost profits arising out of or related to this Management Agreement of the performance or breach thereof even if Southern Corrosion has been advised of the possibility thereof. Southern Corrosion's liability to Owner hereunder if any, shall in no event exceed the total of the amounts Owner has paid Southern Corrosion hereunder.

9. EXCUSABLE DELAY. Southern Corrosion shall not be liable for any delays or failure in performance of Maintenance Services hereunder if such delays or failures are due to strikes, inclement weather, acts of god or other causes beyond Southern Corrosion's reasonable control.

10. REGULATIONS. Performance of the Maintenance Services is predicated on work practices, methods, and procedures legal as of the effective date. Subsequently enacted regulations that effect or alter Southern Corrosion's work practices, methods, and procedures, to perform, or add additional burdens to performance, will be grounds for renegotiating the amount

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of payment originally agreed upon.

11. GENERAL.

(a) Notices. Notice of the breach of any covenant, warranty or other provision of the Agreement and all communications and notices provided for in this Agreement shall be deemed given when in writing, addressed to the parties at the addresses set forth below, and deposited, certified mail, postage prepaid in the United States mail:

Owner:
Carteret County
302 Court House Square
Beaufort, NC 28516

Southern Corrosion Inc.
738 Thelma Rd
Roanoke Rapids, NC 27870

(b) Assignment. This Agreement may not be assigned by either party without the prior written consent of the other party, which consent by either party shall not be unreasonably withheld.

(c) Governing Law. This Agreement shall be construed in accordance with the laws of the State of North Carolina.

(d) Entire Agreement. This Agreement is an integrated document and contains the entire agreement between the parties. No modifications, extensions, or waiver of this Agreement or any of the provisions hereof, nor any representation, promise or condition relating to the Agreement shall be binding upon the parties hereto unless made in writing and signed by the parties hereto.

(e) Binding effects. The provisions of this Agreement shall bind and inure to the benefit of Southern Corrosion and the Owner , and their successors, legal representatives and assigns.

IN WITNESS WHEREOF the parties have hereto executed this Agreement in the manner provided by Law, this the day and year first above written.

ATTEST:

Asst. Secretary

SOUTHERN CORROSION, INC.

BY: _____

President

(Corporate Seal)

ATTEST:

CARTERET COUNTY, NC

BY: _____

County Attorney

This instrument has been preaudited in the manner required by the Local Government Budget and Fiscal Control Act.

Carteret County Finance Director

Active Billing Information

Date	Customers Billed	3/4" Code 01	1" Code 03	2" Code 04	4" Code 05	Merrimon Code 06	Eastmans Creek Code 07	Total Meters Billed	Total Gallons Billed	Total Gallons Pumped
Jan-21	1240.00	1188	19	2	1	28	2	1240	4,786,100	6,885,522
Feb-21	1231.00	1179	19	2	1	28	2	1231	3,909,800	5,873,456
Mar-21	1233.00	1181	19	2	1	28	2	1233	4,076,500	6,588,452
Apr-21	1241.00	1189	19	2	1	28	2	1241	4,103,900	6,809,510
May-21	1249.00	1196	20	2	1	28	2	1249	5,250,700	7,781,230
Jun-21	1251.00	1197	20	3	1	28	2	1251	4,783,400	6,735,841
Jul-21	1256.00	1202	20	3	1	28	2	1256	4,951,500.00	7,195,846
Aug-21	1257.00	1202	21	3	1	28	2	1257	4,282,700.00	7,166,700
Sep-21	1253.00	1197	22	3	1	28	2	1253	4,287,400.00	6,781,500
Oct-21	1255.00	1199	22	3	1	28	2	1255	4,356,200.00	7,014,370
Nov-21	1255.00	1198	22	3	1	29	2	1255	3,673,500.00	6,773,170
Dec-21	1254.00	1197	22	3	1	29	2	1254	3,815,300.00	7,008,150
AVG	**1248**	**1194**	**20**	**3**	**1**	**28**	**2**			

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3/4" Code 01	1" Code 03	2" Code 04	4" Code 05	Merrimon Code 06	Eastmans Creek Code 07	Total
1743	20	3	1	28	2	1797

Phase II Meters Replaced in 2005 minus Merrimon Water System

North River/Mill Creek System

Meters Replaced	
FY 06-07	14
FY 07-08	21
FY 08-09	21
FY 09-10	21
FY 10-11	40
FY 11-12	37
FY 12-13	38
FY 13-14	39
FY 14-15	39
Replaced Meter- Since 2016	267
New Taps- Since 2005	203
Total	**740**

Inactive Meters	533
Active Meters	1264
Total Meters	**1797**

MXU- Auto Reads Device	**1781**

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PUROLOGIX™ WATER SERVICES, INC.
105 Technical Ct.
Garner, NC 27529
919-577-1178
customerservice@purologix.com

Pilot System w/ Service Exchange Tanks

 # 000689

Bill To
Carteret County WTP
252-241-4646
534 Laurel Road
Beaufort, North Carolina 28516

Ship To

534 Laurel Road
Beaufort, North Carolina 28516
john.simmons@carteretcountync.gov
252-241-4646

Estimate Date :	August 02, 2021
Expiration Date :	September 02, 2021
Reference# :	RE21082-5
Sales person :	Russ Elmore
Customer Email :	john.simmons@carteretcountync.gov
Customer Phone :	252-241-4646

Subject :

Pilot system for copper removal from water softener discharge.

#	Item & Description	Qty	List Price	Tax	Amount
1	INSTALLSDI 1" SKU : INSTALLSDI-1" Purologix SDI installation kit including all labor and materials. Kit includes 1" PVC Hoses, Park Fittings, and PVC SCH 80 Sample Ports. Purologix will provide all installation materials and labor including a PRV, PSI gauges, dual rotameters with needle valves for flow balance and sample ports. The systems will be configured as two (2) parallel trains with three (3) GAC carbon tanks in series followed by two (2) METS tanks for copper reduction. Each train will feature sample ports between tanks, and also include a badger flow totalizer to ensure flow balance in system. Include a rack system in new metal bldg. to secure manifold piping and secure tanks.	1.00 Each	4,684.50	316.20	4,684.50
2	SDI GAC 1447 SKU : 1447GAC 3.6 cubic foot tank filled with Calgon Centaur coconut shell carbon having extra surface area for chloramine reduction. 1000 minimum iodine number. 14" Diameter x 47" Tall tank. These tanks remain the property of Purologix Water Services and are provided on a Rental Service Exchange Basis.	6.00 Each	918.50	371.99	5,511.00
3	SDI METS 1447 SKU : 1447METS 3.6 cubic foot service DI tank filled with Specialty Media for	4.00 Each	2,475.00	668.25	9,900.00

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#	Item & Description	Qty	List Price	Tax	Amount
	Metals Reduction. Media has been bench tested and demonstrates the ability to remove Copper from brine waste. 14" Diameter x 47" Tall tank with 1" porting for 10 GPM flow. These tanks remain the property of Purologix Water Services and are provided on a Rental Service Exchange Basis. Once exhausted, they will be analyzed for Full TCLP and after passing, the media will be disposed of as solid waste in a permitted landfill.				
4	MEGA HIGH FLOW 1 um Pleated Single Layer SKU : PLXFCMF630PSL1HF 1 micron absolute rated MEGAFILTER Cartridge for COMMERCIAL HIGH FLOW applications. REQUIRES 2" HOUSING. Cartridge is single layered and pleated for extra high surface area and dirt loading capacity. Cartridge is single open end 6" x 30" with an O-Ring seal. No NANO-AG.	8.00 Box	217.80	117.61	1,742.40
5	MEGAFILTER Housing SKU : PLX-MF-HF The Purologix MEGAFILTER is a direct replacement for small and inefficient 2.5" diameter and 4.5" diameter big blue filter cartridges. The system offers the largest surface area available for extended service life, higher flow rates, less pressure loss, and a more cost effective solution. It is only 40" tall x 8" diameter. It includes inlet and outlet isolation ball valves and a drain port with ball valve. Headers are 2" SCH 80 PVC for High Flow industrial applications. The systems feature multiple filtration solutions from chlorine & chloramine reduction, suspended solids and particulate reduction, taste and odor reduction, and even submicron filtration with a dual layered 0.1 um absolute dual layer cartridge with or without a PAC core. Your Purologix sales person can help you choose the best cartridge for your needs.	4.00 Box	1,204.50	325.22	4,818.00
6	Pump Panel SKU : Custom Basic Pump Panel with Motor Starter, HOA, and echo pod level controls. Core holes into top of water softener discharge holding tank for echo pod level controls.	2.00	2,188.00	295.38	4,376.00
7	MISC-INSTALL SKU : INS-MISC 10 GPM at 60-80 PSI corrosion resistant pump. Iwaki Mag Drive or Similar complete with isolation valves and flanges.	2.00 Lot	3,135.00	423.23	6,270.00
8	MISC-INSTALL SKU : INS-MISC Miscellaneous parts for installation - DI blind flanges, Mega lug adapters bolt kits, Remove existing 6" spool piece and check valve in valve vault in-between the existing Valve and pipe flange at valve vault wall. Install blind flanges on the valve and pipe leaving the valve vault. Cut DI pipe leaving Water Softener discharge holding tank and install blind flange on end going to valve vault and adapt to PVC and run into new metal bldg. (Note: excavation by others)	1.00 Lot	5,500.00	371.25	5,500.00

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#	Item & Description	Qty	List Price	Tax	Amount
9	MISC-INSTALL SKU : INS-MISC Install a 2" PVC discharge pipe from the new metal bldg. to the holding tank and run up the side of tank and discharge thru a hole cut into existing grate on top of holding tank. Insulate pipe that is exposed above ground. (Note: excavation by others)	1.00 Lot	1,960.00	132.30	1,960.00
10	MISC-INSTALL SKU : INS-MISC Supply and install a 10' x 18' metal bldg. anchored every 4' with a 6' x 6' roll up door, 2" fiberglass roof and wall insulation, Led lights, and electric heater. Building is sized large enough to allow for additional equipment for expansion of the system based on potential increase in flow rates. (Note: excavation by others)	1.00 Lot	14,000.00	945.00	14,000.00
11	MISC-INSTALL SKU : INS-MISC Pour a 14' x 20' concrete pad with 3500psi concrete and a 12"x 8" footing under perimeter of bldg. to anchor into.	1.00 Lot	10,500.00	708.75	10,500.00
12	MISC-INSTALL SKU : INS-MISC Supply approximately 200' of 2" PVC conduit from existing eclectic bldg. to new metal bldg. with necessary circuits for new pumps, control panels, convenience outlets, electric heater and lights. (Note: excavation by others)	1.00 Lot	13,000.00	877.50	13,000.00
				Project Total	82,261.90
				NC-Carteret County (6.75%)	5,552.68
				Grand Total	**$87,814.58**

Notes

CUSTOMER SCOPE OF SUPPLY
All necessary excavation and removal of excess spoils
All Laboratory Analysis By Others including TCLP for non-haz disposal.
Batch pump control is TBD. Customer signal or separate level control not included.
PROJECT OBJECTIVES:
Determine the in-service life of the GAC for dechlorination
Achieve Total Chlorine levels less than 0.13 ppm (regulatory limit)
Determine the in-service life of the MET Media for Copper Reduction
Achieve Total Copper levels less that 2 micrograms/liter.
Get TSS Levels below regulatory requirements.
Eliminate use of Sodium Thoisulfate for Dechlorination.

Terms & Conditions

Purologix Water Services, Inc. Standard T&C's Of Sale Will Apply
DIGITALLY SIGN FOR ORDER ACCEPTANCE
Invoice Request For 50% Earnest Money Down Payment Will Follow
40% Balance Will Be Collected With Shipping to Site
10% Balance Will Be Collected After Successful Startup

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Tank and Filter Exchange is Available for Pricing Quoted Above
ACH, PO, Cash, Check, BitCoin, VISA, MasterCard, AMEX & Discover Cards Accepted
QUOTE VALID FOR 30-DAYS (unless otherwise specified)
20% Restocking Fee for Order Cancellation.

Authorized Signature _____

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The following is a list of items NOT normally included with our equipment or assembly and startup services. These services are only included if specifically stated otherwise in writing:

a. Permits, building inspections, taxes or duties.

b. Indoor location for equipment with suitable heat, light and ventilation.

c. Civil or concrete work (by others).

d. Core drilling or wall penetrations.

e. Floor drains, adequately sized and located.

f. Weekend or non-day shift work.

g. Union or licensed plumbing labor or labor subject to prevailing wage determinations.

h. Water main.

i. Back-flow preventer(s).

j. Electrical load center(s).

k. MCC

l. Water heater(s).

m. Insulation or heat tracing.

n. Storage of equipment.

o. Demolition, disposal or other work related to existing equipment.

p. Field labeling of components or piping.

q. Installation

r. Safety Showers and Eye Wash Stations

s. Pressure regulators or Pressure Relief Valves if required.

t. Equipment Freight (PPD & Added)

u. Any required Rigging Equipment (forklift, picker, crane, etc.)

Purologix Standard Terms and Conditions of Equipment Sale

1. **Acceptance of Term's** - Buyer's acceptance of this quotation shall create a contract subject to and expressly limited by the terms and conditions contained in this quotation and this page. Acceptance of offer may only be made on the exact terms and conditions hereof and if additional or different terms are proposed by Buyer, such response shall constitute a counteroffer.

2. **Revocation of Offer** - This quotation shall be a firm offer and will not be revoked for a period of 30-Days after the quotation date; thereafter it shall expire and be of no effect unless Seller, in its discretion, elects to honor Buyer's acceptance subsequent to such period.

3. **Prices, Taxes, and Payment** – In addition to the price quoted or invoiced, the buyer is responsible for any taxes required by Federal, State, and Local jurisdictions to include all fees, permits, duties, etc. Buyer shall pay for Products or Services and required fees and taxes upon delivery and successful start-up of the system. No balance due shall exceed Net 30-Days unless agreed in writing as a special term of sale. If customer is delayed in installation and start-up beyond 90-days from time of delivery, then final payment will be immediately due.

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4. **Delivery and Shipment** – All products shall be delivered to Buyers Location on Sellers Truck. Seller will make every reasonable effort to ship the Products hereunder in accordance with the delivery date given in the quotation, provided that Seller shall have no liability with respect to delays in delivery.

5. **Right of Rescission** - Buyer may cancel this contract within 3-days of the signing date by notifying the seller in writing. Cancellation notification must be postmarked before midnight on the 3rd day after the contract is signed. In some special cases, customer may be responsible for a 20% restocking fee on any custom equipment or special orders that are cancelled or returned. Cancellation after this rescission period will be subject to the 20% restocking fee plus any additional progress payments for project milestones that were substantially achieved.

6. **Disclaimer of Expressed and Implied Warranties** - The Products shall be covered by the applicable Manufacturers Limited Standard Warranty. NO OTHER EXPRESS OR IMPLIED WARRANTY IS MADE WITH RESPECT TO THE PRODUCTS. SELLER EXPRESSLY EXCLUDES IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE. Any model or sample furnished to the Buyer is merely illustrative of the general type and quality of goods and does not represent that the Products will conform to the model or sample. Buyer's remedies under Seller warranty shall be limited to repair or replacement of the Product or component which failed to conform to Seller's warranty. Seller shall not be liable for any incidental or consequential damages or economic loss or property damage incurred by Buyer.

7. **Warranty for Parts and Labor** – Installation materials, parts and labor services will have a 90-day limited warranty against defects in parts or workmanship. Seller will repair or replace any defective components that are identified in writing within 90-days of installation and start-up, whichever is first. Seller shall not be responsible for any incidental or consequential damages or economic loss or property damage incurred by Buyer after this initial warranty expires.

8. **Agents, Etc**. - No agent, employee or other representative has the right to modify or expand Manufacturer's or Seller's standard warranty applicable to the Products or Services, or make any representations as to the Products or Services other than those set forth in Seller's product literature and any such affirmation, representation or warranty, if made, should not be relied upon and shall not form a part of this contract.

9. **Governing Law** - This contract shall be governed by and construed in accordance with the laws (other than those pertaining to conflicts of law questions) of the State of North Carolina.

10. **Limit of Liability** - The aggregate liability of Seller arising out of the performance or nonperformance of its obligations under or in connection with this agreement, including any claims for indemnity shall not exceed and amount equal to purchase price of this order. In no event shall Seller be liable for loss or damages to the facility in which the subject equipment is located, or incidental, special or consequential damages of any other kind or nature. The provisions of this paragraph shall prevail over any conflicting or inconsistent provisions contained elsewhere in this agreement, except to the extent that such conflicting or inconsistent provisions act to further restrict or reduce Seller's liabilities under this agreement.

11. **Exchange Services** - If included, all SDI tanks remain the property of Purologix Water Services, Inc. and are provided on a rental exchange basis. Customer grants full Access and Title to maintain, service, and remove tanks as required. Tanks are rated to 80 PSI maximum working pressure and should be isolated at the feed water shut-off valve when not in use. Backflow preventers and pressure reducing devices are by others. All accessories such as filter housings, hoses, fittings, quality monitors, fixtures, UV lights, and other accessories belong to the client after installation. Any filters in the system will be changed each time tanks are exchanged for an additional fee. UV systems will be serviced annually for an additional fee. Customer can pay a monthly tank rental fee, or waive the rental fee and accept a 6-month minimum exchange requirement. For Deionized Water Applications we guarantee 16 MEG/OHM minimum resistivity from any potable water feed source.

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Pump Activity Report from Jan 1, 2021 00:00:00 to Jan 1, 2022 00:00:00

Station	Pump	Starts	Average (Hrs)	Total (Hrs)
Master PLC Modbus Driver	Booster Pump 1 Pump 1 Running	199	1:01:27	203:49:40
Master PLC Modbus Driver	Booster Pump 1 Pump 2 Running	201	1:05:10	218:21:41
Master PLC Modbus Driver	Booster Pump 2 Pump 1 Running	1	1:20:01	1:20:01
Master PLC Modbus Driver	Booster Pump 2 Pump 2 Running	2	1:02:08	2:04:17
Master PLC Modbus Driver	Booster Pump 3 Pump 1 Running	147	1:11:38	175:32:18
Master PLC Modbus Driver	Booster Pump 3 Pump 2 Running	152	1:09:12	175:19:13
Master PLC Modbus Driver	High Service Pump 1 Running	1151	2:21:38	2717:17:59
Master PLC Modbus Driver	High Service Pump 2 Running	1159	2:12:06	2551:59:56
Master PLC Modbus Driver	Well 1 Running	657	2:14:03	1467:55:48
Master PLC Modbus Driver	Well 2 Running	649	2:43:36	1769:38:11

FORM FV1(a)
ESTABLISHED 12/2020

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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

FAIR VALUE ENGINEERING ASSESSMENT FORM

INSTRUCTIONS

If additional space is needed, supplementary sheets may be attached. If any section does not apply, write "not applicable". Additional information that is relevant to the application that is not listed on this form should be included as an attachment or addendum

Note: This form is only to be used in conjunction with Form FV1, Application for Determination of Fair Value of Utility Assets Pursuant to G.S. 62-133.1A.

SELLER-LOCAL GOVERNMENT UTILITY

1. Trade name used for utility business: North River / Mill Creek Water System

2. Name of owner (if different from trade name): Carteret County, NC

3. Description of the water system Water System that serves Carteret County

4. County where located Carteret County

5. Description of the sewer system N/A

6. County where located N/A

7. Number of current customers: water 1,245 sewer: N/A

ENGINEER INFORMATION

1. Name of Engineer Providing Utility Assessment : Steven R. Gandy, Ph.D., P.E.
2. Engineer Background Information:
   License No. and Issuing Authority: 031020
   Education: B.S. Chemical Engineering, M.S. Civil Engineering, Ph.D. Biology & Agriculture Engineering
   Has Engineer been subject to Discipline by any State Licensing Authority (if yes, provide date and cause of discipline): No

3. Engineer's experience with engineering design, planning, construction, renovations, replacements and operations of water and wastewater utility systems: See attached resume

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See attached resume

ASSESSMENT OF TANGIBLE ASSETS OF SYSTEM TO BE ACQUIRED

Water Utility System Information

Distribution System Information

1. Water Mains (Provide the following information for each section of water mains):

a. Year installed: 1988 - 2004

b. Pipe diameter: 2" - 10"

c. Length of main: 2" = 26,400 ft; 4" = 1,320 ft; 6" = 156,288 ft; 8" = 107,712 ft; 10" = 3,168 ft

d. Type of pipe material (i.e., asbestos cement, galvanized, PVC Class 160, PVC SDR 21, C-900, ductile iron, other):
Ductile Iron, PVC SDR21 - Less than 3% of the water lines are DI, with the remainder being PVC

e. Copy of Department of Environmental Quality (DEQ) approval for each section, if available:
Project details for distribution projects have been attached, including project Serial Number and approval date

f. Describe the condition of the water distribution system valves:
Good - All believed to be functional; a monthly exercise program for valves is in place

g. Describe condition of service lines, including materials:
Aged less than 25 years - PVC and ductile iron

h. Describe the condition of the fire hydrants in each section:
Good condition - replaced when demaged, also replaced/repaired when Fire Dept performs annual test or staff discovers issue during routine visual inspection, or from customer reporting

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2. Water Meters

a. Type of meters (i.e., manual read, AMR, AMI, other):
Sensus meters with Sensus transmitters, Drive-By reading, approx. 4 hour read time

b. Average age of residential water meters: Less than 15 years

3. Customer growth – number of customers added or lost during last 3 years in each of the following categories:

a. Residential: 63 customers added (1101 in 2017, 1164 in 2020)

b. Commercial: 17 customers lost (39 customers in 2017, 22 in 2020)

c. Industrial: 17 customers added (23 customers in 2017, 41 in 2020)

d. Governmental, including schools: 1 customer added (25 in 2017, 26 in 2020)

4. Water Storage:

a. Describe each water storage facility by type and capacity (i.e. hydropneumatic, ground storage, elevated storage, other):
Three 2,000 gallon aerial tanks for Laurel Road system - Taylor Farm Road (2012), Laurel Road (1988), and Mayflower Drive (2012); one 10,000 gallon ground tank for Merrimon System (approx. 2012)

b. Provide the year each storage facility placed in service:
Laurel Road Tank - 1988; Taylor Farm Road, Mayflower Drive, and Merrimon - 2012

c. Provide the most recent year each storage facility was recoated on interior and exterior:
All three elevated storage tanks - Interiors and exteriors painted in 2015
Scheduled to be repainted in 2027

5. Water Production – Water Wells

a. Provide number of water supply wells in service:

2

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b. For each water supply well in service provide the year first placed in service:

Laurel Road - 1988; Merrimon - approx. 2012

c. Provide for each water supply well the original 24 hour well drawdown test, if available. N/A

d. Provide the original DEQ approval for each supply well.

See attached

e. Provide the three most recent inorganic analyses for each well.

see attached

f. Provide the average gallons per minute pumped from each well for the most recent 24 months:

Laurel Road WTP - 450 gpm; Merrimon WTP - 50 gpm

g. Environmental Compliance:

(i) Does any well exceed the EPA or State of North Carolina maximum contaminant level for a primary drinking water contaminant?

No

(ii) If yes, please provide the three most recent analyses for that primary contaminant from that well.

N/A

h. Provide a description of the installed treatment for each primary contamination MCL:

2 Filters for Iron and Manganese Removal, 2 softeners, gas chlorine disinfection, ion exchange, bleach treated (Merrimon)

i. Does the water system exceed the EPA action levels for lead and/or copper?

Yes, but no NOV - distribution lines treated with Carus 8600 for corrosion control, staff contends contamination is from private lines rather than system contamination

j. Provide a summary of the condition of each well house, including controls and valve banks and needed renovations. Good condition; controls 8 years old, plumbing 3 years old, full media replacement in 2019; SCADA 12 years old; well buildings are concrete block with brick exteriors and flat roofs, and they are in good condition

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k. Describe the water treatment of each well, including filters and the need for replacements or renovations as necessary. good condition; see above

6. Surface Water Treatment Plant N/A

a. Year of original construction_____

b. Capacity of "original plant"_____

c. Describe all treatment stages, including advanced treatment based on ultrafiltration technology, if applicable. _____

d. Type of structure (i. e., steel, concrete, other)_____

e. History of Expansion

(i) Year of each expansion, if any_____

(ii) Additional capacity of each expansion_____

(iii) Treatment stages of each expansion_____

(iv)Type of structure of each expansion (i.e., steel, concrete, other)_____

f. Provide copies of DEQ construction permits for the original construction and all expansions, if any._____

g. Provide copy of the most recent DEQ permit.

h. Provide copies of the two most recent DEQ inspection reports.

i. Provide copies of all DEQ issued Notices of Violation (NOV) for the last five years, if any._____

j. Provide copies of all the selling government entity's responses to each DEQ issued NOV the last five years, if any._____

k. Provide the monthly average gallons per day produced by the surface treatment plant for each of the last 36 months_____

l. Provide the non-revenue water percentage for each of the last three years (water produced at the surface water treatment plant less water billed to customers, divided the water produced)_____

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m. Describe in detail renovations and remediations, if any, performed by the selling government entity, the most recent ten years_____

7. Water and General Upgrading and Renovations – Costs

Provide the estimated cost of each water system upgrades/renovations necessary during the first five years No additional upgrades beyond typical annual maintenance are anticipated for the next 5 years

8. Violations – Water System

a. Provide all water system NOVs received from DEQ the last five years.
N/A

b. Provide all the selling government entity's written responses to the NOVs received the last five years.
N/A

Wastewater System N/A

Collection System

1. For each section of gravity collection mains provide:

a. Year installed_____

b. Pipe diameter_____

c. Length of main_____

d. Type material – i.e., clay pipe, steel pipe, concrete pipe, HDPE pipe, PVC Class 160, PVC SDR 21, C-900, ductile iron, lined ductile iron, other

_____

e. Copy of DEQ construction permit for each section, if available.

f. Number of manholes_____

g. Condition of manholes_____

h. Service line materials_____

i. Last time section camera evaluated_____

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2. For each section of collection force mains, provide:

a. Year installed_____

b. Pipe diameter_____

c. Length of main_____

d. Type material – i.e. PVC SDR 21, C-900, ductile iron, lined ductile iron, other

_____

e. Copy of DEQ construction permit for each section, if available.

3. Wastewater Lift Stations – For each provide:

a. Year installed_____

b. Capacity of installed pumps_____

c. Permitted capacity of lift station_____

d. Control system_____

e. Alarm System_____

f. Description of recent renovations, if any._____

g. Material of wet well _____

h. Provide summary of the conditions of each lift station

_____

4. Wastewater Treatment Plant, provide the following:

a. Year of original construction_____

b. Capacity of "original plant"_____

c. Type Treatment_____

d. Type structure i.e., steel, concrete, other_____

e. (i) Year of each expansion, if any (ii) Additional capacity of each expansion (iii) Type treatment of each expansion (iv) Type of structure each expansion i.e.

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steel, concrete,
other_____

f. Provide copies of DEQ construction permits for the original construction and all expansions, if any.

g. Provide copy of most recent NPDES Permit, if applicable.

h. If effluent land application, provide copy of most recent land application permit.

i. If land application, provide the permitted capacity of the installed irrigation system or infiltration system.

j. Does the seller own or have perpetual easements or leases for all of the effluent irrigation/infiltration areas.
_____

k. If an easement or lease, provide a copy of the recorded document(s).

l. Provide copies of the monthly DMRs (NPDES Permit) or NDMR (land application) for the most recent 36 months.

m. Provide copy of the most recent wastewater treatment plant permit, including all required monitoring parameters

n. Provide copies of the two most recent DEQ inspection reports for the wastewater treatment plant.

5. Wastewater, general information

a. Provide copies of all DEQ issued NOVs for the last five years, if any.

b. Provide copies of all the selling government entity's responses to each of the DEQ issued NOV the last five years, if any.

c. Provide the average total gallons per day sold to metered water customers by the water utility provider for each of the last three years.

d. Provide the infiltration percentage for each of the last three years (influent wastewater to wastewater treatment plant less metered water sold, divided by the metered water
sold)_____

e. Describe in detail collection system infiltration remediation if any, performed by the selling government entity the most recent ten
years_____

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f. Provide the monthly number of wastewater customers the most recent 36 months:

(i) Residential_____

(ii) Commercial_____

(iii) Industrial_____

(iv) Governmental, including schools_____

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Steven Gandy, PhD, PE

Chief Engineer

Steven has utilized his engineering expertise on a broad range of projects including design of the first stand-alone microsand enhanced flocculation water treatment plant in North Carolina. He has mitigated risk management of cooling water supply to Duke Energy's Smith Energy Complex. Steven is a member of the Solid Waste Association of North America's Technical Committee on Emerging Contaminants.

1 year with the firm
20 years of experience

Education

NC State University/ PhD/2004/ Biological and Agricultural Engineering

NC State University/ MS/2000/Civil Engineering/

NC State University/ BS/1998/Chemical Engineering

Professional Registration

2021/VA/PE/#0402063178

2017/SC/PE/#34408

2005/NC/PE/#03120

Certifications

Registered Environmental Consultant, Hazardous Waste Section NCDEQ

Areas of Expertise

- Design of PFAS Removal Systems
- Collection and Distribution Systems
- Groundwater Assessments and Corrective Action Plans
- Environmental Assessments and Remediation

**Individual Experience*

Design of PFAS Removal System for Maysville Water Treatment Plant, Maysville, NC: As Project Manager, responsible for the design of a PFAS removal system for modification of an existing water treatment plant in the Town of Maysville, NC. An Ion Exchange resin is being utilized to adsorb PFAS and PFOA compounds in a raw water source for use as potable water. Pretreatment optimization was also designed to mitigate media fouling and extend media life to the extent possible. This project is currently being bid.

Wastewater Treatment Plant Septic Offloading, City of Dunn, NC: Project Engineer. Prior to 2020, the City of Dunn Wastewater Treatment Plant did not accept septic or portable toilet waste due to the plant's headworks not being designed to screen large amounts of non-biodegradable debris that is often associated with portable toilet waste and septic tank waste. Several of the local septic hauling businesses had approached the City about being able to dispose of septic waste at the City's WWTP for several years. The only other local facility accepting this type of waste was frequently turning away the haulers and charging extreme rates for the service. The City saw an opportunity to support their local businesses as well as add a revenue stream to the City, and engaged Draper Aden to design a septic receiving station and headworks modification at the WWTP specifically for this purpose. Draper Aden assembled a team that included site, utility, and structural engineers to tackle the challenge. A design was created in early 2021, that allowed for a non-mechanical offload station with a large debris screen, waste chute, and new covered dumpster. The project design is complete and permitted but not yet constructed.

Site Assessment and Corrective Action, Swepsonville Closed Landfill, Alamance County, NC*: As Project Manager, provided assessment and remediation strategies to mitigate environmental damage and prevent any human health related issues in areas where VOC, elevated metal concentrations, and emerging contaminants have been identified. Also provided delineation and assessment of contaminant plumes and mitigation strategies for a closed and unlined facility that received waste from 1971-1996. Performed environmental data collection and analysis to determine treatment and repair strategies. Coordinated with DEQ Division of Water Resources, Solid Waste Section, Army Corps of Engineers, and owner to develop short- and long-term solutions to problems that have been occurring for over 20 years at the closed landfill. Shallow and nested deep well

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installation, well replacement and abandonment, water quality monitoring, soils and gas analysis were used to support environmental decisions.

Landfill Expansions for Iredell, Cherokee, and Surry Counties, NC*: As Project Manager, responsible for design, permitting (Permit to Construct), construction observation, and certification (Permit to Operate) for three lined landfills in North Carolina. Provided design of Leachate Collection, pumping and storage facilities.

Scale House Design for Surry and Alamance County, NC*: As Project Manager, provided design of a multi-scale facility for Surry and Alamance County, including transaction windows, emergency generator, DA restrooms, and potable well and septic systems.

Transfer Station Permit Renewal for Franklin County, NC*: As Project Manager, updated all information and plans in accordance with all current NCDEQ SWS regulations.

Permit to Operate Renewal for Alamance County Municipal Solid Waste Landfill and C&D Landfill*: As Project Manager, performed revisions to site operations and engineering plans in accordance with current SWS rules, renovations to the recycling center, and mitigation of operational issue affecting efficient performance.

Corrosion Inhibition, NCDOT Project 18-01071, Boone Maintenance Facility NC*: As Project Manager, provided design of improvements and modifications to a maintenance facility water system, including the addition of corrosion inhibitors by manipulating pH through the use of lime slurry and providing for disinfection to meet NCDEQ regulations for potable water systems.

Water Treatment Project, Duke Energy Progress, Hamlet, NC*: As Project Manager, provided the following services:

1) Design of sludge removal system for settled water reservoir
2) Trouble shooting and implementation of water turbidity removal from cooling system for advanced cycle steam turbine system and heat exchangers
3) Single point failure analysis for settled water transfer and cooling system for Smith Energy Complex
4) Design of service roads for 13 miles of water infrastructure support through environmentally-sensitive areas and crossing 9 NCDOT roads

Water Treatment Plant, Richmond County, NC*: As Project Manager, provided the following services:

1) Design of a 2.3 million gallon-apday water treatment plant expansion (expanding from 6.7 MGD to 9 MGD), including Environmental Assessment and utility audit/cost analysis
2) Design of 60,000± LF of new high service line
3) Troubleshooting and optimization of existing Claricone settled water at treatment plant

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4) Design and permitting of solids handling system, including new thickeners, sludge pumping system, and belt press facility
5) Design and permitting of new flow paced dosing chemical delivery system for potable water treatment plant

One Million Gallon Per Day Water Treatment Plant Expansion, Town of Jonesville, NC*: Project Manager for the design, permitting, and construction contract administration/observation of a Microsand Enhanced Flocculation Water Treatment System. Design and implementation of new SCADA and telemetry system for new one MGD water treatment plant. Also responsible for design and permitting of new raw water pump station and controls for settled water reservoir levels.

Phase I Environmental Site Assessments*:
1) Scotland County Industrial Park
2) Newport Wastewater Treatment Plant
3) Richmond County Industrial Park Property, Water treatment Plant Property
4) National Salvage Industrial Park Site in Dudley, NC
5) Iredell County Municipal Solid Waste Landfill Property
6) Town of Lillington Potential Municipal Property

Water Treatment Plant Design, Jamesville Water Treatment Plant, NC: As Project Manager, provided funding assistance, design, permitting, bidding, construction contract administration and construction observation. A Reverse Osmosis (RO) water treatment plant was designed to replace a failing water treatment plant for groundwater supplied to the Town of Jamesville. The plant's capacity is 100,000 gallons per day installed in a dual mode where one half of the system can be removed for service without interrupting service. Likewise, a dual train softening system and a fully automated disinfection system will allow the plant to operate autonomously with minimal oversight to free up the single operator for much needed maintenance throughout the existing distribution system. The work needs to be completed while keeping the existing plant online until the new plant is running and certified by the Engineer and PWS. When complete, this plant will be as advanced and capable as any in the State, allowing for the removal of emerging contaminates such as 1-4 Dioxane and GenX (PFOS).

Inspection, Evaluation, Design of Repairs and Replacements, Oversight and Certification for Lewiston-Woodville, NC*: As Senior Project Manager, searched grant applications, secured funding, and organized a comprehensive evaluation of the entire collection system and WWTP. Designed and oversaw repair work for manholes, gravity, and force main transport of wastewater to WWTP. Scope included: traffic plans; bypass pumping; locating unmapped manholes under courses of pavement grown over with vegetation or buried under soil, as well as unmapped sewer lines and services; point repairs; CIP; manhole relining; and general structural repairs of manholes and sewer lines within the DOT ROW. Designed and permitted new WWTP and final certification of all work.

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Wastewater System Integrity and Repair for Eaton Cooperation, Roxboro, NC: As Chief Engineer, responsible for troubleshooting the existing system composed of an older collection system (made primarily from brick with cast iron lines) in conjunction with a more modern wastewater system comprised of prefabricated concrete manholes and PVC lines. Evaluated different repair techniques including poly-urea relining, CIPP, and point repairs. Provided Inflow and Infiltration estimates and mitigation design in a confined environment, under existing structures, and in high traffic areas where options were very limited.

Concrete Deterioration Evaluation, Jonesville, NC: As Senior Project Manager, inspected concrete basins for aging WTP facility. Fieldwork included concrete testing for pH, spalling, and water infiltration to determine the degree of Alkaline-Silica Reaction that had taken place over 50 years for two basins while in use. Made an eventual recommendation for removal while maintaining constant WTP operation and replacement with prefabricated process units.

Precast Concrete Pipe Evaluation for Alamance County, Swepsonville, NC: As Senior Project Manager, performed field evaluation of inlet and outlet stormwater structures and coordination of CCTV inspection for 1500 LF of 48" RCP in an extremely corrosive environment. Determined priority repairs and pipe rating index for individual sections and defects for 48" RCP traversing orphaned landfill under 30' of compacted waste.

Publications

MS Thesis: "Evaluation of Algae Removal Effectiveness for Dissolved Air Flotation (DAF), Microsand Enhanced Flocculation (MEF), and Conventional Drinking Water Treatment."

ASCE Conference Presentation Paper: "Streaming current values and comparative coagulant doses/aids for effective algae removal at the PZC."

Ph.D. Dissertation: "Applicability, Implementation, and Modeling of Calcium Oxide in the Stabilization and Storage of Belt-Separated Swine Manure Solids."

ASAE Conference Presentation Paper: "Quicklime stabilization of belt separated swine manure for the purpose of land application, elimination of storage lagoons and vector reduction."

Environment 1, Incorporated
PHONE (252) 756-6208
FAX (252) 756-0633

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LEAD AND COPPER - SOURCE WATER - ANALYSIS

WATER SYSTEM ID#: 04-16-197 COUNTY: CARTERET

Name of Water System: NORTH RIVER

Sample Type: (X) Source Water ( ) Special/Non-compliance

Location Where Collected: 534 LAUREL RD WTP

Facility ID No. (Source Water): WT1

Sample Point: E01

Collection Date	Collection Time
08/31/21	07:00 AM

Collected By: JOHN SIMMONS

Mail Results to (water system representative):

NORTH RIVER
ATTN: JOHN SIMMONS
5231 BUSINESS DRIVE
NEWPORT, NC 28570

Phone #: (252) 241-4646

Fax #: (252) 728-0793

Responsible Person's Email:
john.simmons@carteretcountync.gov

LABORATORY ID#: 37715 ( ) SAMPLE UNSATISFACTORY ( ) RESAMPLE REQUESTED

CONTAM CODE	CONTAMINANT	METHOD CODE	REQUIRED REPORTING LIMIT (R.R.L.)	NOT DETECTED ABOVE R.R.L. (X)	QUANTIFIED RESULTS *	ALLOWABLE LIMITS
1022	Copper	200.8	0.050 mg/l	X	mg/l	1.300 mg/l
1030	Lead	200.8	0.003 mg/l	X	mg/l	0.015 mg/l

* Note: If Lead is detected above 0.015 mg/L, the Laboratory must fax analytical results to the State within 48 hours.

	DATE:	TIME:
ANALYSES BEGUN:	09/02/21	08:42 AM
ANALYSES COMPLETED:	09/13/21	04:22 PM

Laboratory Log #: 8018-083121-E01S Certified By: MAO

COMMENTS:

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Nov 22 2022

LEAD AND COPPER - SOURCE WATER - ANALYSIS

WATER SYSTEM ID#: 04-16-197 COUNTY: CARTERET

Name of Water System: NORTH RIVER

Sample Type: (X) Source Water ( ) Special/Non-compliance

Location Where Collected: 534 LAUREL RD WTP

Facility ID No. (Source Water): WT1

Sample Point: E01

Collection Date	Collection Time
08/30/21	08:00 AM

Collected By: JOHN SIMMONS

Mail Results to (water system representative):

NORTH RIVER
ATTN: JOHN SIMMONS
5231 BUSINESS DRIVE
NEWPORT, NC 28570

Phone #: (252) 241-4646

Fax #: (252) 728-0793

Responsible Person's Email:
john.simmons@carteretcountync.gov

LABORATORY ID#: 37715 ( ) SAMPLE UNSATISFACTORY ( ) RESAMPLE REQUESTED

CONTAM CODE	CONTAMINANT	METHOD CODE	REQUIRED REPORTING LIMIT (R.R.L.)	NOT DETECTED ABOVE R.R.L. (X)	QUANTIFIED RESULTS *	ALLOWABLE LIMITS
1022	Copper	200.8	0.050 mg/l	X	mg/l	1.300 mg/l
1030	Lead	200.8	0.003 mg/l	X	mg/l	0.015 mg/l

* Note: If Lead is detected above 0.015 mg/L, the Laboratory must fax analytical results to the State within 48 hours.

	DATE:	TIME:
ANALYSES BEGUN:	09/02/21	08:42 AM
ANALYSES COMPLETED:	09/13/21	04:22 PM

Laboratory Log #: 8018-083021-E01S Certified By: MAO

COMMENTS:

Environment 1, Incorporated

114 OAKMONT DRIVE
GREENVILLE, N.C. 27858

PHONE (252) 756-6208
FAX (252) 756-0633

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Nov 22 2022

DISTRIBUTION LEAD AND COPPER ANALYSIS

WATER SYSTEM ID#: 04-16-197 COUNTY: CARTERET

Name of Water System: NORTH RIVER

Sample Type: [X] Routine Distribution (Compliance) [ ] Non-compliance

Sample Site Type: [X] Tier 1 [ ] Tier 2 [ ] Tier 3 [ ] Other

Location Code: 110 Tap Location: 125 RIVERSIDE DR-LEFT SIDE

Street Address: 125 RIVERSIDE DR City: BEAUFORT

Check if sample site is owned or controlled by water system. [ ]

Check if sample site is a daycare or a K-12 school. [ ]

Facility ID No. (Distribution): D01

Sample Point: LCR

Collection Date	Collection Time X
08/17/21	06:55 AM

Collected By: MARY JO EDWARDS

Mail Results to (water system representative):

NORTH RIVER
ATTN: JOHN SIMMONS
5231 BUSINESS DRIVE
NEWPORT, NC 28570

Phone #: (252) 241-4646

Fax #: (252) 728-0793

Responsible Person's Email:
john.simmons@carteretcountync.gov

LABORATORY ID#: 37715 [ ] SAMPLE UNSATISFACTORY [ ] RESAMPLE REQUESTED

CONTAM CODE	CONTAMINANT	METHOD CODE	REQUIRED REPORTING LIMIT (R.R.L.)	NOT DETECTED ABOVE R.R.L. (X)	QUANTIFIED RESULTS	ALLOWABLE LIMITS
1022	Copper	200.8	0.050 mg/l		1.562 mg/l	1.300 mg/l
1030	Lead	200.8	0.003 mg/l		0.004 mg/l	0.015 mg/l

	DATE:	TIME:
ANALYSES BEGUN:	08/18/21	04:46 PM
ANALYSES COMPLETED:	08/27/21	02:12 PM

Laboratory Log #: 8018-081721-110P Certified By: MAO

COMMENTS:

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Nov 22 2022

Environment 1, Incorporated

114 OAKMONT DRIVE
GREENVILLE, N.C. 27858

PHONE (252) 756-6208
FAX (252) 756-0633

DISTRIBUTION LEAD AND COPPER ANALYSIS

WATER SYSTEM ID#: 04-16-197 COUNTY: CARTERET

Name of Water System: NORTH RIVER

Sample Type: [X] Routine Distribution (Compliance) [ ] Non-compliance

Sample Site Type: [ ] Tier 1 [ ] Tier 2 [X] Tier 3 [ ] Other

Location Code: 130 Tap Location: 217 SHELL LANDING RD-LEFT

Street Address: 217 SHELL LANDING RD City: BEAUFORT

Check if sample site is owned or controlled by water system. [X]

Check if sample site is a daycare or a K-12 school. [ ]

Facility ID No. (Distribution): D01

Sample Point: LCR

Collected By: HOMEOWNER

Collection Date	Collection Time X
08/17/21	09:20 AM

Mail Results to (water system representative):

NORTH RIVER
ATTN: JOHN SIMMONS
5231 BUSINESS DRIVE
NEWPORT, NC 28570

Phone #: (252) 241-4646

Fax #: (252) 728-0793

Responsible Person's Email:
john.simmons@carteretcountync.gov

LABORATORY ID#: 37715 [ ] SAMPLE UNSATISFACTORY [ ] RESAMPLE REQUESTED

CONTAM CODE	CONTAMINANT	METHOD CODE	REQUIRED REPORTING LIMIT (R.R.L.)	NOT DETECTED ABOVE R.R.L. (X)	QUANTIFIED RESULTS	ALLOWABLE LIMITS
1022	Copper	200.8	0.050 mg/l		1.645 mg/l	1.300 mg/l
1030	Lead	200.8	0.003 mg/l	X	mg/l	0.015 mg/l

	DATE:	TIME:
ANALYSES BEGUN:	08/18/21	04:47 PM
ANALYSES COMPLETED:	08/27/21	02:12 PM

Laboratory Log #: 8018-081721-130P Certified By: MAO

COMMENTS:

Environment 1, Incorporated

114 OAKMONT DRIVE
GREENVILLE, N.C. 27858

PHONE (252) 756-6208
FAX (252) 756-0633

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DISTRIBUTION LEAD AND COPPER ANALYSIS

WATER SYSTEM ID#: 04-16-197 COUNTY: CARTERET

Name of Water System: NORTH RIVER

Sample Type: [X] Routine Distribution (Compliance) [ ] Non-compliance

Sample Site Type: [X] Tier 1 [ ] Tier 2 [ ] Tier 3 [ ] Other

Location Code: 260 Tap Location: 214 RUDOLPH DR-LEFT

Street Address: 214 RUDOLPH DR City: BEAUFORT

Check if sample site is owned or controlled by water system. [ ]

Check if sample site is a daycare or a K-12 school. [ ]

Facility ID No. (Distribution): D01

Sample Point: LCR

Collected By: GENE RIGGS

Collection Date	Collection Time X
08/17/21	08:00 AM

Mail Results to (water system representative):

NORTH RIVER
ATTN: JOHN SIMMONS
5231 BUSINESS DRIVE
NEWPORT, NC 28570

Phone #: (252) 241-4646

Fax #: (252) 728-0793

Responsible Person's Email:
john.simmons@carteretcountync.gov

LABORATORY ID#: 37715 [ ] SAMPLE UNSATISFACTORY [ ] RESAMPLE REQUESTED

CONTAM CODE	CONTAMINANT	METHOD CODE	REQUIRED REPORTING LIMIT (R.R.L.)	NOT DETECTED ABOVE R.R.L. (X)	QUANTIFIED RESULTS	ALLOWABLE LIMITS
1022	Copper	200.8	0.050 mg/l		1.440 mg/l	1.300 mg/l
1030	Lead	200.8	0.003 mg/l	X	mg/l	0.015 mg/l

	DATE:	TIME:
ANALYSES BEGUN:	08/18/21	04:54 PM
ANALYSES COMPLETED:	08/30/21	11:49 AM

Laboratory Log #: 8018-081721-260P Certified By: MAO

COMMENTS:

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Environment 1, Incorporated
114 OAKMONT DRIVE
GREENVILLE, N.C. 27858
PHONE (252) 756-6208
FAX (252) 756-0633

VOLATILE ORGANIC CHEMICALS ANALYSIS (VOC's)

WATER SYSTEM ID#: 04-16-197 COUNTY: CARTERET

Name of Water System: NORTH RIVER

Sample Type: (X) Entry Point ( ) Special/Non-compliance

Location Where Collected: WELL #1 & #2

Facility ID No.: WT1

Sample Point: E01

Collected By: JOHN SIMMONS JR

Collection Date	Collection Time
05/03/21	08:15 AM

Mail Results to (water system representative):

NORTH RIVER
ATTN: JOHN SIMMONS
5231 BUSINESS DRIVE
NEWPORT,NC 28570

Phone #: (252) 241-4646

Fax #: (252) 728-0793

Responsible Person's Email:
john.simmons@carteretcountync.gov

LABORATORY ID#: 3 7 7 1 5 ( ) SAMPLE UNSATISFACTORY ( ) RESAMPLE REQUESTED

CONTAM CODE	CONTAMINANT	METHOD CODE	REQUIRED REPORTING LIMIT (R.R.L.)	NOT DETECTED ABOVE R.R.L. (X)	QUANTIFIED RESULTS	ALLOWABLE LIMITS
2378	1,2,4-Trichlorobenzene	502.2	0.0005 mg/l	X	mg/l	0.07 mg/l
2380	Cis-1,2-Dichloroethylene	502.2	0.0005 mg/l	X	mg/l	0.07 mg/l
2955	Xylenes (Total)	502.2	0.0005 mg/l	X	mg/l	10.00 mg/l
2964	Dichloromethane	502.2	0.0005 mg/l	X	mg/l	0.005 mg/l
2968	o-Dichlorobenzene	502.2	0.0005 mg/l	X	mg/l	0.600 mg/l
2969	p-Dichlorobenzene	502.2	0.0005 mg/l	X	mg/l	0.075 mg/l
2976	Vinyl Chloride	502.2	0.0005 mg/l	X	mg/l	0.002 mg/l
2977	1,1-Dichloroethylene	502.2	0.0005 mg/l	X	mg/l	0.007 mg/l
2979	Trans-1,2-Dichloroethylene	502.2	0.0005 mg/l	X	mg/l	0.100 mg/l
2980	1,2-Dichloroethane	502.2	0.0005 mg/l	X	mg/l	0.005 mg/l
2981	1,1,1-Trichloroethane	502.2	0.0005 mg/l	X	mg/l	0.200 mg/l
2982	Carbon Tetrachloride	502.2	0.0005 mg/l	X	mg/l	0.005 mg/l
2983	1,2-Dichloropropane	502.2	0.0005 mg/l	X	mg/l	0.005 mg/l
2984	Trichloroethylene	502.2	0.0005 mg/l	X	mg/l	0.005 mg/l
2985	1,1,2-Trichloroethane	502.2	0.0005 mg/l	X	mg/l	0.005 mg/l
2987	Tetrachloroethylene	502.2	0.0005 mg/l	X	mg/l	0.005 mg/l
2989	Chlorobenzene	502.2	0.0005 mg/l	X	mg/l	0.100 mg/l
2990	Benzene	502.2	0.0005 mg/l	X	mg/l	0.005 mg/l
2991	Toluene	502.2	0.0005 mg/l	X	mg/l	1.000 mg/l
2992	Ethylbenzene	502.2	0.0005 mg/l	X	mg/l	0.700 mg/l
2996	Styrene	502.2	0.0005 mg/l	X	mg/l	0.100 mg/l

	DATE:	TIME:
ANALYSES BEGUN:	05/03/21	03:48 PM
ANALYSES COMPLETED:	05/13/21	10:24 AM

Laboratory Log #: 8018-050321-E01V

Certified By: MAO

COMMENTS:

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Environment 1, Incorporated
,4 OAKMONT DRIVE
GREENVILLE, N.C. 27858
PHONE (252) 756-6208
FAX (252) 756-0633

INORGANIC CHEMICAL ANALYSIS

WATER SYSTEM ID#: 04-16-197 COUNTY: CARTERET

Name of Water System: NORTH RIVER

Sample Type: (X) Entry Point ( ) Special/Non-compliance

Location Where Collected: WELL #1 & #2

Facility ID No.: WT1

Location Code: E01

Collected By: DANIEL BATCHELOR

Collection Date	Collection Time
09/04/18	07:05 AM

Mail Results to (water system representative):

NORTH RIVER
ATTN: JOHN SIMMONS
5231 BUSINESS DRIVE
NEWPORT,NC 28570

Phone #: (252) 241-4646

Fax #: (252) 728-0793

Responsible Person's Email:
john.simmons@carteretcountync.gov

LABORATORY ID#: 37715 ( ) SAMPLE UNSATISFACTORY ( ) RESAMPLE REQUESTED

CONTAM CODE	CONTAMINANT	METHOD CODE	REQUIRED REPORTING LIMIT (R.R.L.)	NOT DETECTED ABOVE R.R.L. (X)	QUANTIFIED RESULTS	ALLOWABLE LIMITS
1005	Arsenic	200.8	0.005 mg/l	X	mg/l	0.010 mg/l
1010	Barium	200.8	0.400 mg/l	X	mg/l	2.000 mg/l
1015	Cadmium	200.8	0.001 mg/l	X	mg/l	0.005 mg/l
1020	Chromium	200.8	0.020 mg/l	X	mg/l	0.100 mg/l
1024	Cyanide	4500CN-E	0.050 mg/l	X	mg/l	0.200 mg/l
1025	Fluoride	4500F-C	0.100 mg/l		0.23 mg/l	4.000 mg/l
1028	Iron	200.7	0.060 mg/l	X	mg/l	0.300 mg/l
1032	Manganese	200.8	0.010 mg/l	X	mg/l	0.050 mg/l
1035	Mercury	200.8	0.0004 mg/l	X	mg/l	0.002 mg/l
1036	Nickel	200.8	0.100 mg/l	X	mg/l	N/A
1045	Selenium	200.8	0.010 mg/l	X	mg/l	0.050 mg/l
1052	Sodium	3111B	1.000 mg/l		116.100 mg/l	N/A
1055	Sulfate	4500SO4-E	15.000 mg/l	X	mg/l	250.0 mg/l
1074	Antimony	200.8	0.003 mg/l	X	mg/l	0.006 mg/l
1075	Beryllium	200.8	0.002 mg/l	X	mg/l	0.004 mg/l
1085	Thallium	200.8	0.001 mg/l	X	mg/l	0.002 mg/l
1925	pH	4500H-B	N/A		7.3 pH	6.50– 8.50

	DATE:	TIME:
ANALYSES BEGUN:	09/04/18	03:11 PM
ANALYSES COMPLETED:	10/10/18	09:18 AM

Laboratory Log #: 8018-090418-E01I Certified By: MAO

COMMENTS:

Environment 1, Incorporated

114 OAKMONT DRIVE
GREENVILLE, N.C. 27858

PHONE (252) 756-6208
FAX (252) 756-0633

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PESTICIDES AND SYNTHETIC ORGANIC CHEMICALS ANAYLSIS (SOC's)

WATER SYSTEM ID#: 04-16-197 COUNTY: CARTERET

Name of Water System: NORTH RIVER

Sample Type: (X) Entry Point ( ) Special/Non-compliance

Location Where Collected: WELL #1 & #2

Facility ID No.: WT1

Sample Point: E01

Collected By: DANIEL BATCHELOR

Collection Date	Collection Time
03/01/21	07:50 AM

Mail Results to (water system representative):

NORTH RIVER
ATTN: JOHN SIMMONS
5231 BUSINESS DRIVE
NEWPORT,NC 28570

Phone #: (252) 241-4646

Fax #: (252) 728-0793

Responsible Person's Email:
john.simmons@carteretcountync.gov

LABORATORY ID#: 3 7 7 1 5 ( ) SAMPLE UNSATISFACTORY ( ) RESAMPLE REQUESTED

CONTAM CODE	CONTAMINANT	METHOD CODE	REQUIRED REPORTING LIMIT (R.R.L.)	NOT DETECTED ABOVE R.R.L. (X)	QUANTIFIED RESULTS *	ALLOWABLE LIMITS
2005	Endrin	525.2	0.00001 mg/l	X	mg/l	0.002
2010	BHC-Gamma	525.2	0.00002 mg/l	X	mg/l	0.0002
2015	Methoxychlor	525.2	0.0001 mg/l	X	mg/l	0.04
2020	Toxaphene	525.2	0.001 mg/l	X	mg/l	0.003
2031	Dalapon	515.4	0.001 mg/l	X	mg/l	0.20
2035	Di(2-ethylhexyl)adipate	525.2	0.0006 mg/l	X	mg/l	0.40
2036	Oxamyl(vydate)	531.1	0.002 mg/l	X	mg/l	0.20
2037	Simazine	525.2	0.00007 mg/l	X	mg/l	0.004
2040	Picloram	515.4	0.0001 mg/l	X	mg/l	0.500
2041	Dinoseb	515.4	0.0002 mg/l	X	mg/l	0.007
2042	Hexachlorocyclopentadiene	525.2	0.0001 mg/l	X	mg/l	0.050
2046	Carbofuran	531.1	0.0009 mg/l	X	mg/l	0.040
2050	Atrazine	525.2	0.0001 mg/l	X	mg/l	0.003
2051	Alachlor	525.2	0.0002 mg/l	X	mg/l	0.002
2065	Heptachlor	525.2	0.00004 mg/l	X	mg/l	0.0004

* Note: If result exceeds allowable limit, the laboratory must fax analytical results to the State within 48 hours.

Environment 1, Incorporated

114 OAKMONT DRIVE
GREENVILLE, N.C. 27858

PHONE (252) 756-6208
FAX (252) 756-0633

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PESTICIDES AND SYNTHETIC ORGANIC CHEMICALS ANAYLSIS (SOC's)

(continued)

WATER SYSTEM ID#: 04-16-197
Name of Water System: NORTH RIVER
Facility ID No.: WT1
Sample Point: E01

Collection Date	Collection Time
03/01/21	07:50 AM

LABORATORY ID#: 3 7 7 1 5

CONTAM CODE	CONTAMINANT	METHOD CODE	REQUIRED REPORTING LIMIT (R.R.L.)	NOT DETECTED ABOVE R.R.L. (X)	QUANTIFIED RESULTS *	ALLOWABLE LIMITS
2067	Heptachlor Epoxide	525.2	0.00002 mg/l	X	mg/l	0.0002
2105	2,4-D	515.4	0.0001 mg/l	X	mg/l	0.07
2110	2,4,5-TP (Silvex)	515.4	0.0002 mg/l	X	mg/l	0.05
2274	Hexachlorobenzene	525.2	0.0001 mg/l	X	mg/l	0.001
2039	Di(2-ethylhexyl)phthalate	525.2	0.00132 mg/l	X	mg/l	0.006
2306	Benzo(a)pyrene	525.2	0.00002 mg/l	X	mg/l	0.0002
2326	Pentachlorophenol	515.4	0.00004 mg/l	X	mg/l	0.001
2383	PCB's (as decachlorobiphenyl)	525.2	0.0001** mg/l	X	mg/l	0.0005
2931	DBCP	504.1	0.00002 mg/l	X	mg/l	0.0002
2946	Ethylene Dibromide (EDB)	504.1	0.00001 mg/l	X	mg/l	0.00005
2959	Chlordane	525.2	0.0002 mg/l	X	mg/l	0.002

* Note: If result exceeds allowable limit, the laboratory must fax analytical results to the State within 48 hours.
** Note: R.R.L. (mg/L) for PCB screening are as follows: Aroclor 1016 – 0.00008, Aroclor 1221 – 0.02, Aroclor 1232 – 0.0005, Aroclor 1242 – 0.0003, Aroclor 1248 & 1254 – 0.0001, Aroclor 1260 – 0.0002

	DATE:	TIME:
ANALYSES BEGUN:	03/01/21	04:11 PM
ANALYSES COMPLETED:	03/29/21	11:38 AM

Laboratory Log #: 8018-030121-E01S

Certified By: MAO

COMMENTS:

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **15-01015** **Received:** 12/15/2015 **Project Type:** TANK REHABILITATION ONLY
Water System No.: **NC0416197** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: 534 LAUREL ROAD - BEAUFORT

Contacts

Applicant Name: W. Russell Overman, County Manager **Engineer Name:**
Reviewer Name: Bhatta, Shashi

Events

Event	Event Date	Comments
final approval	04/21/2016	TLK
engineer's certification	04/21/2016	30647
project approval	12/15/2015	RO/SMB

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **09-00533R1** **Received:** 6/13/2011 **Project Type:** STORAGE SYSTEM
Water System No.: **NC0416197** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: TANK 3/BOOSTER PUMP STATIONS 2&3 CARTERET COUNTY NC

Contacts

Applicant Name: John Langdon **Engineer Name:**
Reviewer Name: Chohan, Siraj (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
applicant's certification	09/10/2012	
engineer's certification	09/10/2012	7469 OK PER SMC
final approval	09/10/2012	TLK PER SMC
applicant's certification	08/27/2012	
partial final approval	08/27/2012	TLK PER SMC - FINAL DISINFECTION OF ET3 REMAINING
partial engineer's certification	08/27/2012	7469 OK PER SMC - FINAL DISINFECTION OF ET3 REMAINING
project approval	01/03/2012	SHOP DRAWINGS FOR THE 200.000-GALLON ELEVATED TANK RECEIVED.
approval mailed	07/20/2011	
authorization to construct	07/13/2011	SMC
tentative approval	07/12/2011	

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: 115- - 041 **Received:** 6/6/2011 **Project Type:** DISTRIBUTION REPLACEMENT
Water System No.: NC- 619174 **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: CARTERET CO. - US HWY 70 UTILITIES RELOCATION (R-3307)

Contacts

Applicant Name: Dee Meshaw, Asst. County Manager **Engineer Name:**
Reviewer Name: Chohan, Siraj (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
final approval	06/12/2013	TLK PER SMC
engineer's certification	06/12/2013	33439 OK PER SMC
authorization to construct expiration reminder	06/04/2013	
applicant's certification	05/23/2012	
partial engineer's certification	05/23/2012	33439 OK PER SMC - APPROXIMATELY 2000 LF OF 8-INCH WATERLINE ALONGSIDE US 70 EAST
partial final approval	05/23/2012	TLK PER SMC - APPROXIMATELY 2000 LF OF 8-INCH WATERLINE ALONGSIDE US 70 EAST
approval mailed	07/20/2011	
authorization to construct	07/11/2011	SMC
project approval	07/08/2011	
Comment Sent	07/07/2011	
Comment Sent	07/05/2011	ADDITIONAL INFORMATION NEEDED.

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **10-00988** **Received:** 10/8/2010 **Project Type:** TANK REHABILITATION ONLY

Water System No.: **NC0416197** **County:** CARTERET

Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS

Description: 534 LAUREL ROAD, BEAUFORT NC

Contacts

Applicant Name: Tony Cahoon, Public Works Director **Engineer Name:**

Reviewer Name: Chohan, Siraj (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
final approval	03/18/2011	TLK PER WIRO
engineer's certification	03/15/2011	PER WIRO
project approval	10/11/2010	

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **15-10446** **Received:** 12/2/2009 **Project Type:** GROUNDWATER SYSTEM
Water System No.: **NC1609057** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: CARTERET COUNTY - LAUREL RD WTP RENOVATIONS

Contacts

Applicant Name: John Langdon, County Manager **Engineer Name:**
Reviewer Name: Chohan, Siraj (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
final approval	11/01/2010	SMC
applicant's certification	10/29/2010	
engineer's certification	10/29/2010	16359
approval mailed	01/08/2010	
authorization to construct	12/18/2009	SMC
project approval	12/17/2009	

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Nov 22 2022

Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **09-00361** **Received:** 3/10/2009 **Project Type:** STORAGE SYSTEM
Water System No.: **NC0416197** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: ELEVATED TANK NO. 2 & BOOSTER PUMP STATION NO. 1 (CONTRACT 11 & 12)

Contacts

Applicant Name: John Langdon **Engineer Name:**
Reviewer Name: Chohan, Siraj (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
approval mailed	04/12/2011	
final approval	03/30/2011	TLK PER SMC
project approval	03/29/2011	ET SHOP DRAWGS AND PUMPS PERFORMANCE CURVES RECEIVED.
engineer's certification	03/29/2011	7469 OK PER SMC (CERT DATED 3/22/2011)
applicant's certification	03/25/2011	
authorization to construct expiration reminder	01/26/2011	
authorization to construct extension	01/26/2011	
construction started	07/01/2010	PER FORM FROM WJ ZAIST DATED 2/1/2011
approval mailed	03/26/2009	
authorization to construct	03/25/2009	SMC
tentative approval	03/25/2009	SHOP DRAWINGS & BP PERFORMANCE CURVES REQUIRED FOR AP.

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **09-00361** **Received:** 3/10/2009 **Project Type:** STORAGE SYSTEM
Water System No.: **NC0416197** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: ELEVATED TANK NO. 2 & BOOSTER PUMP STATION NO. 1 (CONTRACT 11 & 12)

Contacts

Applicant Name: John Langdon **Engineer Name:**
Reviewer Name: Chohan, Siraj (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
approval mailed	04/12/2011	
final approval	03/30/2011	TLK PER SMC
project approval	03/29/2011	ET SHOP DRAWGS AND PUMPS PERFORMANCE CURVES RECEIVED.
engineer's certification	03/29/2011	7469 OK PER SMC (CERT DATED 3/22/2011)
applicant's certification	03/25/2011	
authorization to construct expiration reminder	01/26/2011	
authorization to construct extension	01/26/2011	
construction started	07/01/2010	PER FORM FROM WJ ZAIST DATED 2/1/2011
approval mailed	03/26/2009	
authorization to construct	03/25/2009	SMC
tentative approval	03/25/2009	SHOP DRAWINGS & BP PERFORMANCE CURVES REQUIRED FOR AP.

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **07-02067** **Received:** 11/16/2007 **Project Type:** DISTRIBUTION EXTENSION
Water System No.: **NC0416197** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: CHADWICK SHORES PLANTATION (LOTS 1-62) CONTRACT 9

Contacts

Applicant Name: John Langdon **Engineer Name:**
Reviewer Name: Chen,Tony (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
applicant's certification	11/19/2008	
final approval	11/19/2008	TLK
engineer's certification	11/14/2008	7469
approval mailed	11/30/2007	
authorization to construct	11/28/2007	TCC BY SEP
project approval	11/27/2007	

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **09-00361** **Received:** 2/5/2007 **Project Type:** DISTRIBUTION EXTENSION
Water System No.: **NC0437369** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: TRACEY GROVE S/D, SECTION 2

Contacts

Applicant Name: John Langdon **Engineer Name:**
Reviewer Name: Chen,Tony (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
project terminated	03/07/2017	Per form from john simmons dated 2/22/17
on hold	12/03/2010	PER FORM FROM WILLIAM ZAIST DATED 12/3/2010
authorization to construct expiration reminder	11/29/2010	
authorization to construct extension	11/29/2010	
authorization to construct extension	01/05/2009	PER FORM FROM TONY CAHOON DATED 1/5/2009
authorization to construct expiration reminder	12/29/2008	
construction started	02/19/2007	PER FORM FROM WILLIAM ZAIST DATED 12/3/2010
approval mailed	02/15/2007	
authorization to construct	02/13/2007	TCC BY DB
project approval	02/12/2007	

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **06-02153** **Received:** 12/14/2006 **Project Type:** DISTRIBUTION EXTENSION
Water System No.: **NC0416197** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: TRACY GROVE S/D, SECTION 1

Contacts

Applicant Name: John Langdon **Engineer Name:**
Reviewer Name: Chen,Tony (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
applicant's certification	06/19/2017	
final approval	06/19/2017	tlk
engineer's certification	06/02/2017	7469; still need applicant certification
authorization to construct extension	03/13/2017	Per form from John Simmons/Frank Lews dated 3/13/17
on hold	12/03/2010	PER FORM FROM WILLIAM ZAIST DATED 12/3/2010
authorization to construct expiration reminder	10/28/2010	
authorization to construct extension	10/28/2010	
authorization to construct extension	12/08/2008	PER FORM FROM TONY CAHOON DATED 12/8/2008
authorization to construct expiration reminder	11/24/2008	
construction started	01/22/2007	PER FORM FROM WILLIAM ZAIST DATED 12/3/2010
approval mailed	01/08/2007	
authorization to construct	01/04/2007	TCC BY SEP
project approval	01/03/2007	

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **15-10456** **Received:** 9/1/2006 **Project Type:** DISTRIBUTION EXTENSION
Water System No.: **NC1905076** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: JOANS HAVEN DRIVE LOTS CON-5

Contacts

Applicant Name: John Lan Gdon **Engineer Name:**
Reviewer Name: Chen,Tony (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
applicant's certification	11/22/2006	
final approval	11/22/2006	
engineer's certification	11/22/2006	
approval mailed	09/20/2006	
authorization to construct	09/19/2006	TCC BY DB
project approval	09/13/2006	

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **06-01023** **Received:** 6/12/2006 **Project Type:** DISTRIBUTION EXTENSION
Water System No.: **NC0416197** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: MILL LANDING S/D, CONTRACT 6

Contacts

Applicant Name: John Langdon **Engineer Name:**
Reviewer Name: Chen,Tony (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
applicant's certification	06/14/2007	
final approval	06/14/2007	
engineer's certification	06/14/2007	
approval mailed	06/26/2006	
project approval	06/22/2006	
authorization to construct	06/22/2006	TCC BY DB

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **07-02062** **Received:** 6/12/2006 **Project Type:** DISTRIBUTION EXTENSION

Water System No.: **NC0427219** **County:** CARTERET

Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS

Description: BRIDGEWATER @ WARE CRJ S/D NO5

Contacts

Applicant Name: John Langdon **Engineer Name:**

Reviewer Name: Chen,Tony (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
applicant's certification	10/10/2006	
final approval	10/10/2006	
engineer's certification	10/10/2006	
approval mailed	06/26/2006	
authorization to construct	06/23/2006	TCC BY SEP
project approval	06/22/2006	

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **09-05931** **Received:** 9/12/2005 **Project Type:** TANK REHABILITATION ONLY
Water System No.: **NC0456517** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: CARTERET COUNTY ELEVATED TANK

Contacts

Applicant Name: John Langdon **Engineer Name:** Zzz Migration
Reviewer Name: Chen,Tony (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
final approval	01/05/2006	TCC
engineer's certification	01/04/2006	
project approval	09/12/2005	R.O. APP. 9/9/05

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **05-00938** **Received:** 6/1/2005 **Project Type:** DISTRIBUTION EXTENSION
Water System No.: **NC0416197** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: CARTERET CO./CONTRACT #43

Contacts

Applicant Name: John Langdon **Engineer Name:** Zzz Migration
Reviewer Name: Chen,Tony (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
applicant's certification	02/20/2006	
final approval	02/20/2006	OU
partial engineer's certification	02/20/2006	CHANGE ORDER 1
applicant's certification	12/15/2005	TCC
partial final approval	12/15/2005	TCC
partial engineer's certification	12/08/2005	
authorization to construct	11/23/2005	TCC, WSMP# 02-01787
approval mailed	06/22/2005	
project approval	06/14/2005	

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **03-01288** **Received:** 8/18/2003 **Project Type:** DISTRIBUTION EXTENSION
Water System No.: **NC0416197** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: CARTERET CO. #43/PH 2 DEH 0906

Contacts

Applicant Name: Mary Ann Hinshaw **Engineer Name:**
Reviewer Name: Ou, Henri (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
applicant's certification	07/27/2005	
partial engineer's certification	07/27/2005	FINAL
final approval	07/27/2005	OU
partial final approval	05/24/2005	OU
applicant's certification	05/24/2005	
partial engineer's certification	05/24/2005	SR 1675,1723,1676,1673,..
partial engineer's certification	05/19/2005	SR 1230, 1231
applicant's certification	05/19/2005	
partial final approval	05/19/2005	OU
partial final approval	05/05/2005	OU
partial engineer's certification	05/05/2005	SR 1246,1416,1460,1946...
applicant's certification	05/05/2005	
partial engineer's certification	04/20/2005	SR1169,1631,1644,1165,101
applicant's certification	04/20/2005	
partial final approval	04/20/2005	OU
approval mailed	09/18/2003	
authorization to construct	09/12/2003	OU
project approval	09/12/2003	WSMP 02-01787

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **09-00093** **Received:** 12/23/2002 **Project Type:** DISTRIBUTION EXTENSION
Water System No.: **NC0631347** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: EASTMAN CREEK S/D LOTS 1-90

Contacts

Applicant Name: Doug Brady, Chairman **Engineer Name:**
Reviewer Name: Ou, Henri (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
final approval	05/05/2004	OU
engineer's certification	05/05/2004	
applicant's certification	04/29/2004	
approval mailed	01/16/2003	
project approval	01/10/2003	WSMP 02-01788
authorization to construct	01/10/2003	OU

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **02-01787** **Received:** 11/5/2002 **Project Type:** WATER SYSTEM MANAGEMENT PLAN

Water System No.: **NC0416197** **County:** CARTERET

Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS

Description: CARTERET COUNTY WATER

Contacts

Applicant Name: John Whitehurst **Engineer Name:** Zzz Migration

Reviewer Name: O'Daniel, Sandy (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
WSMP deemed complete	11/26/2002	STEA

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **07-02664** **Received:** 11/4/2002 **Project Type:** DISTRIBUTION EXTENSION
Water System No.: **NC0124296** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: INDIAN SHORES S/D

Contacts

Applicant Name: John Whitehurst, County Mgr. **Engineer Name:**
Reviewer Name: Ou, Henri (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
applicant's certification	05/27/2003	
final approval	05/27/2003	HSO BY JHD
engineer's certification	05/13/2003	
approval mailed	12/18/2002	
project approval	11/27/2002	
authorization to construct	11/27/2002	OU

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: 0070-262 **Received:** 6/12/2000 **Project Type:** WATER SYSTEM MANAGEMENT PLAN
Water System No.: NC02-4-19 **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: COUNTY OF CARTERET

Contacts

Applicant Name: Bob Murphy **Engineer Name:** Zzz Migration
Reviewer Name: O'Daniel, Sandy (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
WSMP deemed complete	06/12/2000	SHORT FORM

Water Resources
ENVIRONMENTAL QUALITY

Project Detail

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Serial No: **00-01400** **Received:** 6/2/2000 **Project Type:** DISTRIBUTION EXTENSION
Water System No.: **NC0416197** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: CARTERET CO. WTR. SYS 40,41,42

Contacts

Applicant Name: Robert Murphy **Engineer Name:**
Reviewer Name: Ou, Henri (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
engineer's certification	06/17/2003	WTP PORTION
final approval	06/17/2003	OU
applicant's certification	05/29/2003	
partial final approval	05/29/2003	OU
partial engineer's certification	05/12/2003	EXCEPT WTP PORTION
approval mailed	07/24/2000	
authorization to construct	07/07/2000	OU
project approval	07/07/2000	
reminder letter	06/12/2000	

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: 1101-198 **Received:** 5/3/2000 **Project Type:** DISTRIBUTION EXTENSION
Water System No.: NC14-9-67 **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: WHITEWATER S/D

Contacts

Applicant Name: Robert Murphey, County Manager **Engineer Name:**
Reviewer Name: Ou, Henri (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
applicant's certification	05/06/2004	
final approval	05/06/2004	OU
engineer's certification	04/28/2004	
approval mailed	07/06/2000	
authorization to construct	07/03/2000	OU
project approval	07/03/2000	
reminder letter	05/04/2000	

Water Resources
ENVIRONMENTAL QUALITY

Project Detail

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Serial No: **00-00140** **Received:** 3/23/2000 **Project Type:** WATER SYSTEM MANAGEMENT PLAN
Water System No.: **NC0691947** **County:** CARTERET
Water System Name: NORTH RIVER/MILL CREEK WATER SERVICE DIS
Description: N. RIVER & MERRIMON WTR SYSTEM

Contacts

Applicant Name: Robert Murphy **Engineer Name:** Zzz Migration
Reviewer Name: O'Daniel, Sandy (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
WSMP deemed complete	03/23/2000	SHORT FORM

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **16-00890** **Received:** 10/18/2016 **Project Type:** TANK REHABILITATION ONLY
Water System No.: **NC0416198** **County:** CARTERET
Water System Name: MERRIMON WATER SYSTEM
Description: 105 JONAQUINS CREEK RD MERRIMON NC

Contacts

Applicant Name: Mr. Russell Overman **Engineer Name:**
Reviewer Name: Bhatta, Shashi

Events

Event	Event Date	Comments
engineer's certification	03/02/2017	eng cert 30647
final approval	03/02/2017	tlk
project approval	10/18/2016	TLK PER SMB

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Water Resources
ENVIRONMENTAL QUALITY

Project Detail

Serial No: **02-01788** **Received:** 11/5/2002 **Project Type:** WATER SYSTEM MANAGEMENT PLAN
Water System No.: **NC0416198** **County:** CARTERET
Water System Name: MERRIMON WATER SYSTEM
Description: CARTERET COUNTY WATER SYSTEM

Contacts

Applicant Name: John Whitehurst **Engineer Name:** Zzz Migration
Reviewer Name: O'Daniel, Sandy (former employee, contact shashi.bhatta@ncdenr.gov)

Events

Event	Event Date	Comments
WSMP deemed complete	11/26/2002	STEA

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Carteret County, NC
Laurel Road / Merrimon Water Systems

UPDATE TO PRESENT VALUE OF WATER SYSTEM

DRAFT

December 2021

Prepared by:

Draper Aden Associates
Engineering ◆ Surveying ◆ Environmental Services

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3RD PARTY REVIEW

This Report has been subjected to technical and quality reviews by:

Ethan Gartin		12/20/2021
Name:	Signature	Date
Project Engineer		

Steven R. Gandy		12/20/2021
Name:	Signature	Date
Project Manager		

C. Tyrus Clayton, Jr		12/20/2021
Name:	Signature	Date
Quality Reviewer		

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Background

Carteret County owns and operates two groundwater wells for water supply. The first well is located just East of Sowers Drive on Laurel Road, Beaufort, NC 28516, and the extracted groundwater is treated at the onsite Laurel Road Water Treatment Plant (WTP) before is it pumped to three (3) elevated storage tanks for distribution within the community. The system serves approximately 1,226 customers. The County also owns and operates a small water system known as the Merrimon Water System, approximately 20 miles north of Laurel Rd and Merrimon Rd intersection. The water system consists of the Jonaquins Creek Well and an above-ground water storage tank, and it serves approximately 27 customers. (The attached Appendix A system map further details the layout and location of the system and components.)

Draper Aden performed a water system feasibility study in 2019 to look at a merger with a local municipality which established a monetary value for the County's water system assets, among other conclusions. This document is meant to update that number to a more current value.

Assumptions / Limitations

In order to assess the changes to the value of the water systems owned by Carteret County, the following was assumed:

- Conditions of Carteret County's water system assets stated in the 2019 Feasibility Study have not significantly changed are still an accurate depiction of current conditions.
- Book Value approach was used in estimating the value of fixed assets. Straight Line Depreciation was used to estimate depreciated value of water system assets. For the purpose of estimation, the salvage value of each system component was assumed to be zero dollars ($0).
- The analysis done in 2019 for the projected 2020 fiscal budget is accurate to current financial conditions; an updated analysis for 2020 and 2021 budgets and expenses was not performed.
- To account for inflation since the 2019 feasibility study, several present book values which were estimated in the 2019 report have been increased by approximately 5%.

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Results / Conclusions

The water system assets owned by Carteret County have an estimated value of approximately $12.7 million. A detailed breakdown of this value can be found in Tables 1 and 2.

The remainder of the major findings and recommendations reported in the 2019 feasibility study hold true.

Attachments:

Table 1: Estimated Book Value of Carteret County Water System
Table 2: Present Book Value of Carteret County Water System
System MapAppendix A: Figure 1 Carteret County Water System Map

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Table 1. Estimated Book Value of Carteret County Water System

Assets	Date of Acquisition	Design Life (yrs)	Historical Cost ($)	Total Useful life (months)	Net Amount to Be Depreciated ($)	Accumulated Depreciation ($)	Current Depreciation ($)	Total Depreciation ($)	Present Book value of Asset ($)
Booster Pump 1	2012	50	174,284	600	174,284	26,433	3,486	29,919	144,365
Booster Pump 2	2012	50	253,111	600	253,111	38,389	5,062	43,451	209,661
Booster Pump 3	2012	50	253,111	600	253,111	38,389	5,062	43,451	209,661
		Subtotal	**680,507**				**Subtotal**	**116,820**	**563,686**
Water Tank 1	1988	50	619,263	600	619,263	391,168	12,385	403,553	215,710
Water Tank 2	2012	50	689,091	600	689,091	104,512	13,782	118,294	570,797
Water Tank 3	2012	50	765,262	600	765,262	116,065	15,305	131,370	633,892
		Subtotal	**2,073,616**				**Subtotal**	**653,217**	**1,420,399**
		Total	**2,754,123**				**Total**	**770,037**	**1,984,085**

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Table 2. Present Book Value of Carteret County Water System

System No	Description	Present Book value of Asset ($)
SCADA		
Booster Pump House1	SCADA System*	**294,000**
Land		
Laurel Road Aerial Tank	Land Property	25,428
Laurel Road Treatment Plant	Land Property	57,220
Jonaquins Creek Water House	Land Property	26,097
Aerial Tank	Land Property	130,312
Booster Pump Station-1	Land Property	40,578
Booster Pump Station-2	Land Property	35,312
Booster Pump Station-3	Land Property	34,160
Elevated Tank	Land Property	20,615
	Sub Total	**369,722**
Well House	Water withdrawal house*	**210,000**
Jonaquins Creek Well House and Storage	Merrimon Water System*	**420,000**
Fire Hydrants	Fire rescue purposes	**300,000**
Water Treatment Plants	Supply/Distribution*	**1,575,000**
Piping System		
2" PVC	(26,400 ft, $10/ft)	264,000
4" PVC	(1,320 ft, $16/ft)	21,120
6" PVC	(151,588 ft, $24/ft)	3,638,112
6" Ductile	(4,700 ft, $28/ft)	131,600
8 " PVC	(104,477 ft, $28/ft)	2,925,356
8" Ductile	(3,235 ft, $32/ft)	103,520
10" PVC	(3,168 ft, $34/ft)	107,712
	Sub Total*	**7,550,991**
	Total ($)	**10,719,713**

*Value has been increased by ~5% from the 2019 feasibility study

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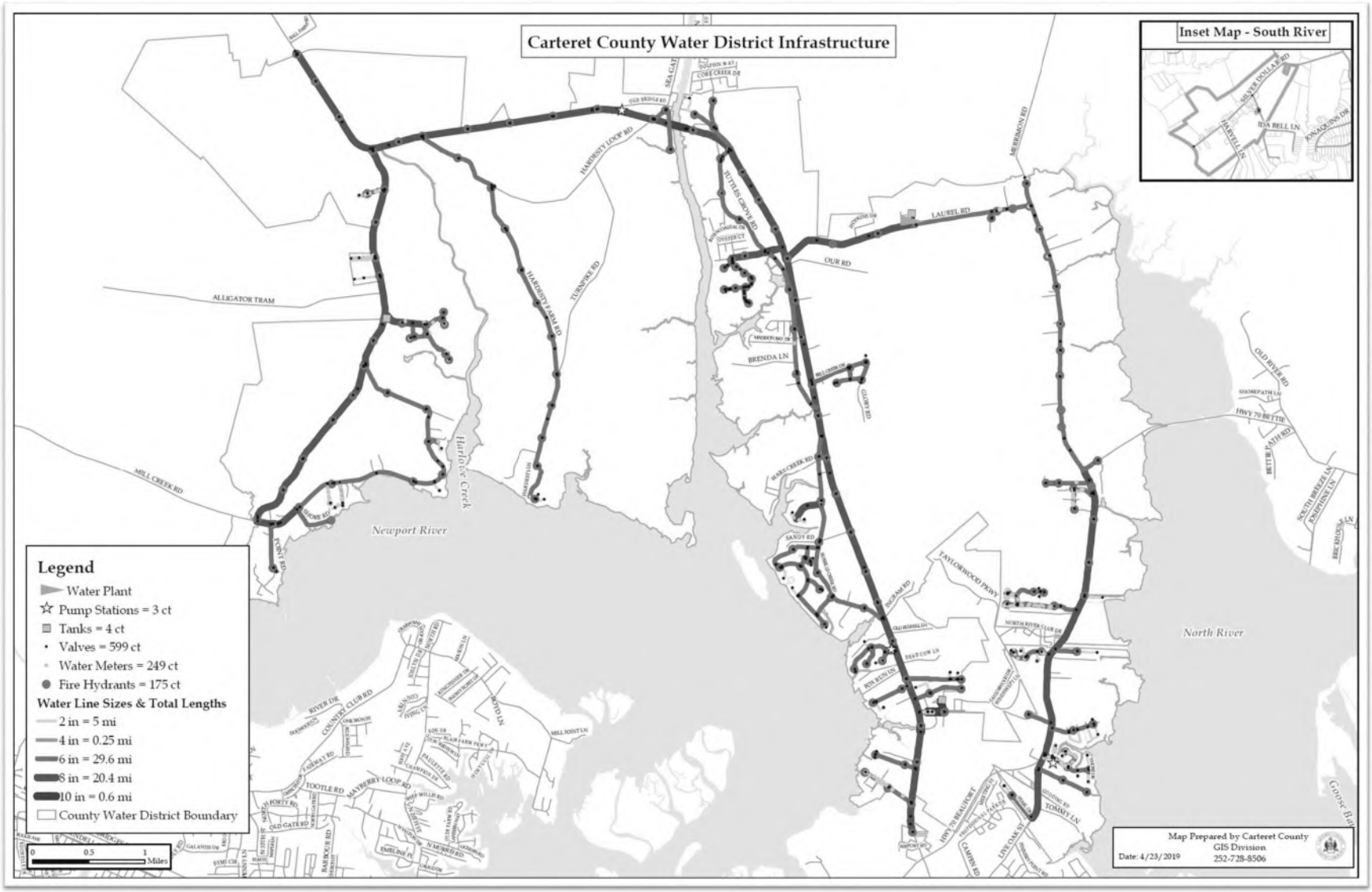

Draper Aden Associates
Engineering • Surveying • Environmental Services

Figure 1 Carteret County Water System Map

CWSNC W-354 SUB 398
Carteret Fair Value Determination
Form Application Exhibit 1A

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Golden State Water CO (Filer) CIK: 0000092116
AMERICAN STATES WATER CO (Filer) CIK: 0001056903

Print Document View Excel Document

10-K
Cover
Document and Entity Information
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CONSOLIDATED BALANCE SHEETS
CONSOLIDATED STATEMENTS OF CAPITALIZATION
CONSOLIDATED STATEMENTS OF INCOME
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Completion of Electric Utility Reorganization Plan

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

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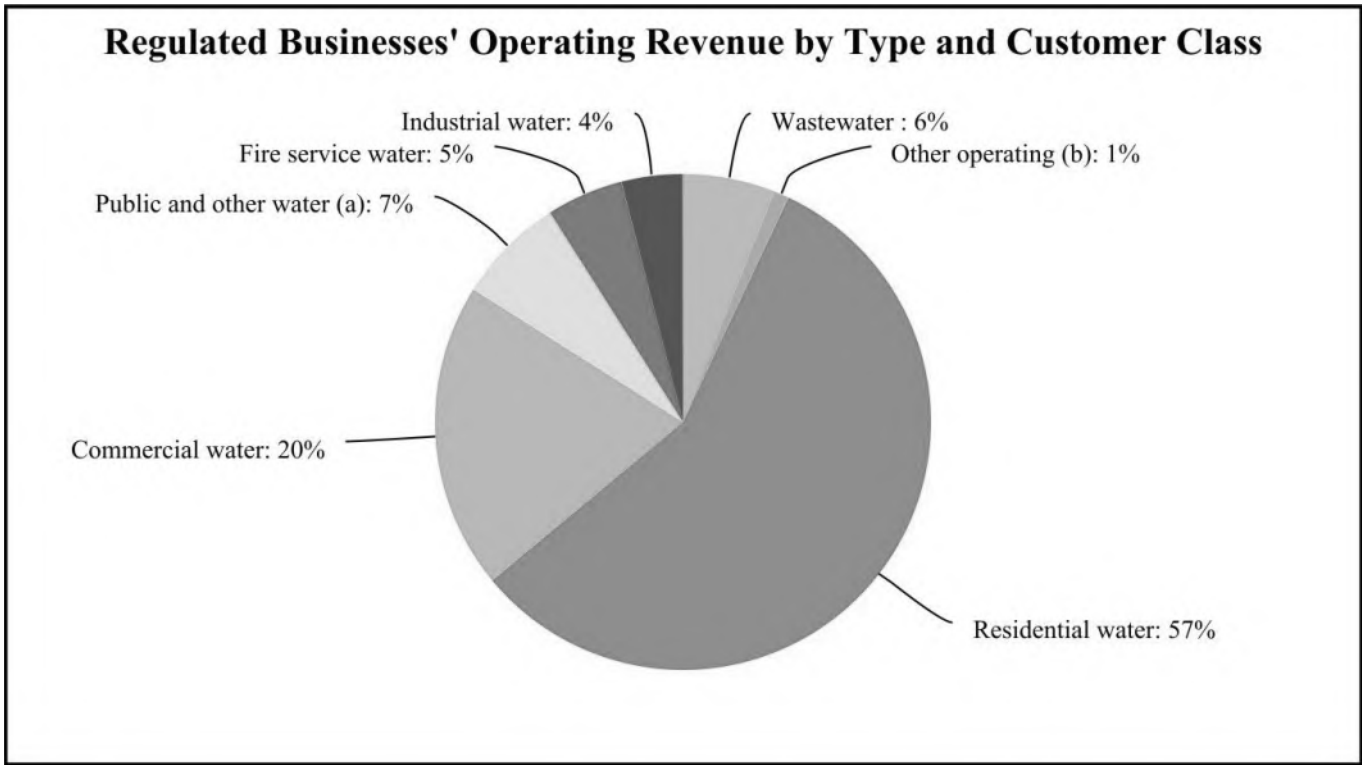
The following chart depicts the allocation of the Company's Regulated Businesses' operating revenue of $3,384 million by type, including a breakout of the total water services revenues by class of customer, for the year ended December 31, 2021:



(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:

	2021		2020		2019	
(In thousands)	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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Interconnections

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
	$	4,410

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
	$	15,670

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

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

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ARTESIAN RESOURCES

OVER 100 YEARS OF SUPERIOR SERVICE

Artesian Water Company ▲ Artesian Wastewater Management ▲ Artesian Utility Development ▲ Artesian Water Pennsylvania ▲ Artesian Water Maryland ▲ Artesian Wastewater Maryland

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

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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.

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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' 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.

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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.

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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.

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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

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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 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

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Carlton Fair Value Determination
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Lead and copper may enter drinking water primarily through plumbing materials. The Company is required to comply with the Lead and Copper Rule established by the EPA and administered by the DEP. The Company must monitor drinking water at customer taps for compliance with this rule. If lead concentrations exceed an action level, the Company must undertake a number of additional actions to control corrosion, inform the public about steps they should take to protect their health and may be required to replace lead service lines under its control. See "Management's Discussion and Analysis – Environmental Matters" for a discussion of the Company's compliance with the Lead and Copper rule.

The DEP and the Susquehanna River Basin Commission, or SRBC, regulate the amount of water withdrawn from streams in the watershed to assure that sufficient quantities are available to meet the needs of the Company and other regulated users. Through its Division of Dam Safety, the DEP regulates the operation and maintenance of the Company's impounding dams. The Company routinely inspects its dams and prepares annual reports of their condition as required by DEP regulations. The DEP reviews these reports and inspects the Company's dams. The DEP most recently inspected the Company's dams in 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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Carteret County Water System

Utility Asset Purchase Agreement

THIS UTILITY ASSET PURCHASE AGREEMENT ("**Agreement**") is made and entered into as of the 18th day of October, 2021 (the "**Effective Date**"), by and between **CAROLINA WATER SERVICE, INC. OF NORTH CAROLINA**, a North Carolina corporation with an address of 500 West Monroe St., Suite 3600, Chicago, IL 60661 (the "**Buyer**"), and **Carteret County**, a North Carolina local government, with an address of 210 Turner Street, Beaufort NC, 28576 (the "**Seller**").

W I TN E S S E T H:

WHEREAS, Seller owns, maintains, and operates utility assets that consist generally of (2) wells used for water production, (3) booster pump stations, (3) elevated storage tanks (1) water treatment plant, and distribution facilities including water mains, valves, and service lines used to provide water service in the Service Area including any real property;

WHEREAS, Buyer is a public utility that furnishes retail water and wastewater services to the public in various portions of the State of North Carolina;

WHEREAS, Buyer desires to purchase, and Seller desires to sell, the Purchased Assets upon the terms and conditions set forth in this Agreement, and

NOW, THEREFORE, in consideration of the mutual covenants, conditions, representations, warranties and agreements contained herein, the parties agree as follows:

ARTICLE I

DEFINITIONS AND CONSTRUCTION SECTION

As used in this Agreement, the following terms shall have the meanings as defined herein unless the context requires otherwise:

"Assigned Permits" has the meaning set forth in Section 2.02(A)(6).

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"**Business**" means the Utility System and the Purchased Assets.

"Business Day" means any day except Saturday and Sunday or any other day on which commercial banks located in Beaufort, North Carolina are authorized or required by law to be closed for business.

"Closing" or **"Closing Date"** has the meaning set forth in Section 9.01 of this Agreement.

"Connection Charges" means the funds collected from new customers of the Utility System at or prior to initial connection to the Utility System in order to defray the cost of making utility service available.

"Customer Deposits" means all funds or deposits required to be made by customers of the Utility System to Seller upon becoming a customer, which deposit shall be returned to customers upon termination of services to said customer if said customer does not have any outstanding indebtedness owed to the Utility System upon termination. Said funds are being held by Seller. A listing of said Customer Deposits is attached hereto as **Exhibit F** and incorporated herein by this express reference. Said list shall be updated at Closing to reflect additions and subtractions from said listing from the Effective Date until the date of Closing.

"Easements" means easements not within a plat or dedicated roadway as set forth in **Exhibit B**.

"Encumbrance" means any charge, claim, condition, equitable interest, lien, option, pledge, security interest, mortgage, right of way, easement, encroachment, servitude, right of first option, right of first refusal or similar restriction, including any restriction on use, voting (in the case of any security or equity interest), transfer, receipt of income or exercise of any other attribute of ownership.

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"Excluded Assets" means those assets, properties and rights, both tangible and intangible, real and personal, listed on **Exhibit C**.

"Fee Parcels" means the fee simple real property listed in **Exhibit D** and all fixtures and appurtenant interests belonging or appertaining thereto.

"Governmental Authorization" means any approval, authorization, license, order, certificate of public convenience and necessity, registration or permit issued, granted, given or otherwise made available by or under the authority of any Governmental Body.

"Governmental Body" means any governmental authority of any nature, including, but not limited to, the U.S. Environmental Protection Agency ("**EPA**"), the North Carolina Utilities Commission (NCUC), and The North Carolina Department of Environmental Quality (DEQ).

"Permitted Real Estate Encumbrances" shall mean all rights of way, easements and covenants of record pertaining to the Fee Parcels and the Easements so long as the same do not materially impair the use, value or marketability of any Fee Parcel or Easement. Materiality of impairment shall be determined by Buyer at its sole, reasonable discretion. Permitted Real Estate Encumbrances shall not include any equitable interest, lien, option, pledge, security interest, mortgage, right of first option, right of first refusal or similar restriction, including any restriction on voting (in the case of any security or equity interest), transfer, receipt of income or exercise of any other attribute of ownership.

"Personal Property" means the personal property that is owned and used by Seller in operation of the Utility System and identified on **Exhibit E**.

"Purchased Assets" has the meaning set forth in Section 2.02 hereof.

"Service Area" means the service areas identified in **Exhibit A**.

"Title Commitment" means the title insurance commitment with respect to the Fee Parcels in an amount selected by Buyer in its discretion and not to exceed the Purchase Price,

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issued by the Title Company committing the Title Company to issue and deliver the Title Policy to Buyer upon compliance with the requirements stated in Schedule B, Section 1 thereof, subject to the terms and conditions contained therein.

"Title Company" means the company identified by Buyer to issue the Title Commitment and Title Policy.

"Title Policy" means the ALTA owner's policy of title insurance, issued by the Title Company in accordance with the Title Commitment that meets the requirements of Section 3.03 of this Agreement.

"Utility System" means (1) the Fee Parcels, (2) the Easements, and (3) the Personal Property used to provide water utility service in the Service Area.

ARTICLE II

PURCHASE AND SALE OF ASSETS

SECTION 2.01. PURCHASE AND SALE COVENANT. At Closing, Buyer shall purchase from Seller and Seller shall sell to Buyer the Purchased Assets, upon the terms and subject to the conditions set forth in this Agreement.

SECTION 2.02. PURCHASED ASSETS.

(A) The Purchased Assets consist of the following:

(1) The Fee Parcels.

(2) The Easements, together with any other easement, license and right of way rights possessed by Seller at Closing, whether identified prior to or after Closing.

(3) The Governmental Authorizations.

(4) The Personal Property, including, but not limited to, all water production, treatment, storage, supply and distribution facilities, pumps, pumping stations, tanks, plants, wells, transmission mains, distribution mains, supply pipes, pipelines, storage tanks, standpipes,

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hydrants, valves, meters, meter boxes, service connections, machinery, equipment, parts, tools, chemicals, supplies, inventories, office buildings and all other physical facilities, equipment, appurtenances and property installations used in the operation of the Utility System, plans, and third party warranties that relate to the Personal Property or completed or in progress construction.

(5) To the extent transferable under applicable law or with the consent of any third-party, if necessary and obtained, any intellectual property owned by Seller and relating to the Business including (i) patents, patent disclosures, trademarks, service marks, trade dress, trade names, logos, copyrights and mask works, and all registrations, applications and goodwill associated with the foregoing, (ii) trade secrets, know-how and confidential business information (including current and planned methods and processes, client and customer lists and files, billing history for each customer, current and anticipated client and customer requirements, vendor and supplier lists and files, price lists, market studies, business plans, business opportunities and financial data), and (iii) rights in electronic mail addresses and in telephone, facsimile, cable or similar numbers used by Seller.

(6) To the extent transferable under applicable law or with the consent of any third-party, all permits, authorizations, filings, approvals and licenses possessed by Seller, or through which Seller has rights, that are used, useable or useful in the operation of the Business or the use or enjoyment or benefit of the Purchased Assets (collectively, "**Assigned Permits**").

(7) To the extent transferable under applicable law or with the consent of any third-party, if necessary and obtained all consent orders issued by a Governmental Body to which Seller is subject, or through which Seller has obligations, that relate to the operation of the Utility System or the use or enjoyment or benefit of the Purchased Assets, and to which Buyer agrees, in its sole discretion, to assume.

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(8) All Connection Charges collected by Seller prior to Closing.

(9) All records, documents and knowledge, whether written, electronic, recorded or any other form, related to the Business, including all production records, engineering records, purchasing and sales records, accounting records, business plans, budgets, contracts, easements and licenses, cost and pricing information, correspondence, prospective client information, customer and vendor lists and data, property records and other data, information, records and files, wherever located (including any such records maintained in connection with any computer system) related to the Business. Seller may retain copies of any records it deems necessary to substantiate any government or business returns or reports filed or due to be filed, including tax returns, which relate to events prior to Closing. Seller, at its expense, will provide originals of such records to Buyer upon Buyer's request.

(10) All purchase order forms, forms, labels, stationery, shipping materials, catalogues, brochures, artwork, photographs and advertising materials which relate to the Business.

(11) All rights and choses in action of Seller arising out of occurrences before or after the Closing relating to the Business, except those rights expressly retained by Seller under this Agreement.

(B) No later than the Closing, Seller shall provide Buyer (or provide Buyer with unrestricted, 24-hour access to) copies of current customer records, as-built surveys and water and wastewater plans, plats, engineering and other drawings, designs, blueprints, plans and specifications, maintenance and operating manuals, engineering reports, calculations, studies, reports made to Governmental Bodies, Assigned Permits, permit applications, non-corporate

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accounting, and non-corporate business records, controlled by or in the possession of Seller that relate to the description and operation of the Utility System.

SECTION 2.03. EXCLUDED ASSETS. Notwithstanding any other provision of this Agreement that may be construed to the contrary, the Purchased Assets do not include the Excluded Assets as shown on **Exhibit C**.

SECTION 2.04. PURCHASE PRICE. The Purchase Price for the Purchased Assets is Nine Million, Five Hundred Thousand and no/100 dollars ($9,500,000), subject to prorations and adjustments set forth in this Agreement. The Purchase Price shall be payable by Buyer to Seller in immediately available funds at Closing, by wire transfer, pursuant to wire instructions to be provided by Seller to Buyer at or prior to Closing. The current deposit of Four Hundred Seventy Five Thousand and no/100 dollars ($475,000) shall be applied to the purchase price.

SECTION 2.05. ASSUMED OBLIGATIONS. With the sole exception of Buyer's agreement to provide water service to individual customers through the Utility System following the Closing, Buyer shall not assume and shall not be liable for any debt, liabilities or contractual obligations of any other party of any nature whatsoever. Seller shall remain fully and solely liable for any and all debts, obligations or liabilities arising from the Purchased Assets and/or Seller's operation of the Utility System prior to the Closing.

SECTION 2.06. WITHHOLDING TAX. Buyer shall be entitled to deduct and withhold from the Purchase Price all taxes that Buyer may be required to deduct and withhold under any provision of any applicable federal, state or other tax law or regulation. All such withheld amounts shall be treated as delivered to Seller hereunder. All withholding tax issues will be determined by Buyer and submitted to Seller at least fifteen (15) days before Closing.

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ARTICLE III

DUE DILIGENCE ISSUES

SECTION 3.01. PROVISION OF INFORMATION AND COOPERATION BY SELLER.

(A) Seller has provided or will provide to Buyer within 15 days after the Effective Date an inventory, updated through the Effective Date, of equipment, parts and other Personal Property used by Seller in connection with the operation of the Utility System.

(B) After the Effective Date, Seller shall cooperate with Buyer in providing updated information, financial and other reports to Buyer's representatives during normal business hours upon reasonable advance notice.

(C) After the Effective Date, Seller will give to Buyer, its officers, directors, employees, accountants, counsel and other representatives free and full access to and the right to inspect, during normal business hours, the Utility System and all of the premises, properties, assets, records, contracts and other documents relating to its Business and operations, and shall permit them to consult with the officers, employees, accountants, counsel and agents of Seller for the purpose of making such investigation of the business and operations of Seller as Buyer shall desire to make, provided that such investigation shall not unreasonably interfere with the business or operations of Seller and Buyer shall provide reasonable advance notice.

(D) After the Effective Date, Seller shall make any existing plats, surveys, plans or specifications for the Utility System in Seller's possession available to Buyer, or its representatives, for inspection during normal business hours upon reasonable advance notice.

(E) After the Effective Date, Seller shall cooperate with any request by Buyer to test the levels of Per- and polyfluoroalkyl substances ("**PFAS**") in the Utility System and/or the

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Purchased Assets, such testing may include, but is not limited to testing the levels of PFOA, PFOS, GenX, HFPO-DA, and testing for any other chemicals deemed necessary by Buyer.

SECTION 3.02. DUE DILIGENCE DETERMINATIONS.

Buyer shall have one hundred twenty (120) Business Days from the Effective Date within which to conduct its due diligence. Thereafter, Buyer shall have fifteen (15) Business Days within which to terminate this Agreement in its sole discretion by delivering notice of its termination as provided in Section 11.02; otherwise, Buyer and Seller shall proceed to Closing as set forth in Article IX. Upon a termination of this Agreement under Section 3.02, Seller and Buyer shall have no liability and no further obligation to each other under this Agreement.

SECTION 3.03. CURRENT EVIDENCE OF TITLE.

(A) Seller shall furnish or have delivered to Buyer from the Title Company within 30 days after the Effective Date, at Buyer's expense, the following:

(1) A Title Commitment issued by the Title Company to insure title to each parcel listed therein in an amount selected by Buyer in its discretion and not to exceed the Purchase Price, naming Buyer as the proposed insured and having the effective date as set forth therein, wherein the Title Company will have agreed to issue an ALTA form owner's title insurance policy, with North Carolina modifications; and

(2) Copies of all recorded documents listed as special Schedule B-2 exceptions thereunder and all deeds vesting title in and to the Seller.

(B) The Title Commitment shall include the Title Company's requirements for issuing the Title Policy, which shall be met by Seller as provided in Section 3.03(E) on or before the Closing Date (including those requirements that must be met by releasing or satisfying monetary Encumbrances, but excluding Encumbrances that will remain after Closing as agreed to by the Buyer).

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(C) If any of the following occur, it shall constitute a Title Objection:

(1) The Title Commitment or other evidence of title or search of the appropriate real estate records discloses that any party other than Seller has title to the insured estate covered by the Title Commitment;

(2) Any title exception is disclosed in Schedule B to any Title Commitment that is not one of the Permitted Real Estate Encumbrances; or

(3) Any current survey or other due diligence discloses any matter that Buyer reasonably believes could materially and adversely affect Buyer's material use and enjoyment of the Fee Parcels described therein;

Buyer shall notify Seller in writing of such matters within 30 days prior to theClosing Date.

(D) Seller shall use its best efforts to cure each Title Objection and take all steps required by the Title Company to eliminate each Title Objection as an exception to the Title Commitment including the payment of money to cure any such Title Objections that may require such payment or the escrow of funds with the Title Company as may be required by the Title Company. Any Title Objection that the Title Company is willing to insure over, on terms acceptable to Seller and Buyer, is herein referred to as an "**Insured Exception**." The Insured Exceptions, together with any title exception or matters disclosed by any survey and not objected to by the Buyer in the manner aforesaid, shall be deemed to be acceptable to Buyer. In the event Seller is unable to cure a Title Objection and/or Buyer objects to an Insured Exception, Buyer shall have the right to terminate this Agreement and shall have no liability or further obligation under this Agreement.

(E) Seller shall use its best efforts to comply with the requirements of Schedule B Section 1 of the Title Commitment. At the Closing, Seller shall identify any Schedule B Section 1

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requirements that cannot be satisfied as of the Closing ("**Post-Closing Schedule B Requirements**"). Buyer and Seller shall agree on a post-Closing process to satisfy these requirements. Seller shall indemnify Buyer as to all Post-Closing Schedule B Requirements that are not satisfied in accordance with the agreed upon post-Closing process. Seller shall cooperate with Buyer in satisfying the Post-Closing Schedule B Requirements.

(F) Buyer shall have the right, but not the obligation, to do such surveys on the Fee Parcels as Buyer desires. Surveys procured by Buyer shall be at the sole cost and expense of Buyer.

(G) If Buyer desires to have any standard survey exceptions deleted or modified in the Title Policy, Buyer shall deliver to Seller's attorneys, no later than 30 days prior to the Closing Date, properly certified and current original surveys of the specified Fee Parcels that comply with North Carolina law.

SECTION 3.04. ENVIRONMENTAL PROVISIONS.

(A) For purposes of this Agreement, the following terms shall have the following meanings:

(1) "**Hazardous Materials**" means any substance or material subject to regulation by any federal, state or local Governmental Body under any Environmental Law as a hazardous material, hazardous substance, hazardous waste, pollutant, contaminant, toxic waste, toxic substance as those terms or terms of similar import are defined, identified or regulated under any Environmental Laws, and any petroleum and petroleum products, by-products or breakdown products and any substance or material present in concentrations which exceed applicable standards or allowable limits implemented and enforced by any Governmental Body with authority to implement and/or enforce Environmental Laws;

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(2) "**Environmental Laws**" shall include all federal, state and local environmental statutes, laws, regulations, ordinances, injunctions, judgments, orders, or other decrees of any governmental authority pertaining to the protection of the environment and including, but not limited to, the Comprehensive Environmental Response, Compensation and Liability Act; the Resource Conservation and Recovery Act; the Clean Water Act, also known as the Federal Water Pollution Control Act; the Safe Drinking Water Act; the Oil Pollution Act of 1990; the Toxic Substances Control Act; the Superfund Amendments and Reauthorization Act of 1986; the Clean Air Act; the Emergency Planning and Community Right-to-Know Act; the Federal Insecticide, Fungicide and Rodenticide Act; the Endangered Species Act; and any comparable state statute, law, regulation, ordinance, injunction, judgment, order, or other decree. Any reference to a legislative act or regulation shall be deemed to include all amendments thereto and all regulations, orders, decrees, judgments, opinions, directives or notices issued thereunder.

(3) "**Environmental Condition**" shall mean any condition or circumstance related to the Purchased Assets, whether created by Seller or any other party, which (1) required or requires abatement or correction under an Environmental Law, or (2) has given or may give rise to any civil or criminal liability under an Environmental Law, or (3) has created or may create a public or private nuisance, including the presence of asbestos, PCB's, hazardous substances, petroleum products, radioactive waste or radon, on, in or about the Purchased Assets.

(B) Except as set forth in Schedule 3.04(B), after diligent inquiry and investigation, Seller represents and warrants to Buyer that it has obtained and continues to possess all environmental permits and other Governmental Authorizations that are required under Environmental Laws in connection with the business and operation of the Utility System, has filed such timely and complete renewal applications as may be required prior to the Closing Date, and also has complied with all reporting and record keeping requirements under Environmental Laws.

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(C) Except as set forth in Schedule 3.04(C), after diligent inquiry and investigation, Seller represents and warrants to Buyer that: (1) the Utility System has been and is in full compliance with all applicable Environmental Laws and environmental permits and there are no past or present events, conditions, circumstances, activities, practices, incidents, actions or plans pertaining or relating to the Purchased Assets which may impede or prevent continued compliance with the Environmental Laws or which may give rise to any civil or criminal liability under any of the Environmental Laws; (2) Seller has been and is in compliance with all orders, decrees, judgments and notices issued against Seller under or in connection with any of the Environmental Laws; and (3) there are no Environmental Conditions. Except as set forth in Schedule 3.04(C), Seller has no knowledge of any basis for a violation, alleged violation or liability.

(D) Except as set forth in Schedule 3.04(D), after diligent inquiry and investigation, Seller represents and warrants to Buyer that it has not received notice of any violation, alleged violation or liability arising under any applicable federal, state or local statutes, laws and regulations (including, without limitation, any applicable environmental, building, zoning, or other law, ordinance or regulation) materially or adversely affecting the Purchased Assets or Utility System.

(E) Except as set forth in Schedule 3.04(E), after diligent inquiry and investigation, Seller represents and warrants to Buyer that there are no Hazardous Materials present on, in or under, or in the environment of the Utility System that are not in compliance with the Environmental Laws, including any Hazardous Materials contained in barrels, aboveground or underground storage tanks, equipment (whether moveable or fixed) or other containers, either temporary or permanent. Seller has not disposed of any Hazardous Materials on the Fee Parcels or Easements, nor has Seller removed Hazardous Materials from the Fee Parcels or Easements, except as provided by law.

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(F) Buyer, at its expense, may perform assessments, as it deems appropriate, including Phase I Environmental Site Assessments ("**ESA**") pursuant to applicable ASTM standards and Phase II Environmental Site Assessments for recognized environmental conditions identified in the Phase I Environmental Site Assessments. Seller shall cooperate with Buyer and its agents by providing reasonable access to the Utility System and Fee Parcels so that Buyer or its agents may conduct any Environmental Site Assessments.

(G) If any ESA reveals Hazardous Materials on the Fee Parcels or Easements that require remedial action, Buyer, in its sole discretion, shall either: (a) demand that Seller take prompt action as necessary to expeditiously remediate the reported Hazardous Materials and provide the Buyer with copies of all documentation verifying that all remediation has occurred and applicable regulatory requirements have been satisfied; (b) attempt to negotiate with Seller a lesser Purchase Price for the Purchased Assets and proceed to Closing under the terms contained herein; provided, however, that if Seller and Buyer are unable to negotiate a lesser Purchase Price within twenty (20) days of Buyer's first offer to Seller, Buyer may terminate this Agreement; or (c) terminate this Agreement. Upon any termination under this Section 3.04, Seller and Buyer shall have no liability and no further obligation to each other under this Agreement.

ARTICLE IV

REPRESENTATIONS AND WARRANTIES

SECTION 4.01. REPRESENTATIONS AND WARRANTIES OF SELLER. Seller represents and warrants to Buyer as follows:

(A) Seller is duly organized, validly existing and has an active status under the laws of the State of North Carolina. Seller has the power and authority to enter into this Agreement and all related agreements and to consummate and perform the terms and conditions and transactions

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contemplated hereby and has duly and validly authorized the execution of this Agreement and all related documents and agreements by all necessary corporate action. This Agreement and all related agreements constitute the valid and binding obligation of Seller.

(B) Except as set forth in Schedule 4.01(B), there are no pending or threatened legal actions, claims, suits, mediations, arbitrations, investigations or other legal or administrative proceedings pending or threatened against Seller that could affect the Purchased Assets or Seller's ability to transfer the Purchased Assets and there exist no facts that might result in any action, claim, suit, mediation, arbitration, investigation or other proceedings that might result in any adverse change in the Purchased Assets.

(C) Except as set forth in Schedule 4.01(C), Seller holds all necessary Governmental Authorizations to operate the Utility System, is not in default under any Governmental Authorization and Seller has not received notice of any claim of default with respect to any Governmental Authorization. Seller is not in default with respect to any judgment, order, writ, verdict, injunction, decree or award applicable to it of any court or other government instrumentality or arbitrator having jurisdiction over it as pertaining to the Purchased Assets.

(D) The execution and performance of this Agreement by Seller does not and will not violate or result in the breach of any term, or condition, or require the consent of any person not a party hereto under: (i) the by-laws, charters or ordinances of Seller or (ii) any Governmental Authorization or material mortgage, indenture, contract, lease, license or other instrument, document or understanding, oral or written, to which Seller is a party or subject. This Agreement does not require any further approvals of any other party, other than the NCDEQ and NCUC, does not violate any law, ordinance or regulation, and does not conflict with any order or decree.

(E) Except as set forth in Schedule 4.01(E), all agreements, contracts, commitments, leases, certificates, permits and other instruments related to the Purchased Assets or to which Seller

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is a party are valid and enforceable in accordance with their terms, are in good standing, and the parties thereto are in compliance with the provisions thereof. Except as set forth in Schedule 4.01(E), no party is in default in the performance, observance or fulfillment of any obligation, covenant or condition contained therein, and no event has occurred, which with or without the giving of notice or lapse of time, or both, would constitute a default thereunder.

(F) All returns of taxes, information and other reports required to be filed in any jurisdiction by Seller have been timely filed and all such tax returns are true, correct and complete in all material respects. All taxes applicable to Seller for the Purchased Assets that are due and payable have been paid and there are presently no claims for tax deficiencies pending against Seller by any taxing authority, nor does Seller know of any basis for the making of any claim by any taxing authority for any tax deficiency against Seller.

(G) Seller has not dealt with a broker, salesman, or finder in connection with any part of the transaction contemplated by this Agreement, and, insofar as it knows; no broker, salesman or other person is entitled to any commission or fee with respect to such transaction as a result of Seller's actions.

(H) Except as set forth in Schedule 4.01(H) and the Permitted Real Estate Encumbrances, and without limiting the generality of any other provision of this Section 4.01, Seller warrants that Seller is the sole legal owner and has full right, power and ability to convey the fee simple absolute interest and good and marketable title to the Fee Parcels, free and clear of all liens, claims, Encumbrances and interests in the Fee Parcels.

(I) Except as set forth in Schedule 4.01(I), and without limiting the generality of any other provision of this Section 4.01, Seller warrants that, as of Closing, Seller is the sole legal owner and has full right, power and ability to convey to Buyer clear title to all of the Purchased

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Assets. Except as set forth in Schedule 4.01(I), Seller has good and marketable title to the Purchased Assets, free and clear of all liens, claims, Encumbrances and interests.

(J) Seller has all agreements, contracts, commitments, leases, and other instruments required to conduct the Business as it has been and is now being conducted and to own and operate the Business.

(K) Seller is not party to, or subject to the provision of, any judgment, order, writ, injunction or decree of any court or of any governmental official, agency or instrumentality relating to the Utility System and/or the Purchased Assets.

(L) Seller's environmental representations and warranties contained in Section 3.04 are true and accurate and incorporated by reference into this Section 4.01.

(M) Except as set forth in Schedule 4.01(M), there are no liabilities or obligations of Seller, either accrued, absolute, contingent or otherwise, relating to the Purchased Assets. For purposes of this Agreement, the term liabilities shall include, without limitation, any direct or indirect indebtedness, guaranty, endorsement, claim, loss, damage, deficiency, accounts payable, cost, expense, obligation or responsibility either accrued, absolute, contingent or otherwise.

(N) The Purchased Assets and the Utility System are in compliance and at the time of Closing shall be in compliance in all material respects with all Governmental Body requirements applicable to the Utility System and Purchased Assets, including without limitation all governmental requirements pertaining to health, safety or environmental matters. Except as set forth in Schedule 4.01(N), Seller has not received any notice from the NCDEQ, NCUC, or EPA or any other Governmental Body having jurisdiction of any violation or alleged non-compliance with any governmental requirements applicable to Seller, the Purchased Assets or the Utility System.

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(O) Seller has duly and timely filed all reports, responses, assessments, and other filings required of it with the NCDEQ, NCUC and any other Governmental Body having jurisdiction over Seller and the operation and maintenance of the Utility System.

(P) Seller maintains in effect general liability insurance coverage with limits of liability of not less than $1,000,000 per occurrence/$1,000,000 in aggregate per policy year.

(Q) All leases, licenses, rights of way, and easements related in any manner to the Purchased Assets and all other instruments, documents and agreements pursuant to which Seller has obtained the right to use any real property in connection with the Purchased Assets are in good standing, valid, effective and assignable in accordance with their respective terms, and with respect thereto, there is no existing default or event which could constitute a default. Seller possesses and will assign to Buyer at Closing all such property rights necessary to operate the Purchased Assets.

(R) All Easements required or necessary to operate the Utility System and Purchased Assets as currently configured have been lawfully obtained and maintained by Seller and are validly in existence and of public record in the Offices of the Recorder of Deeds in and for Carteret County, North Carolina and are transferable to Buyer in accordance with their terms and without cost to Buyer. Seller has good and valid rights to occupy and to obtain access to the areas where the distribution lines and other facilities of the Purchased Assets are located.

(S) Seller has not concealed from Buyer any facts which Seller knows to be material to the Purchased Assets or the Utility System or the operation and maintenance thereof. Seller has disclosed to Buyer all agreements and contracts affecting the Purchased Assets or the Utility System or the operation and maintenance thereof, whether such agreements and contracts are being transferred or assigned to Buyer. No representation or warranty made by Seller in this Agreement and no information or Schedule furnished by Seller to Buyer (i) contains any untrue statement of a material fact or (ii) omits a material fact the statement of which is necessary in order to make the

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statements contained in this Agreement or in such information or Schedule, in light of the circumstances under which they are made, not misleading.

(T) Except as expressly disclosed herein, the Utility System and Purchased Assets are in good operating condition and repair relative to their age and type.

(U) There are no conditions or developments existing or, to the knowledge of Seller, threatened which would have a material adverse effect on the Purchased Assets.

(V) Seller is not in any violation of any law, ordinance or governmental rule or regulation to which it or its business, operations, assets or, properties is subject and has not failed to obtain, or to adhere to the requirements of any certificate or other Governmental Authorization necessary to the ownership of its assets and properties or to the conduct of its business.

(W) Seller is not a party to any contract for the purchase of, or payment for supplies, equipment or for services related to the Purchased Assets, except such contracts that shall not survive Closing and/or Contracts set forth on Exhibit XX.

(X) The Business has no funds, loans, developer contributions, parent company contributions, other liabilities or equity contributions that could be considered contributions in aid of construction or advances in aid of construction.

(Y) Seller is not a party to any contract for future payment of refunds under any extension agreement, customer deposit agreement or similar agreement with respect to the Purchased Assets.

(Z) As of the Closing, (if applicable) Seller's bonds, if any, will be defeased, and any and all liens and encumbrances on the Purchased Assets will have been removed. The defeasance will be done in a proper and lawful manner.

(AA) Each Exhibit and Schedule contains a true and complete list of the information described thereon.

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(BB) All of the tangible property included in the Purchased Assets is usable in the regular course of business.

(CC) The data contained in the customer records provided to Buyer is true and accurate.

SECTION 4.02. REPRESENTATIONS AND WARRANTIES OF BUYER. Buyer represents and warrants to Seller as follows:

(A) Buyer is duly organized, validly existing and has an active status under the laws of the State of North Carolina. Buyer has the power and authority to enter into this Agreement and to perform the terms and conditions of this Agreement.

(B) Buyer is not subject to, nor a party to any proceeding, legal requirement or any other restriction of any kind or character that would prevent consummation of the transactions contemplated by this Agreement.

(C) Buyer has not dealt with a broker, salesman, or finder in connection with any part of the transaction contemplated by this Agreement, and, insofar as it knows, no broker, salesman or other person is entitled to any commission or fee with respect to such transaction as a result of Buyer's actions.

(D) The execution and performance of this Agreement by Buyer does not and will not violate or result in the breach of any term or condition, or require the consent of any person not a party hereto under: (i) the by-laws of Buyer; or (ii) any material mortgage, indenture, contract, lease, license or other instrument, document or understanding, oral or written, to which Buyer is a party or subject.

ARTICLE V

ISSUANCE AND TRANSFER OF GOVERNMENTAL AUTHORIZATIONS

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SECTION 5.01. ISSUANCE AND TRANSFER OF GOVERNMENTAL AUTHORIZATIONS. Within thirty (30) days of the expiration of the due diligence period provided in Section 3.02 above, Seller and Buyer jointly shall apply for, and thereafter diligently seek and pursue, the issuance, cancellation and/or transfer of all Governmental Authorizations necessary for Buyer to operate the Utility System. Each party shall be responsible for its own fees and costs in this regard. Any filing fees incurred in seeking such Governmental Authorizations shall be split evenly between the parties.

ARTICLE VI

CONDITIONS PRECEDENT TO THE BUYER'S OBLIGATION TO CLOSE

Buyer's obligation to purchase the Purchased Assets and to take the other actions required to be taken by Buyer at the Closing is subject to the satisfaction, at or prior to the Closing, of each of the following conditions (any of which may be waived by the Buyer, in whole or in part):

SECTION 6.01. SELLER'S PERFORMANCE. All of the covenants and obligations that Seller is required to perform or to comply with pursuant to this Agreement at or prior to the Closing (considered collectively), and each of these covenants and obligations (considered individually), shall have been duly performed and complied with in all material respects.

SECTION 6.02. SELLER'S REPRESENTATIONS AND WARRANTIES. All representations and warranties made by Seller in this Agreement shall be true, correct and complete as of the Effective Date, and no breach or violation of such representations and warranties shall have occurred from the Effective Date up to and including the Closing Date.

SECTION 6.03. ADDITIONAL DOCUMENTS. Seller shall have caused the documents and instruments required by this Agreement and the following documents to be delivered (or made available) to the Buyer, in a form reasonably satisfactory to the Buyer:

(A) Certified copies of all resolutions reflecting approval of this Agreement by Seller;

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(B) Certified copies of all additional resolutions of Seller and/or minutes of the meetings of the Board of Commissioners of Seller as Buyer may reasonably request;

(C) Such other documents as Buyer may reasonably request for the purpose of:

(1) Evidencing the performance by Seller of, or the compliance by Seller with, any covenant or obligation required to be performed or complied with by Seller; or

(2) Evidencing the release of all liens, security interests, and other encumbrances other than Permitted Real Estate Encumbrances.

SECTION 6.04. NO CONFLICT; NO LITIGATION AFFECTING CLOSING. Neither the consummation nor the performance of this Agreement will, directly or indirectly, materially contravene or conflict with or result in a material violation of or cause Buyer to suffer any material adverse consequence under any applicable Governmental Authorization or other legal order. On the Closing Date, there shall not have been issued and in effect any injunction or similar legal order prohibiting or restraining consummation of any of the transactions contemplated in this Agreement and no legal action or governmental investigation or inquiry which might reasonably be expected to result in any such injunction or order shall be pending or threatened before any court or governmental agency and no suit, action or proceeding to obtain damages or other relief in connection with this Agreement shall be pending or threatened before any court or governmental agency.

SECTION 6.05. GOVERNMENTAL AUTHORIZATIONS. Buyer shall have received all Governmental Authorizations needed for the transfer of the Purchased Assets, including, but not limited to, adoption and approval of an Order from the NCUC, authorizing: (a) the transfer of the Purchased Assets as contemplated by this Agreement; (b) Buyer to provide water services to the existing customers in the respective Service Area; and (c) Seller to abandon such Service Area. Such Governmental Authorizations, orders, authorizations and approvals by

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the NCDEQ, NCUC, and other governmental authorities shall be in form and substance satisfactory to Buyer in its sole discretion. All Governmental Authorizations shall have been issued, cancelled or transferred, as the case may be, in accordance with Article V on terms satisfactory to Buyer.

SECTION 6.06. MATERIAL DAMAGE. The Purchased Assets shall not be, or be threatened to be, materially adversely affected by fire, explosion, earthquake, disaster, accident, cessation or interruption of utility or other services, flood, drought, lack of water supply, contamination of water supply, embargo, riot, civil disturbance, uprising, activity of armed forces or act of God or public enemy, or any other event or occurrence.

SECTION 6.07. TESTING. Buyer shall be satisfied in its sole discretion with the test results of any testing of the levels of **PFAS** in the Utility System and/or the Purchased Assets, including, but not limited to testing of the levels of PFOA, PFOS, GenX, HFPO-DA and testing for any other chemicals deemed necessary by Buyer.

SECTION 6.08. SATISFACTION OF BUYER. All actions, proceedings, resolutions, instruments and documents required to carry out this Agreement or incidental hereto and all other related matters shall have been approved on the Closing Date by Buyer in the exercise of its reasonable judgment.

SECTION 6.09. CONSENTS OR APPROVALS. All consents or approvals required for the assignment of the Contracts shall have been obtained or accommodated in accordance with this Agreement.

ARTICLE VII

CONDITIONS PRECEDENT TO SELLER'S OBLIGATION TO CLOSE

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Seller's obligation to sell the Purchased Assets and to take the other actions required to be taken by Seller at the Closing is subject to the satisfaction, at or prior to the Closing, of each of the following conditions (any of which may be waived by Seller in whole or in part):

SECTION 7.01. BUYER'S PERFORMANCE. All of the covenants and obligations that Buyer is required to perform or to comply with pursuant to this Agreement at or prior to the Closing (considered collectively), and each of these covenants and obligations (considered individually), shall have been performed and complied with in all material respects.

SECTION 7.02. BUYER'S REPRESENTATIONS AND WARRANTIES. All representations and warranties made by Buyer in this Agreement shall be true, correct and complete as of the Effective Date, and no breach or violation of such representations and warranties shall have occurred from the Effective Date up to and including the Closing Date.

SECTION 7.03. NO LITIGATION AFFECTING CLOSING. On the Closing Date, there shall not have been issued and in effect any injunction or similar legal order prohibiting or restraining consummation of any of the transactions contemplated in this Agreement and no legal action or governmental investigation or inquiry which might reasonably be expected to result in any such injunction or order shall be pending or threatened before any court or governmental agency and no suit, action or proceeding to obtain damages or other relief in connection with this Agreement shall be pending or threatened before any court or governmental agency.

ARTICLE VIII

COVENANTS OF SELLER

SECTION 8.01. OPERATION OF THE BUSINESS OF SELLER. Between the Effective Date and the Closing, Seller shall:

(A) Conduct the Business in the ordinary course of business consistent with past practice;

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(B) Confer with Buyer prior to implementing operational decisions relating to the Utility System of a material nature;

(C) Maintain and service the Purchased Assets in a state of repair and condition such that they will be in proper working order at Closing, that complies with legal requirements and is consistent with the requirements and normal conduct of Seller's business;

(D) Comply with all laws, ordinances, rules, regulations, orders and legal requirements and contractual obligations applicable to the operation of Seller's business;

(E) Use its best efforts to maintain its relations and good-will with its suppliers, customers and any others having business relations with it;

(F) Cooperate with Buyer and assist Buyer in identifying the Governmental Authorizations required by Buyer to operate the business from and after the Closing Date and either (i) transferring existing Governmental Authorizations of Seller to Buyer, where permissible, or (ii) assisting Buyer in obtaining new Governmental Authorizations;

(G) Use best efforts to obtain, and cooperate promptly with Buyer's efforts to obtain, all Governmental Authorizations or other consents and approvals and actions required of either Seller or Buyer to complete the transactions contemplated by this Agreement;

(H) Upon request from time to time, execute and deliver all documents, make all truthful oaths, testify in any proceedings, whether before or after Closing, and do all other acts that may be reasonably necessary to consummate this Agreement, all without further consideration;

(I) Maintain all books and records of Seller relating to Seller's business in the ordinary course of business;

(J) Notify and consult with Buyer prior to the initiation, development, or execution of any plans for expansion of or improvements to the Utility System;

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(K) Cooperate with Buyer in sending any customer notices that in Buyer's judgment are necessary or desirable in connection with the transactions contemplated herein (provided, however, that, except for any notices required by any Governmental Body, no such notices shall be sent to customers unless and until Seller has determined to proceed with Closing under this Agreement);

(L) Not allow the levels of raw materials, supplies or other materials included in the Purchased Assets to vary materially from the levels customarily maintained;

(M) Conduct the Business in such a manner that at the Closing the representations and warranties of Seller contained in this Agreement shall be true as though such representations and warranties were made on and as of such date. Furthermore, Seller will use its best efforts to cause all of the conditions to this Agreement to be satisfied on or prior to the Closing Date

(N) Not make any material modification to any Governmental Authorization that relates to the Purchased Assets and maintain in full force and effect until Closing all Governmental Authorizations necessary to operate the Utility System; and

(O) Promptly notify Buyer in writing of (i) any actions, suits, claims, disputes, arbitrations, investigations or proceedings commenced or, to its knowledge, threatened against, relating to or involving or otherwise affecting Seller or the Business that relate to the consummation of the transactions contemplated by this Agreement or of the occurrence of any event (exclusive of general economic factors affecting business in general) of a nature that is or may be materially adverse to the business, operations, properties, assets, prospects or condition (financial or otherwise) of Seller; (ii) the damage or destruction by fire or other casualty of any material portion of the Purchased Assets or if any material portion of Purchased Assets becomes the subject of any proceeding or, to the knowledge of Seller, threatened proceeding, for the taking thereof or any part thereof or of any right relating thereto by condemnation, eminent domain or

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other similar governmental action; and (iii) all events between the Effective Date and Closing which could render any representation or warranty under the Agreement, if restated and republished as of Closing, untrue or incorrect in any material respect.

SECTION 8.02. NOTIFICATION. Between the Effective Date and Closing, Seller shall promptly notify Buyer, in writing, if it becomes aware of (a) any fact or condition that causes or constitutes a breach of this Agreement or (b) the occurrence after the Effective Date of any fact or condition that would or would be reasonably likely to (except as expressly contemplated by this Agreement) cause or constitute a breach of this Agreement. During the same period, Seller also shall promptly notify the Buyer of the occurrence of any breach of any covenant of Seller in this Agreement or the occurrence of any event that may make the satisfaction of the conditions in this Agreement impossible or unlikely.

SECTION 8.03. PAYMENT OF LIABILITIES. Seller shall pay or otherwise satisfy in the ordinary course of business all of its liabilities and obligations as they come due.

ARTICLE IX

CLOSING AND RELATED PROCEDURES AND ADJUSTMENTS

SECTION 9.01. CLOSING DATE AND PLACE. The closing shall be held at such place as is mutually agreed upon by the parties, commencing at 10:00 a.m. local time, within thirty (30) days after approval by the NCUC. The effective time of the legal transfer hereunder shall be 12:01 a.m. on the Closing Date. Notwithstanding the foregoing, if the Closing has not occurred on or before December 1, 2022, either party shall have the right to terminate this Agreement, provided that such termination shall be without prejudice to the rights of either party which has performed its obligations under this Agreement if Closing does not occur because of a material breach of this Agreement by the other party. By mutual agreement of the parties hereto,

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the Closing Date may be extended for a period of up to one hundred twenty (120) days. Consent to the extension of the Closing Date shall not be unreasonably withheld.

SECTION 9.02. RECORDING FEES AND TAXES.

(A) Fees to record the deeds and any other instruments necessary to deliver title to Buyer shall be paid by Buyer.

(B) To the extent that taxes or other charges are due and payable with respect to the deeds and other instruments necessary to deliver title to the Purchased Assets to Buyer, said transfer taxes shall be paid by Buyer. Any income taxes due and payable by Seller as a result of the sale of the Purchased Assets shall be paid by Seller.

SECTION 9.03. ACCOUNTS RECEIVABLE; ACCOUNTS PAYABLE; CUSTOMER DEPOSITS.

(A) All accounts receivable generated for services provided to customers prior to the Closing Date shall belong to Seller and Seller shall have the right and obligation to collect such accounts receivable. All accounts receivable generated for services provided to customers on and after the Closing Date shall belong to Buyer and Buyer shall have the right and obligation to collect such accounts receivable.

(B) All bills for services, materials and supplies rendered in connection with the operation of the Utility System prior to the Closing Date ("Accounts Payable"), shall be paid by Seller.

(C) Seller shall be responsible for all ad valorem or property taxes, prorated through the Closing Date. Taxes due thereafter, if any, shall be paid by Buyer.

(D) Seller shall refund all customer deposits, with interest if such interest is required to be paid by law, regulation or administrative order. Deposits shall not be transferred to Buyer.

SECTION 9.04. CONNECTION CHARGES.

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(A) Connection Charges collected by Seller prior to the Closing Date for which the connection was not completed prior to Closing shall be a Purchased Asset.

(B) Connection Charges collected from and after Closing shall be Buyer's sole and separate property.

SECTION 9.05. METER READINGS. Buyer and Seller agree that final meter readings shall be conducted within seven (7) days immediately prior to Closing. These readings shall be utilized by Seller for the purpose of issuing final bills, and shall constitute the opening readings for Buyer. Buyer shall use these readings to begin the billing cycle for its new customers following Closing, and shall not be responsible for the collection of any amounts due Seller for bills issued by Seller as a result of Seller's final meter reading

SECTION 9.06. COSTS AND PROFESSIONAL FEES.

(A) Each party shall be responsible for securing its own counsel and advisors for representation in connection with the negotiation of this Agreement and all other matters associated with performance, cancellation or closing hereunder, unless otherwise specified herein. Each party shall be responsible for the payment of the fees of its own attorneys, bankers, engineers, accountants, and other professional advisors or consultants in connection herewith. Seller's attorney will be responsible for the recording of the deeds and other instruments necessary to deliver title to Buyer.

SECTION 9.07. RISK OF LOSS. At all times prior to and through the time of Closing, Seller shall maintain adequate fire and extended insurance coverage for the cost of any repairs to the Purchased Assets that may be required as a result of casualty damage. The risk of loss to the Utility System prior to Closing shall be borne by Seller. The risk of loss to the Utility System after Closing shall be borne by Buyer.

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SECTION 9.08. TRANSFER OF UTILITIES. Seller and Buyer will cooperate to transfer utility service, including telephone, electric and gas service providing such service to any of the Purchased Assets as of the Closing Date. In the event service cannot be transferred in the name of Buyer as of the Closing Date, the bills shall be pro-rated as of the Closing Date, and Buyer shall retain from the Purchase Price its estimate of the amount of such bills not yet paid by Seller.

SECTION 9.09. CLOSING PROCEDURE.

(A) On or prior to the Closing Date, Seller and Buyer shall execute all documents necessary to close the transaction.

(B) At the Closing, Seller shall deliver to Buyer the tangible Purchased Assets in substantially the same operating condition and repair, ordinary wear and tear excepted, as of the Effective Date.

(C) At Closing, the appropriate party shall execute and deliver or cause to be executed and delivered to the Closing the following documents in final form, together with any exhibits or appendices ("Transfer Documents"):

(1) General warranty deed(s) for the conveyance of Fee Parcels to be conveyed, substantially in the same form as set forth in **Exhibit H**;

(2) Assignment of Easements conveying the Easements to Buyer, substantially in the same form as set forth in **Exhibit I**;

(3) If necessary, general assignment of any Government Authorizations;

(4) Bills of Sale or other documents of assignment and transfer, with full warranties of title to the personal property portion of Purchased Assets, substantially in the same form as set forth in **Exhibit G**;

(5) Assignments of the Contracts on the form set forth in Exhibit XX.

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(6) Post closing agreements, affidavits, assignment certificates, estoppel certificates, corrective instruments, releases, satisfactions or terminations necessary or required pursuant to this Agreement;

(7) Title Commitments consistent with Section 3.03 of this Agreement;

(8) Non-foreign affidavit;

(9) Any affidavits, assignments, certificates, estoppel certificates, corrective instruments, releases, satisfactions, terminations or waivers necessary to close, including, but not limited to, a no lien affidavit, a "gap" affidavit and those instruments identified by the Title Company insuring the Fee Parcels;

(10) Documents, in a form reasonably satisfactory to the Buyer, evidencing the release of all liens, security interests, and other encumbrances other than Permitted Real Estate Encumbrances.

(D) Following execution and delivery of the Transfer Documents, Seller shall also deliver keys to any and all buildings and gates to Buyer and simultaneously with such delivery, all such steps shall be taken as may be required to put Buyer in actual possession and operating control of the Purchased Assets.

SECTION 9.10. REMEDY. Seller acknowledges that the Purchased Assets are unique and not otherwise available and agrees that Buyer may seek specific performance of this Agreement by Seller.

SECTION 9.11. DOCUMENTS AFTER THE CLOSING. From time-to-time after the Closing, each party hereto shall, upon request of the other, execute, acknowledge and deliver, or shall cause to be executed, acknowledged and delivered, all such further acts, deeds, assignments, bills of sale, transfers or other documentation for (1) confirming or correcting title in the name of Buyer or its successor(s) or perfecting possession by Buyer or its successor(s) of any or all of the

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Purchased Assets, including the establishment of a record of Easements without resort to litigation, expenditure of monies or other extraordinary means, for all facilities that are a part of the Utility System in existence or use at the time of Closing, or (2) otherwise fulfilling the obligations of the parties hereunder. Further, from time-to-time after Closing, should the parties discover that certain land parcels, easements, or other rights owned or enjoyed by Seller at Closing and necessary to the proper operation and maintenance of the Utility System were not included in the appendices hereto, and thus not transferred to the Buyer or its successor(s) at Closing in accordance with this Agreement, then the parties agree that Seller shall execute or cause to be executed the documents including, but not limited to, acts of sale or transfer, deeds, easements and bills of sale necessary to convey such ownership or rights to Buyer or its successor(s), at no cost to Buyer, provided such conveyances may be accomplished without resort to litigation, expenditure of monies or other extraordinary means.

ARTICLE X

INDEMNITY AND ATTORNEYS FEES

SECTION 10.01. INDEMNIFICATION OF BUYER

From and after the Closing, Seller agrees to reimburse, indemnify (or defend at Buyer's sole option) and hold Buyer, its affiliates, and its and their officers, directors and employees, successors and assigns harmless from and against any liability, obligation, loss, claim, action, suit, audit, deficiency, damage, fine, cost or expense (including attorney's fees and costs) resulting from, relating to, arising out of or attributable to:

(A) any act or omission of Seller or its agents, employees or contractors relating to Seller's ownership, maintenance, or operation of the Utility System prior to Closing;

(B) any misrepresentation, or breach or non-fulfillment of any representation, warranty, covenant or agreement on the part of Seller under this Agreement, or from any misrepresentation

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in, or omission from, any Exhibit or Schedule or information furnished to Buyer pursuant to this Agreement or in connection with the negotiation, execution or performance of this Agreement;

(C) any liabilities or obligations of Seller of any nature whatsoever except for those liabilities and obligations of Seller which Buyer specifically assumes pursuant to this Agreement;

(D) the provision of water and/or wastewater service by Seller for the period prior to the Closing Date;

(E) issues of regulatory compliance and claims by third parties for events that are attributable to events that occurred prior to Closing;

(F) Seller's failure to perform any of its covenants following Closing; and/or

(G) Seller's tax liability.

SECTION 10.02. GENERAL

Buyer shall provide the Seller with reasonable notice of any claims arising under this Section 10. The indemnification rights of the Buyer under this Section 10 are independent of and in addition to such rights and remedies as the Buyer may have at law or in equity or otherwise for any misrepresentation, breach of representation, warranty, or failure to fulfill any agreement or covenant hereunder.

SECTION 10.03. ATTORNEYS FEES

In the event litigation or any action is necessary to resolve any dispute arising under this Agreement or to enforce the terms of this Agreement, the prevailing party shall be entitled to recover reasonable attorney's fees, expenses and costs as well as any other damages occasioned by the breach of the terms of this Agreement to the extent allowed by North Carolina law.

ARTICLE XI

GENERAL PROVISIONS

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SECTION 11.01. APPLICABLE LAW; JURISDICTION AND VENUE. This Agreement shall be governed by, construed and enforced in accordance with the laws of the State of North Carolina excluding any choice of law rules that may direct the application of the laws of any other jurisdiction with venue in Carteret County, North Carolina.

SECTION 11.02. NOTICE.

(A) All notices, requests, demands, waivers, consents, approvals, certificates or other communications which are required or permitted hereunder shall be in writing and shall be deemed sufficiently given when hand delivered or mailed by registered or certified mail, postage prepaid, or by courier service, charges prepaid, or when delivered by facsimile transmission to the parties at the following addresses or fax numbers:

To Seller:
Carteret County Water System
210 Turner Street
Beaufort, NC 28576
Attn: Eugene Foxworth, Assistant County Manager
Phone: 252-728-8450
Eugene.Foxworth@carteretcountync.gov

To Buyer:
Carolina Water Service Inc., of North Carolina
500 West Monroe St., Suite 3600,
Chicago, IL 60661
Attn: Donald H. Denton III, President
Phone: 704-525-5049
Cell: 704-995-7640
Donald.Denton@corix.com

with a copy to:
Corix Regulated Utilities (US) Inc.
500 West Monroe St., Suite 3600
Chicago, IL 60661
Attn: Vice President and General Counsel
Phone: (775) 300-1628
Allen.Wilt@corix.com

(B) Any written notice given to one person in subsection (A) of this Section shall also be copied and provided to all other persons identified in subsection (A).

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(C) The parties may, by notice in writing given to the others, designate any future or different addresses or contact numbers to which the subsequent notices, requests, demands, waivers, consents, approvals, certificates or other communications shall be sent. Any notice shall be deemed given on the date such notice is delivered by hand, courier, or by facsimile transmission or five (5) days after the date mailed.

SECTION 11.03. ASSIGNMENT AND JOINDER.

(A) This Agreement may not be assigned without the prior written consent of the non-assigning party, which consent shall not be unreasonably withheld.

(B) This Agreement shall be construed as solely for the benefit of Seller and Buyer and their successors and assigns and no claim or cause of action shall accrue to or for the benefit of any other party.

(C) This Agreement shall be binding on, shall inure to the benefit of and be enforceable by the parties to it and their respective successors and permitted assigns.

SECTION 11.04. AMENDMENTS AND WAIVERS. Except as otherwise provided in this Agreement, no amendment, supplement, modification or waiver of this Agreement shall be binding upon any party hereto unless executed in writing by such party. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision of this Agreement, whether or not similar, unless otherwise expressly provided in writing.

SECTION 11.05. ENTIRE AGREEMENT. This Agreement is the entire agreement between the parties and supersedes all prior and contemporaneous agreements, understandings, negotiations and discussions of the agreements, understandings, negotiations and discussions of the parties, whether oral or written, pertaining to the subject matter hereof, and there are no warranties, representations or other agreements between the parties in connection with the subject matter hereof, except as specifically set forth herein.

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SECTION 11.06. TERMINATION EVENTS. By notice given prior to or at the Closing, this Agreement may be terminated as follows:

(A) Without limiting the rights and remedies available to Buyer arising from Seller's failure to comply with its obligations under this Agreement, if the Governmental Authorizations set out in Article V, or if all conditions precedent to Buyer's obligation to close set out in Article VI have not been satisfied within 18 months after the Effective Date, Buyer shall have the right of termination, without further recourse by or liability to Seller, by delivery of written notice to Seller.

(B) Without limiting the rights and remedies available to Seller arising from Buyer's failure to comply with its obligations under this Agreement, if the Governmental Authorizations set out in Article V, or if all conditions precedent to Seller's obligation to close set out in Article VII have not been satisfied within 14 months after the Effective Date, Seller shall have the right of termination, without further recourse by or liability to Buyer, by delivery of written notice to Buyer.

(C) As otherwise provided in this Agreement.

(D) By mutual written agreement of Buyer and Seller.

(E) If, between the Effective Date and the Closing, any of the Purchased Assets shall be destroyed or damaged in whole or in part by fire, earthquake, flood, other casualty or any other cause ("**Casualty**"), then Buyer shall have the option to: (a) acquire such Purchased Assets on an "as is" basis and take an assignment from Seller of all insurance proceeds payable to Seller in respect of the Casualty, or (b) in the event that the Casualty would have a material adverse effect on the value or use of the Purchased Assets, terminate this Agreement.

SECTION 11.07. EFFECT OF TERMINATION.

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(A) Each party's right of termination under Section 11.06 is in addition to any other rights it may have under this Agreement or otherwise and the exercise of such right of termination is not an election of remedies. If this Agreement is terminated pursuant to Section 11.06, all obligations of the parties under this Agreement shall terminate unless otherwise stated in this Agreement; provided, however, that if this Agreement is terminated because of a breach of this Agreement by the non-terminating party or because one or more of the conditions to the terminating party's obligations under this Agreement is not satisfied as a result of the other party's failure to comply with its obligations under this Agreement, the terminating party's right to pursue all legal remedies will survive such termination unimpaired.

(B) Neither Seller nor Buyer shall be liable to the other in the event that after the Effective Date there occurs (1) a change of law that prevents the Closing, (2) any action by an unrelated third party that prevents the Closing, or (3) any legal order that prevents the Closing. Both parties shall diligently defend against a third party's attempt to prevent a Closing or Governmental Authorization.

(C) If a material breach of any provision of this Agreement has been committed by Buyer and such breach has not been waived by Seller, but does not result in termination of the Agreement, Seller retains all remedies available to it at law or in equity with respect to such breach.

(D) If a material breach of any provision of this Agreement has been committed by Seller and such breach has not been waived by Buyer, but does not result in termination of this Agreement, Buyer retains all remedies available to it at law or in equity with respect to such breach.

SECTION 11.08. COUNTERPARTS. This Agreement may be executed in counterparts, each of which when executed and delivered shall be considered an original and all of which counterparts taken together shall constitute but one and the same instrument. The Parties

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expect that the Seller will execute this Agreement before execution by the Buyer. Seller understands and agrees that Buyer will not execute this Agreement without the prior approval of its Board of Directors, whose discretion to accept or reject this Agreement prior to execution by Buyer shall in no way be limited by Seller's execution hereof. This Agreement shall become binding when conditions precedent to close shall have been executed and delivered by all signatories. It shall not be necessary in making proof of this Agreement or any counterpart hereof to produce or account for any of the other counterparts.

SECTION 11.09. SECTION HEADINGS, GENDER, ETC. Any headings preceding the texts of the several articles, sections or exhibits in this Agreement shall be solely for the convenience of reference and shall not constitute a part of this Agreement, nor affect its interpretation, meaning, construction or effect. Words used herein, regardless of the number and gender specifically used, shall be deemed and construed to include any other number, singular or plural, and any other gender, masculine, feminine or neuter, as the context requires.

SECTION 11.10. SEVERABILITY. In the event any term or provision of this Agreement is held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Agreement and the remainder of this Agreement shall be construed to be in full force and effect. Any such invalidity, illegality or unenforceability in any jurisdiction or under any circumstance shall not invalidate or render unenforceable such provision in any other jurisdiction or under any other circumstance, unless, in either event, the invalid, illegal or unenforceable provision causes this Agreement to fail of its essential purpose.

SECTION 11.11. EXHIBITS AND SCHEDULES. All exhibits, schedules and attachments referred to herein are intended to be and hereby are made specifically a part of this Agreement.

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SECTION 11.12. INTERPRETATION. Each party agrees that (a) it has participated substantially in the negotiation and drafting of this Agreement and is thoroughly aware of all of the terms of this Agreement and the intent of same, and (b) all presumptions and/or burdens of proof concerning any interpretation of this Agreement shall not be affected by any statutory or judicial principles casting such presumptions against and/or burdens of proof on a party responsible for the drafting and/or written form of an agreement or contract.

SECTION 11.13. SURVIVAL OF REPRESENTATIONS, WARRANTIES COVENANTS AND AGREEMENTS. All representations, warranties, covenants and agreements made by the parties in this Agreement or in any agreement, document, statement or certificate furnished hereunder, delivered in support of this Agreement or in connection with the negotiation, execution and performance of this Agreement shall be deemed to have been material and relied on by the parties and shall survive the Closing. Notwithstanding any investigation or audit conducted before or after the Closing Date or the decision of any party to complete the Closing, each party shall be entitled to rely upon the representations, warranties, covenants and agreements set forth herein and therein.

SECTION 11.14. COOPERATION/FURTHER ASSURANCES. Seller from time to time after the Closing, at Buyer's request, and without additional compensation, will execute, acknowledge and deliver to Buyer such other instruments of sale, conveyance, assignment and transfer and will take such other actions and execute and deliver such other documents, certifications and further assurances as Buyer may reasonably require in order to vest in Buyer, and/or to place Buyer fully in possession of, all of the Purchased Assets. Each of the parties hereto, without additional compensation, will cooperate with the other and execute and deliver to the other such instruments and documents and take such actions as may be reasonably requested from time

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to time by any other party hereto as necessary to carry out, evidence and confirm the purposes of this Agreement.

IN WITNESS WHEREOF, the Seller and Buyer have caused this Agreement to be duly executed and entered into on the date first above written.

Carteret County Water System

By:_____

Name: Ed Wheatly

Title: Chairman, Board of Commissioners

Carolina Water Service, Inc. of North Carolina

By:_____

Name: Donald Denton, III

Title: President

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Exhibit A – Service Area

Exhibit B – Easements

Exhibit C – Excluded Assets- NONE

Exhibit D – Fee Parcels

Exhibit E – Personal Property- NONE

Exhibit F – Customer Deposits- NONE

Exhibit G – Bill of Sale

Exhibit H – General Warranty DeedExhibit I – Assignment of Easements

Exhibit K – Contracts to be Assigned - NONE

Exhibit L – Form of Assignment and Assumption Agreement - NONE

Exhibit M- Leases

Exhibit N- List of Assets

Exhibit O- Rates

Schedule 3.04(B) – Environmental Permits & Governmental Authorizations

Schedule 3.04(C) – Environmental Compliance

Schedule 3.04(D) – Violations

Schedule 3.04(E) – Hazardous Materials

Schedule 4.01(B) – Pending or Threatened Legal Actions

Schedule 4.01(C) – Default of Government Authorizations

Schedule 4.01(E) – Agreements Not in Good Standing and Defaults

Schedule 4.01(H) – Conveyance of Fee Parcels

Schedule 4.01(I) – Conveyance of Purchased Assets

Schedule 4.01(M) – Liabilities or Obligations of Seller Relating to the Purchased Assets

Schedule 4.01(N) – Notice of Violations from a Governmental Body

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Exhibit G
Bill of Sale

"FORM OF BILL OF SALE"

This Bill of Sale is made this 18th day of October, 2021, BETWEEN Carteret County Water System a North Carolina municipality ("**Seller**"), and Carolina Water Service, Inc. of North Carolina, a North Carolina corporation ("**Buyer**"). Capitalized terms not otherwise defined herein shall have the meaning provided in the Utility Asset Purchase Agreement dated October 18th, 2021 (the "**Purchase Agreement**") between Seller and Buyer.
Seller, in consideration of One ($1.00) Dollar and other good and valuable considerations in hand paid by Buyer, the receipt and sufficiency of which is hereby acknowledged, has hereby granted, bargained, sold, transferred and delivered unto Buyer, its successors and assigns, the following described personal property, to-wit:

> All of the Purchased Assets constituting personal (movable) property that are used in the operation of the water system for service areas as shown in Exhibit A of the Purchase Agreement, it being the intent of the parties hereto to include in this conveyance all personal property described in Exhibit E and elsewhere in the Purchase Agreement, together with all water systems and all appurtenant parts, including, but not limited to, all pumps, blowers, pipes, lines, valves, meters and meter installations, back-flow devices, pumping equipment, power generation equipment, treatment equipment, tools, chemicals, supplies, force mains, tanks, injectors, control panels, and all other equipment, whether mentioned herein or not, necessary or convenient to operate the systems which are being conveyed herewith.

Seller for itself, its successors and assigns, hereby covenants and agrees that, at any time and from time to time upon the written request of Buyer, Seller will do, execute, acknowledge and deliver or cause to be done, executed, acknowledged and delivered, all such further acts, deeds, assignments, transfers, conveyances, powers of attorney and assurances as may be reasonably required by Buyer in order to assign, transfer, set over, convey, assure and confirm unto and vest in Buyer, its successors and assigns, title to the assets sold, conveyed and transferred by this Bill of Sale.

[*Signature Page Follows*]

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IN WITNESS WHEREOF, the said Seller has hereunto set its hand and seal, the day and year first above written.

Signed, sealed and delivered
In the presence of:

WITNESSES:
X Dee Meshaw
Print: Dee Meshaw

X Rachel B. Hamm
Print: Rachel B. Hamm

Carteret County Water System

By: Ed Whitley

Print: Ed Whitley

Title: Chair, Board of Commissioners

Lori R. Turner

Notary Public

Print name: Lori R. Turner

Notary ID/No: 20180710004 9

My Commission Expires: 5/18/2026

LORI R TURNER
NOTARY PUBLIC
Carteret County
North Carolina
My Commission Expires May 18, 2026

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Exhibit H
General Warranty Deed

"FORM OF WARRANTY DEED"

[NTD: Applicable State form should be inserted. Ensure deed references all fixtures and appurtenant interests, etc. Use special warranty deed if we are the seller]

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Exhibit I

Assignment of Easements

[NTD: If needed, obtain a state specific form. If it is not known at time the first draft of the APA is prepared whether this form is needed, consider leaving the following placeholder "[insert if needed]"]

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Schedule 3.04(B)
Environmental Permits & Governmental Authorizations

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Schedule 3.04(C)
Environmental Compliance

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Schedule 3.04(D)
Violations

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Schedule 3.04(E)
Hazardous Materials

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Schedule 4.01(B)
Pending or Threatened Legal Actions

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Schedule 4.01(C)
Default of Government Authorizations

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Schedule 4.01(E)
Agreements Not in Good Standing and Defaults

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Schedule 4.01(H)
Conveyance of Fee Parcels

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Schedule 4.01(I)
Conveyance of Purchased Assets

Schedule 4.01(M)

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Liabilities or Obligations of Seller Relating to the Purchased Assets

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Schedule 4.01(N)
Notice of Violations from a Governmental Body

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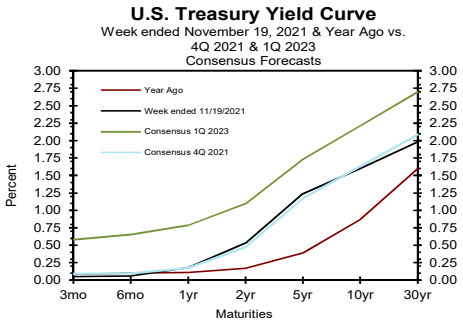
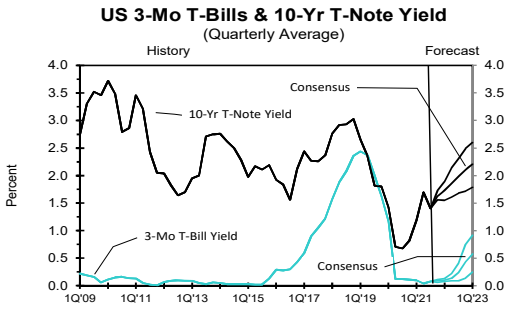
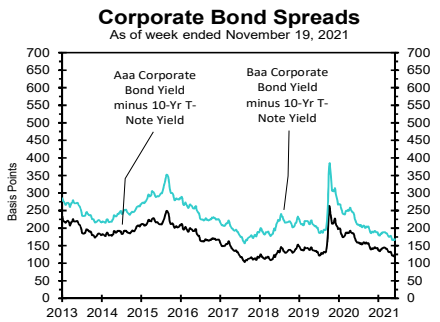
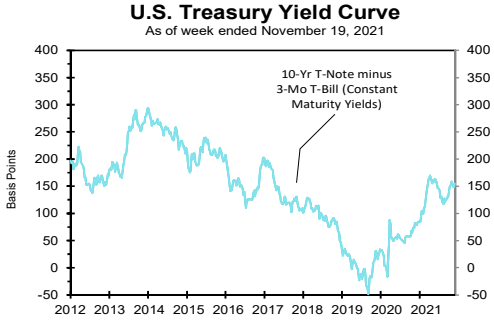
Consensus Forecast of U.S. Interest Rates and Key Assumptions

	History: Average For Week Ending				History: Average For Month				Consensus Forecasts-Quarterly Avg.					
	Nov 19	Nov 12	Nov 5	Oct 29	Oct	Sep	Aug	Latest Qtr 3Q 2021	4Q 2021	1Q 2022	2Q 2022	3Q 2022	4Q 2022	1Q 2023
Federal Funds Rate	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.1	0.1	0.1	0.3	0.4	0.6
Prime Rate	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.3	3.3	3.3	3.4	3.5	3.7
LIBOR, 3-mo.	0.16	0.15	0.14	0.13	0.13	0.12	0.12	0.13	0.2	0.2	0.3	0.4	0.6	0.7
Commercial Paper, 1-mo.	0.06	0.05	0.07	0.06	0.05	0.05	0.05	0.05	0.1	0.1	0.2	0.3	0.5	0.6
Treasury bill, 3-mo.	0.05	0.05	0.05	0.06	0.05	0.04	0.05	0.05	0.1	0.1	0.1	0.2	0.4	0.6
Treasury bill, 6-mo.	0.06	0.07	0.07	0.06	0.06	0.05	0.06	0.05	0.1	0.1	0.2	0.3	0.5	0.7
Treasury bill, 1 yr.	0.18	0.16	0.15	0.14	0.11	0.08	0.07	0.08	0.2	0.2	0.3	0.4	0.6	0.8
Treasury note, 2 yr.	0.53	0.48	0.45	0.48	0.39	0.24	0.22	0.23	0.5	0.6	0.7	0.8	1.0	1.1
Treasury note, 5 yr.	1.24	1.17	1.14	1.18	1.11	0.86	0.77	0.80	1.2	1.3	1.4	1.5	1.6	1.7
Treasury note, 10 yr.	1.60	1.53	1.54	1.59	1.58	1.37	1.28	1.32	1.6	1.7	1.9	2.0	2.1	2.2
Treasury bond, 30 yr.	1.98	1.90	1.95	2.00	2.06	1.94	1.92	1.93	2.1	2.2	2.3	2.5	2.6	2.7
Corporate Aaa bond	2.82	2.72	2.77	2.80	2.85	2.72	2.72	2.72	2.7	2.9	3.1	3.2	3.4	3.6
Corporate Baa bond	3.29	3.18	3.22	3.25	3.31	3.16	3.16	3.16	3.4	3.6	3.8	4.0	4.2	4.4
State & Local bonds	2.56	2.56	2.60	2.61	2.59	2.67	2.64	2.64	2.4	2.6	2.7	2.9	3.0	3.1
Home mortgage rate	3.10	2.98	3.09	3.14	3.07	2.90	2.84	2.87	3.1	3.2	3.4	3.5	3.7	3.8
	History								Consensus Forecasts-Quarterly					
Key Assumptions	4Q 2019	1Q 2020	2Q 2020	3Q 2020	4Q 2020	1Q 2021	2Q 2021	3Q 2021	4Q 2021	1Q 2022	2Q 2022	3Q 2022	4Q 2022	1Q 2023
Fed's AFE Index	110.5	111.4	112.4	107.3	105.2	103.4	102.9	105.0	106.5	106.9	106.8	106.6	106.3	106.1
Real GDP	1.9	-5.1	-31.2	33.8	4.5	6.3	6.7	2.1	5.1	4.4	3.8	3.3	2.6	2.4
GDP Price Index	1.5	1.6	-1.5	3.6	2.2	4.3	6.1	5.9	4.6	3.4	2.8	2.7	2.5	2.5
Consumer Price Index	2.6	1.0	-3.1	4.7	2.4	3.7	8.4	6.6	5.6	3.3	2.9	2.6	2.5	2.4
PCE Price Index	1.7	1.3	-1.6	3.7	1.5	3.8	6.5	5.3	4.5	2.9	2.5	2.5	2.3	2.3









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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 $)						
	Comparable Group							
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%

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CONSOLIDATED BALANCE SHEETS - USD ($) $ in Thousands	Dec. 31, 2021	Dec. 31, 2020
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

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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 sha		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

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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

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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

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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 D	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	$ 13,705,27

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

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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

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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 nonutilty 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

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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

Total Population Change in North Carolina, 2010-2020

	April 1		Population Change		Rank			
Area Name	**2010**	**2020**	**Numeric**	**Percent**	**2010**	**2020**	**Numeric**	**Percent**
North Carolina	9,535,483	10,439,388	903,905	9.5				
Carteret	66,469	67,686	1,217	1.8	39	39	43	44

Counties with Growth

Source: US Census Bureau, 2020 Census and 2010 Census, PL94-171

NH = Non-Hispanic; Voting Age = 18 or older; Childhood = younger than age 18

Prepared by North Carolina Office of State Budget & Management, Demographic & Economic Section

Includes 2010 Correction for Durham and Granville Counties

CWSNC W-354 SUB 398
Carteret Fair Value Determination
Form Application Exhibit 1A

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Population Overview, 2010-2050

County	July 2010	July 2015	July 2020	July 2025	July 2030	July 2035	July 2040	July 2045	July 2050
					Population				
Carteret	66,615	68,019	67,571	67,611	68,863	70,344	71,870	73,416	74,956
STATE	9,571,007	9,968,747	10,456,593	10,963,764	11,527,150	12,094,279	12,669,133	13,245,876	13,824,955

Source: North Carolina OSBM, Standard Population Estimates, Vintage 2020 and Population Projections, Vintage 2021

Last updated January 27, 2022

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Carteret Fair Value Determination
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DEALS AUGUST 6, 2018 / 5:11 PM / 6 MONTHS AGO

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

3 MIN READ

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

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

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

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

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

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Carteret Fair Value Determination
Form Application Exhibit 1A

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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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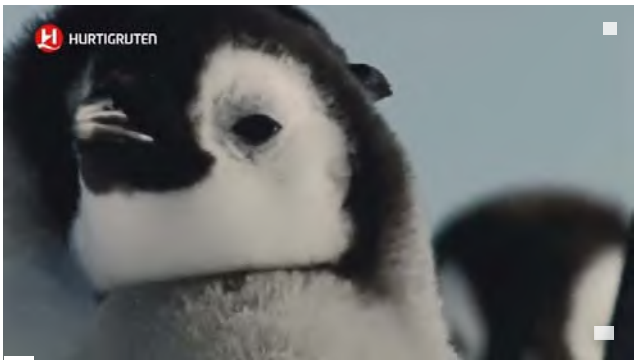

"We have converted from a stock-for-stock deal to a cash offer, which will resolve any further market distractions from the inferior proposals," SJW Chief Executive Eric Thornburg told Reuters, in reference to the actions by Eversource and CalWater.

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

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CONNECTICUT WATER SERVICE INC / CT
BALANCE_SHEET2
Form Type: 10-K
Period End: Dec 31, 2017
Date Filed: Mar 15, 2018
Table Of Contents

CONNECTICUT WATER SERVICE, INC.

CONSOLIDATED BALANCE SHEETS

December 31, (in thousands, except share amounts)	2017	2016
ASSETS		
Utility Plant	$ 927,289	$ 777,860
Construction Work in Progress	11,761	33,748
	939,050	811,608
Accumulated Provision for Depreciation	(241,327)	(210,212)
Net Utility Plant	697,723	601,396
Other Property and Investments	10,662	9,071
Cash and Cash Equivalents	3,618	1,564
Accounts Receivable (Less Allowance, 2017 - $1,265; 2016 - $1,100)	14,965	13,024
Accrued Unbilled Revenues	8,481	8,171
Materials and Supplies, at Average Cost	1,593	1,536
Prepayments and Other Current Assets	7,021	5,069
Total Current Assets	35,678	29,364
Unrecovered Income Taxes - Regulatory Asset	66,631	93,264
Pension Benefits - Regulatory Asset	11,339	12,266
Post-Retirement Benefits Other Than Pension - Regulatory Asset	116	265
Goodwill	67,016	30,427
Deferred Charges and Other Costs	9,618	8,449
Total Regulatory and Other Long-Term Assets	154,720	144,671
Total Assets	$ 898,783	$ 784,502
CAPITALIZATION AND LIABILITIES		
Common Stockholders' Equity:		
Common Stock Without Par Value: Authorized - 25,000,000 Shares		
Issued and Outstanding:		
2017 - 12,065,016; 2016 - 11,248,458	$ 191,641	$ 145,739
Retained Earnings	102,417	91,213
Accumulated Other Comprehensive Loss	(428)	(924)
Common Stockholders' Equity	293,630	236,028
Preferred Stock	772	772
Long-Term Debt	253,367	197,047
Total Capitalization	547,769	433,847
Current Portion of Long-Term Debt	6,173	4,859
Interim Bank Loans Payable	19,281	32,953
Accounts Payable and Accrued Expenses	11,319	13,116
Accrued Interest	1,439	1,012
Current Portion of Refund to Customers - Regulatory Liability	64	855
Other Current Liabilities	3,262	2,330
Total Current Liabilities	41,538	55,125
Advances for Construction	20,024	19,127
Deferred Federal and State Income Taxes	33,579	50,558
Unfunded Future Income Taxes	58,384	90,977
Long-Term Compensation Arrangements	32,649	33,540
Unamortized Investment Tax Credits - Regulatory Liability	1,133	1,189
Excess Accumulated Deferred Income Tax - Regulatory Liability	30,937	4,373
Refund to Customers - Regulatory Liability	-	108
Other Long-Term Liabilities	1,241	701
Total Long-Term Liabilities	177,947	200,573
Contributions in Aid of Construction	131,529	94,957
Commitments and Contingencies	-	-
Total Capitalization and Liabilities	$ 898,783	$ 784,502

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CONNECTICUT WATER SERVICE INC / CT
INCOME_STATEMENT2
Form Type: 10-K
Period End: Dec 31, 2017
Date Filed: Mar 15, 2018
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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

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	Township Of Beaufort Data & Demographics (As of July 1, 2021)	*Township Of Merrimon Data & Demographics (As of July 1, 2021)*
POPULATION		
Total Population	9,577 (100%)	663 (100%)
Population in Households	9,407 (98.2%)	663 (100.0%)
Population in Families	7,151 (74.7%)	543 (81.9%)
Population in Group Quarters[1]	170 (1.8%)	0
Population Density	218	10
Diversity Index[2]	38	16
INCOME		
Median Household Income	$51,171	$56,386
Average Household Income	$65,892	$71,650
% of Income for Mortgage[4]	19%	15%
Per Capita Income	$29,803	$31,799
Wealth Index[5]	64	84
HOUSING		
Total HU (Housing Units)	5,723 (100%)	502 (100%)
Owner Occupied HU	3,068 (53.6%)	279 (55.6%)
Renter Occupied HU	1,262 (22.1%)	35 (7.0%)
Vacant Housing Units	1,393 (24.3%)	188 (37.5%)
Median Home Value	$230,241	$200,000
Average Home Value	$306,874	$258,393
Housing Affordability Index[3]	133	181
HOUSEHOLDS		
Total Households	4,330	314
Average Household Size	2.17	2.11
Family Households	2,624	215
Average Family Size	3	3

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TRANSFER ADJUSTED Carteret County Water System Assets

Total Debt	1687064	1877096	2066128
Purchase of Capital Assets	0	0	25500

	2021	2020	2019
Income (Loss) AFTER Transfers	-353989	-493143	-448411
Interest paid	49835	55201	60568
Depreciation	364270	364887	369612
Total Source	$60,116	($73,055)	($18,231)
Income tax	0	0	0
Principal	190032	189032	189032
Interest paid	49835	55201	60568
Total Use	$239,867	$244,233	$249,600

WITH TRANSFER

Debt Service Coverage	0.25	-0.30	-0.07
Pre-Tax Interest Coverage - Including AFC(3)(x)	-6.10	-7.93	-6.40
Post-Tax Interest Coverage - Including AFC(3)(x)	-6.10	-7.93	-6.40
GCF / Interest Coverage(4)(x)	1.21	-1.32	-0.30
GCF / Tot. Debt(7)(%)	0.61	-6.83	-3.81
GCF / Construction(6)(%)	NA	NA	-309.02

Comparable Group

Debt Service Coverage - As Reported

Comparable Group	2021	2020	2019
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
SJW GROUP	1.6	2.5	3.7
THE YORK WATER COMPANY	0.7	0.7	0.3
Median	2.3	2.4	2.0

Company Name	2021 DEPRECIATION	2020 DEPRECIATION	2019 DEPRECIATION	2021 TOTAL INTERST EXPENSE	2020 TOTAL INTERST EXPENSE	2019 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
SJW 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 INCOME TO PREF+COMM	2020 INCOME TO PREF+COMM	2019 INCOME TO PREF+COMM	2021 REPAY LT DEBT	2020 REPAY LT DEBT	2019 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
SJW 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

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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. 195

1912 to January 1, 2022

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

Trends of Construction Costs

COMPILED & PUBLISHED BY
Whitman, Requardt & Associates, LLP
Engineers, Architects and Planners
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TRENDS OF PUBLIC UTILITY CONSTRUCTION COSTS

GEOGRAPHIC REGIONS

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	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman
	Line #	Line #	Line #	Line #	Line #	Line #	Line #	Line #	Line #	Line #
	2	**8**	**9**	**16**	**23**	**24**	**34**	**38**	**39**	**40**
1912	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1913	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1914	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1915	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1916	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1917	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1918	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1919	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1920	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1921	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1922	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1923	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1924	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1925	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1926	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1927	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1928	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1929	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1930	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1931	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1932	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1933	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1934	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1935	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1936	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1937	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

CWSNC W-354 SUB 398
Carteret Fair Value Determination
Form Application Exhibit 1A

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	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman
	Line #	Line #	Line #	Line #	Line #	Line #	Line #	Line #	Line #	Line #
	2	**8**	**9**	**16**	**23**	**24**	**34**	**38**	**39**	**40**
1938	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1939	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1940	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1941	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1942	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1943	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1944	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1945	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1946	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1947	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1948	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1949	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1950	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1951	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1952	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1953	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1954	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1955	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1956	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1957	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1958	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1959	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1960	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1961	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1962	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1963	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1964	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1965	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1966	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1967	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman
	Line #	Line #	Line #	Line #	Line #	Line #	Line #	Line #	Line #	Line #
	2	**8**	**9**	**16**	**23**	**24**	**34**	**38**	**39**	**40**
1968	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1969	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1970	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1971	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1972	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1973	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1974	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1975	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1976	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1977	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1978	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1979	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1980	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1981	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1982	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1983	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1984	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1985	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1986	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1987	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1988	**233**	**0**	**0**	**0**	**0**	**260**	**0**	**0**	**0**	**0**
1989	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1990	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1991	**0**	**0**	**0**	**0**	**0**	**0**	**273**	**0**	**224**	**162**
1992	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1993	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman	Handy-Whitman
	Line #	Line #	Line #	Line #	Line #	Line #	Line #	Line #	Line #	Line #
	2	**8**	**9**	**16**	**23**	**24**	**34**	**38**	**39**	**40**
1994	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1995	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1996	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1997	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1998	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1999	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2000	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2001	**0**	**0**	**0**	**0**	**0**	**0**	**327**	**0**	**0**	**0**
2002	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**291**	**207**
2003	**0**	**328**	**0**	**0**	**0**	**0**	**342**	**0**	**295**	**207**
2004	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**323**	**207**
2005	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**352**	**214**
2006	**0**	**0**	**624**	**0**	**0**	**0**	**434**	**0**	**398**	**248**
2007	**0**	**0**	**0**	**0**	**0**	**0**	**464**	**0**	**415**	**289**
2008	**0**	**0**	**0**	**0**	**0**	**0**	**517**	**0**	**427**	**373**
2009	**0**	**0**	**0**	**538**	**0**	**0**	**408**	**0**	**439**	**373**
2010	**0**	**0**	**0**	**552**	**0**	**920**	**0**	**0**	**449**	**376**
2011	**0**	**0**	**752**	**419**	**0**	**0**	**0**	**0**	**464**	**379**
2012	**0**	**500**	**788**	**0**	**0**	**1078**	**617**	**0**	**491**	**379**
2013	**0**	**0**	**836**	**0**	**0**	**0**	**0**	**0**	**492**	**381**
2014	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**483**	**386**
2015	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**483**	**401**
2016	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**486**	**403**
2017	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**500**	**419**
2018	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**513**	**436**
2019	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**544**	**447**
2020	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**579**	**466**
2021	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**603**	**565**
2022	**613**	**771**	**1593**	**924**	**0**	**1656**	**943**	**0**	**626**	**803**

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Handy-Whitman	Series Id: PCU3345133345130	Series Id: PCU3342--334
	Series Title: PPI industry data for Industrial process variable instruments-Process control instruments, not	Series Title: PPI industry group data for Communic
Line #	Industry: Industrial process variable instruments	Industry: Communications equipment
42	Product: Process control instruments	Product: Communications equipment
	Base Date: 200312	Base Date: 198512

1912	**0**
1913	**0**
1914	**0**
1915	**0**
1916	**0**
1917	**0**
1918	**0**
1919	**0**
1920	**0**
1921	**0**
1922	**0**
1923	**0**
1924	**0**
1925	**0**
1926	**0**
1927	**0**
1928	**0**
1929	**0**
1930	**0**
1931	**0**
1932	**0**
1933	**0**
1934	**0**
1935	**0**
1936	**0**
1937	**0**

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Handy-Whitman	Series Id: PCU3345133345130	Series Id: PCU3342--334
	Series Title: PPI industry data for Industrial process variable instruments-Process control instruments, not	Series Title: PPI industry group data for Communic
Line #	Industry: Industrial process variable instruments	Industry: Communications equipment
42	Product: Process control instruments	Product: Communications equipment
	Base Date: 200312	Base Date: 198512
1938	**0**	
1939	**0**	
1940	**0**	
1941	**0**	
1942	**0**	
1943	**0**	
1944	**0**	
1945	**0**	
1946	**0**	
1947	**0**	
1948	**0**	
1949	**0**	
1950	**0**	
1951	**0**	
1952	**0**	
1953	**0**	
1954	**0**	
1955	**0**	
1956	**0**	
1957	**0**	
1958	**0**	
1959	**0**	
1960	**0**	
1961	**0**	
1962	**0**	
1963	**0**	
1964	**0**	
1965	**0**	
1966	**0**	
1967	**0**	

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Handy-Whitman Line #	Series Id: PCU3345133345130 Series Title: PPI industry data for Industrial process variable instruments-Process control instruments, not Industry: Industrial process variable instruments Product: Process control instruments Base Date: 200312	Series Id: PCU3342--334 Series Title: PPI industry group data for Communic Industry: Communications equipment Product: Communications equipment Base Date: 198512
42		

1968	0			
1969	0			
1970	0			
1971	0			
1972	0			
1973	0			
1974	0			
1975	0			
1976	0	1976		
1977	0	1977		
1978	0	1978	Year	
1979	0	1979	1979	
1980	0	1980	1980	
1981	0	1981	1981	
1982	0	1982	1982	
1983	0	1983	1983	
1984	0	1984	1984	
1985	0	1985	1985	100.000
1986	0	1986	1986	101.867
1987	0	1987	1987	103.492
1988	0	1988	1988	103.875
1989	0	1989	1989	105.775
1990	0	1990	1990	107.475
1991	0	1991	1991	108.500
1992	0	1992	1992	109.742
1993	0	1993	1993	111.683

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Handy-Whitman Line #		Series Id: PCU3345133345130 Series Title: PPI industry data for Industrial process variable instruments-Process control instruments, not Industry: Industrial process variable instruments Product: Process control instruments Base Date: 200312		Series Id: PCU3342--334 Series Title: PPI industry group data for Communic Industry: Communications equipment Product: Communications equipment Base Date: 198512	
42					
1994	0	1994		1994	113.325
1995	0	1995		1995	113.908
1996	0	1996		1996	114.983
1997	0	1997		1997	115.708
1998	0	1998		1998	114.983
1999	0	1999		1999	112.975
2000	0	2000		2000	110.408
2001	0	2001		2001	108.625
2002	0	2002		2002	105.033
2003	0	2003	100.000	2003	101.717
2004	0	2004	101.717	2004	98.358
2005	0	2005	103.717	2005	97.042
2006	0	2006	106.825	2006	95.883
2007	0	2007	111.442	2007	95.783
2008	0	2008	115.092	2008	97.083
2009	0	2009	119.408	2009	97.200
2010	0	2010	120.667	2010	96.925
2011	0	2011	125.633	2011	96.342
2012	543	2012	127.975	2012	95.625
2013	0	2013	129.292	2013	95.367
2014	0	2014	132.008	2014	95.625
2015	0	2015	133.825	2015	95.825
2016	0	2016	135.667	2016	95.208
2017	0	2017	137.233	2017	93.725
2018	0	2018	139.392	2018	93.075
2019	0	2019	140.433	2019	93.167
2020	0	2020	144.042	2020	93.658
2021	0	2021	146.346	2021	94.333
2022	1225	SPOT	148.324	SPOT	95.791

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KROLL

2022 SBBI® Yearbook

Stocks, Bonds, Bills, and Inflation®

U.S. Capital Markets Performance by
Asset Class 1926–2021

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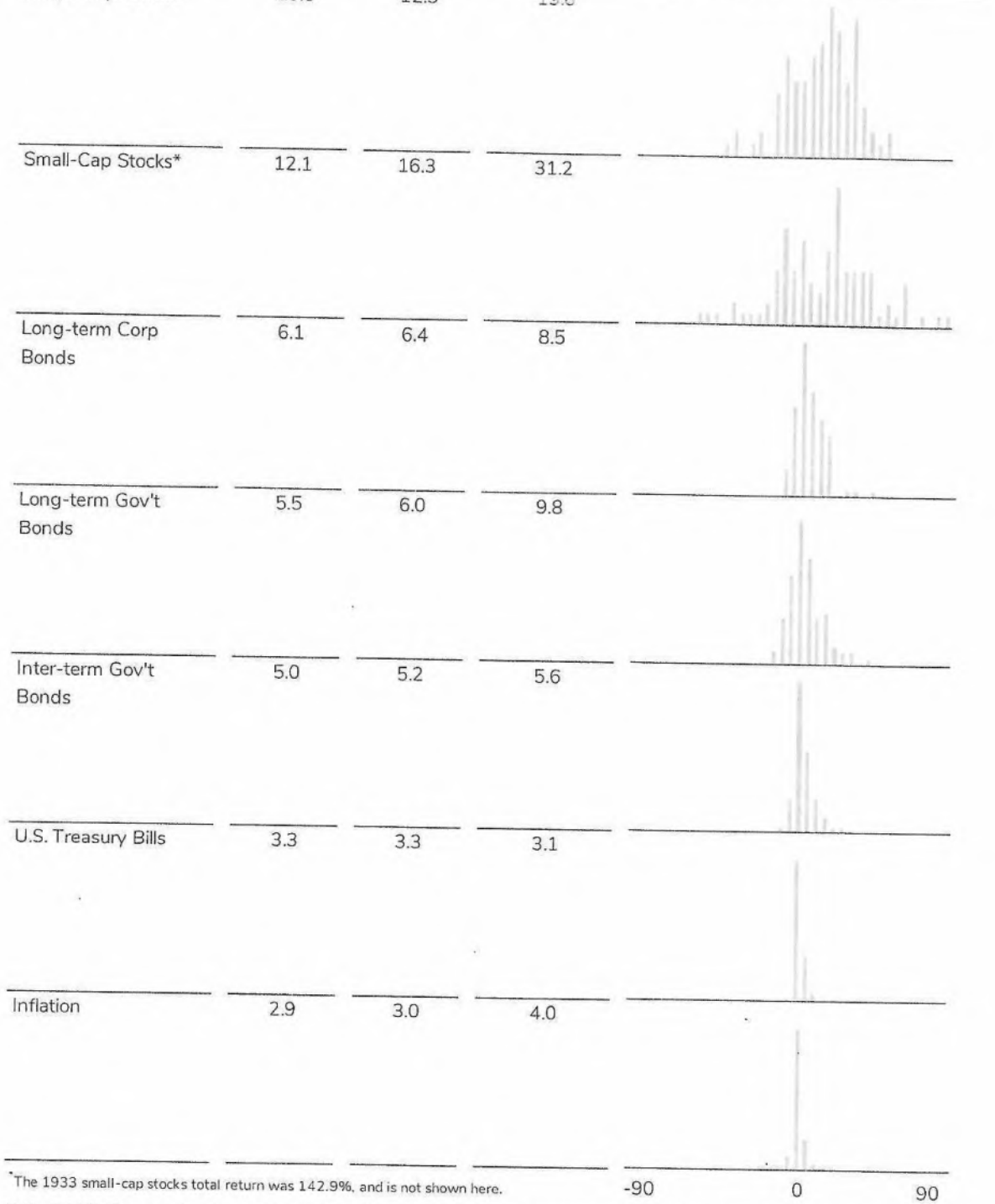
Exhibit 2.3: Basic Series, Summary Statistics of Annual Total Returns (%)
1926–2021

Series	Geometric Mean (%)	Arithmetic Mean (%)	Standard Deviation (%)	Distribution (%)
Large-Cap Stocks	10.5	12.3	19.6	
Small-Cap Stocks*	12.1	16.3	31.2	
Long-term Corp Bonds	6.1	6.4	8.5	
Long-term Gov't Bonds	5.5	6.0	9.8	
Inter-term Gov't Bonds	5.0	5.2	5.6	
U.S. Treasury Bills	3.3	3.3	3.1	
Inflation	2.9	3.0	4.0	



*The 1933 small-cap stocks total return was 142.9%, and is not shown here.

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Exhibit 6.8: Total Returns, Income Returns, and Capital Appreciation Returns of the SBBI® Asset Classes; Summary Statistics of Annual Returns (%)
1926–2021

	Geometric Mean (%)	Arithmetic Mean (%)	Standard Deviation (%)	Serial Correlation
Large-Cap Stocks				
Total Return	10.5	12.3	19.6	0.01
Income	3.9	3.9	1.6	0.92
Capital Appreciation	6.4	8.2	19.0	0.01
Small-Cap Stocks (TR)	12.1	16.3	31.2	0.05
Long-term Corp Bonds (TR)	6.1	6.4	8.5	0.01
Long-term Gov't Bonds				
Total Return	5.5	6.0	9.8	-0.16
Income	4.8	4.9	2.6	0.96
Capital Appreciation	0.5	0.9	8.9	-0.25
Inter-term Gov't Bonds				
Total Return	5.0	5.2	5.6	0.14
Income	4.3	4.3	2.9	0.96
Capital Appreciation	0.6	0.7	4.4	-0.17
U.S. Treasury Bills (TR)	3.3	3.3	3.1	0.92
Inflation	2.9	3.0	4.0	0.62

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In general, risk is rewarded by a higher return over the long term. For example, Exhibit 6.8 shows that over the 1926–2021 time horizon small-cap stocks were the riskiest asset class with a standard deviation of 31.2%, but also provided the greatest rewards to long-term investors, with an arithmetic mean annual return of 16.3%. Comparably, the risk (as measured by standard deviation) of large-cap stocks was significantly lower at 19.6%, and the reward (as measured by arithmetic average annual return) of large-cap stocks was correspondently lower at 12.3%.

U.S. Treasury bills, with a standard deviation of 3.1%, were nearly riskless and had the lowest arithmetic mean annual return at 3.3%.

Inflation-Adjusted Series Summary Statistics

Inflation-adjusted basic series summary statistics are presented in Exhibit 6.9. Note that the real rate of interest is close to zero (0.4%) on average. For the 96-year period, the geometric and arithmetic means are lower by the amount of inflation than those of the nominal series.

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Note that this increased return comes at a price: risk (as measured by standard deviation) increased from 19.6% for large-cap stocks to 31.2% for small-cap stocks. The relationship between risk and return is a fundamental principle of finance. History tells us that small companies are riskier than large companies. Investors are compensated for taking on this additional risk by the higher returns provided by small companies.

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

	Geometric Mean (%)	Arithmetic Mean (%)	Standard Deviation (%)
Large-Cap Stocks	10.5	12.3	19.6
Small-Cap Stocks	12.1	16.3	31.2

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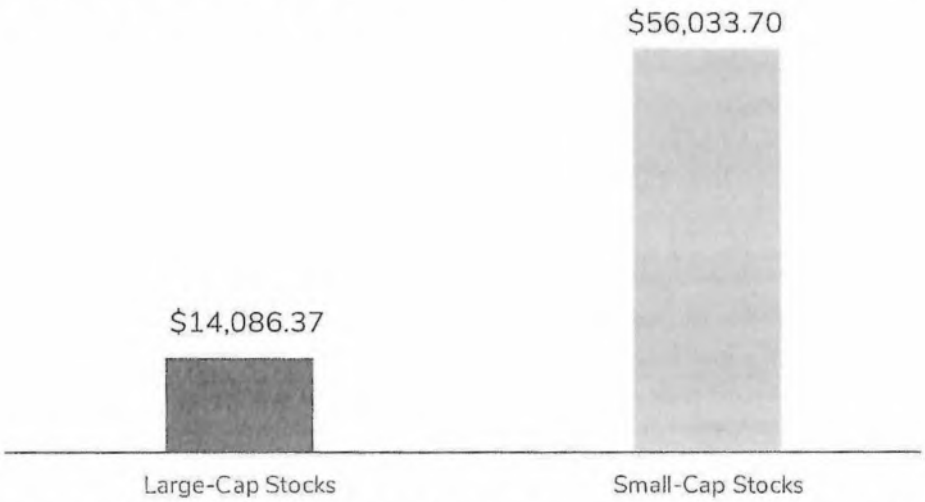
The differences in the performance of large-cap stocks and small-cap stocks can have important implications for investors. Exhibit 7.2 is a graphical depiction of the value of $1 invested at the end of 1925 in large-cap and small-cap stocks and held through December 31, 2021 (a total of 96 years).

Exhibit 7.2: The Value of $1 Invested in Large-Cap and Small-Cap Stocks, 1926–2021
Index (Year-end 1925 = $1.00)



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120 months (10-years), to 240 months (20-years) and finally to 360 months (30-years), small stocks increasingly outperform large stocks (55%, 66%, 88%, and 96% of the time, respectively).

This same pattern of increasing outperformance of small stocks as the holding period is increased can also be seen in the three "Post Banz" periods.

Long-term Returns in Excess of Systematic Risk

The capital asset pricing model, or CAPM, does not fully account for the higher returns of small-cap stocks. The textbook CAPM can be expressed as follows:

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

Where:

k_e	=	Cost of equity capital
R_f	=	Risk-free rate
β	=	Beta
RP_m	=	Equity risk premium (also referred as ERP)

According to the CAPM, the expected return on a security should consist of the riskless rate plus an additional return to compensate for the systematic risk of the security. The return in excess of the riskless rate is estimated in the context of the CAPM by multiplying the equity risk premium by beta. The equity risk premium is the return that compensates investors for taking on risk equal to the risk of the market as a whole (systematic risk). Beta measures the extent to which a security or portfolio is exposed to systematic risk.

The beta of each decile indicates the degree to which the decile's return moves with that of the overall market. A beta greater than one indicates that the security or portfolio has greater systematic risk than the market; according to the CAPM equation, investors are compensated for taking on this additional risk.

CAPM is an attempt to predict *future* returns. CAPM can be used to see how well it would have done predicting returns that we *already know* (i.e., historical returns; returns that have already occurred). This is called "back-testing". If what "actually happened" is greater than "what CAPM would have predicted", then CAPM fell short of explaining what actually happened.

Smaller companies tend to have returns that are not fully explained by their higher betas, so return in excess of that predicted by CAPM tends to *increase* as one moves from the largest companies to the smallest companies. This size related phenomenon prompted a revision to the CAPM to include a size premium. A size premium (as used in the CAPM equation) is thus a measure of "what actually happened" minus "what textbook CAPM predicted":

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Size Premium = Actual Excess Return – Excess Return Predicted by CAPM

A size premium is a common adjustment that analysts make to the textbook CAPM when developing cost of equity capital estimates.[189] [190] This is sometimes referred to as the "modified" CAPM:

$$k_e = R_f + \beta \times (RP_m) + RPs$$

Where:

k_e	=	Cost of equity capital
R_f	=	Risk-free rate
β	=	Beta
RP_m	=	Equity risk premium (also referred as ERP)
RPs	=	Size Premium

The size effect is not without controversy, nor is this controversy something new. Traditionally, small companies are believed to have greater required rates of return than large companies because small companies are inherently riskier. It is not clear, however, whether this is due to size itself, or to other factors closely related to or correlated with size (e.g., liquidity).[191]

189 The CRSP Deciles Size Study and Risk Premium Report Study, both of which provide size premia and other risk premia based upon data licensed from the Center for Research in Security Prices (CRSP) at the University of Chicago Booth School of Business, are fully available in the Kroll Cost of Capital Navigator platform at kroll.com/costofcapitalnavigator (subscription required). CRSP® is a registered trademark and service mark of Center for Research in Security Prices, LLC and has been licensed for use by Kroll, LLC. The Kroll publications and services are not sponsored, sold or promoted by CRSP®, its affiliates or its parent company. To learn more about CRSP, visit www.crsp.org.

190 A detailed discussion of company size and return (and size premia) based upon CRSP deciles 1-10 and the 10th decile split (10a, 10b, 10w, 10x, 10y, and 10z) is available in the Resources Library of the Cost of Capital Navigator at kroll.com/costofcapitalnavigator. (subscription required).

191 For more information, see the Resources section of the Cost of Capital Navigator at kroll.com/costofcapitalnavigator. A comprehensive discussion of the size effect is in the Cost of Capital Navigator "U.S. Cost of Capital Module's" Resources Library.

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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.

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Company Name
Gannett Fleming

Valuation Date
12/31/2020

Returns Reference – Start Year
EARLIEST YEAR

Returns Reference – End Year
2020

Returns Calculation - Mean
Arithmetic
Geometric

ERP Size Premium IRP DoE WACC Summary

	Firms			Portfolio		Size Premium	
Decile	Count	Min size ('000)	Max Size ('000)	Annual Return	Beta	S&P 500	Beta Adjusted
1 - Largest	199	$29,075,803	$1,966,078,882	11.06%	0.92	(0.75%)	

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2	186	$13,178,743	$28,808,073	12.82%	1.04	1.01%
3	210	$6,743,361	$13,177,828	13.66%	1.11	1.85%
4	218	$3,861,858	$6,710,676	13.67%	1.13	1.86%
5	255	$2,445,693	$3,836,536	14.49%	1.17	2.68%
6	246	$1,591,865	$2,444,745	14.82%	1.18	3.01%
7	306	$911,586	$1,591,765	15.63%	1.26	3.82%
8	365	$451,955	$911,103	15.91%	1.31	4.10%
9	412	$190,019	$451,800	16.69%	1.34	4.88%
10 - Smallest	569	$2,194	$189,831	19.64%	1.40	7.83%
1 through 2	385	$13,178,743	$1,966,078,882	11.32%	0.94	(0.48%)
3 through 5	683	$2,445,693	$13,177,828	13.80%	1.13	1.99%
6 through 8	917	$451,955	$2,444,745	15.27%	1.23	3.46%
9 through 10	981	$2,194	$451,800	17.53%	1.35	5.72%
1 through 5	1,068	$2,445,693	$1,966,078,882	11.64%	0.96	(0.17%)
6 through 10	1,898	$2,194	$2,444,745	15.49%	1.24	3.68%

S&P 500 Annual Return for Period 1928 - 2020 : 11.81%

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Draper Aden Associates
Engineering • Surveying • Environmental Services

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Cary, NC 27511
919.827.0864
www.daa.com

May 3, 2022

Dana Hill, Director
Carolina Water Service of NC
Email: Dana.Hill@carolinawaterservicenc.com

RE: Carteret County - Fair Value Engineering Assessment
Draper Aden Associates Project No. 2200990

Dear Mr. Hill

We understand you have received comments and requests for clarifications from Utilities Commission Public Staff on April 1, 2021, regarding the Carteret County water systems. The list of comments will be attached to this response. This response will address those comments in the order they were listed, under the same numbering mechanism.

1. Typical commercial buildings are considered to be around 50-60 years for design life. The majority of items within the booster pump station are expected to last that approximate life, and those which would not are minor in cost and/or the replacement of which would be considered standard maintenance. Table 1 has been included as an attachment, with its formulas.

2. The date for the Mayflower Drive Tank should be 2010. The most recent inspection report for each tank has been attached.

3. Historical costs were unavailable, so that method could not be utilized for those items.

4. The inflation in 2020 was 1.2%, and 4.7% in 2021, so a rounded 5% seemed a reasonable conclusion for simplicity. Source used: https://www.minneapolisfed.org/about-us/monetary-policy/inflation-calculator/consumer-price-index-1913-

5. The number of fire hydrants should indeed be 175 at $875,000. The valves and water meters were not considered "major" components of the water systems, but rather as appurtenances to the waterlines.

6. This was an oversight. The replacement cost should be $300,000.

7. The requested documents are now included as attachments.

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8. Based on the provided information, the average meter age is less than 14 years of age, but some data is unclear so worst-case age was assumed on many. It is believed that all meters are less than 20 years of age, with the possibility of exceptions in the Merrimon Water System. Additional information is included in the attached excel file, along with billing information.

9. Customer and billing information are available in the excel file mentioned in Response 8 above.

10. The tanks are 200,000 gallons, and the date should be 2010.

11. A copy of the NCDENR PWS Authorization to Construct for the 2003 Phase II project has been included, which included many of the installations for the County's water systems. It is unclear that additional documentation exists, other than sets of plans and specifications. NC DEQ was unable to locate additional documents within their files other than what have already been provided.

12. See Response 11, above.

13. See Response 11, above.

14. Copper levels were found to be too high within the water system, so the distribution system is treated with Carus 8600. It is believed that the contamination comes from private service lines, but documentation confirming this is not available. The Pilot system for copper removal quote from Purologix Water Services, Inc., has been attached for reference.

15. The three elevated storage tanks are indeed scheduled to be repainted within the next 5 years; however, this work was not considered to be "upgrades or renovations", but rather regular and anticipated maintenance. As far as scope and cost, it is expected that the tanks will need interiors and exteriors painted, for approximately $120,000 each, or a total of $360,000.

16. The monthly billing summary for 2021, along with the number of each type of meter, is included in the same excel file referred to in Response 8. Information regarding specific gallons pumped per month is not available. Pump run times, however, have been included, which give average daily run times and total hours for each pump in the attached Pump Run Report excel file.

17. It was not made known until now that Carteret County indeed possesses four emergency generators.

    a. The Plant generator is a model 3651650100 from Generac Power Systems, Inc. It is a 3-phase, 277/480 V, 150 kW, diesel-powered standby generator. The generator was produced in December of 2003, and its fuel capacity is 150 gallons.
    b. The Silver Dollar Rd, Merrimon generator is a model MMG35 from Magnum Products LLC (subsidiary of Generac Power Systems). It is a 3-phase, 208/480 V, 33 kW, diesel-powered portable generator. The generator was produced in 2006, and its fuel capacity is 85 gallons.

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c. The Booster Pump Station 2 generator is a model MMG35 from Magnum Products LLC (subsidiary of Generac Power Systems). It is a 3-phase, 480/208 V, 26 kW, diesel-powered portable generator. The generator was produced in 2013, and its fuel capacity is 80 gallons.

d. The Booster Pump Station 1 generator is a model MMG35FH from Magnum Products LLC (subsidiary of Generac Power Systems). It is a 3-phase, 208/480 V, 33 kW, diesel-powered portable generator. The generator was produced in 2011, and its fuel capacity is 80 gallons.

If further information is required, please feel free to reach out so that we can be of assistance.

Sincerely,
Draper Aden Associates

Ethan Gartin, EIT
Project Engineer

Attachments

cc: Eugene Foxworth, Carteret County
Steven Gandy, Draper Aden Associates
C. Tyrus Clayton, Draper Aden Associates

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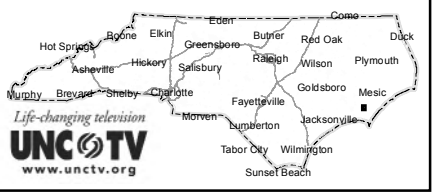
Water Service Area: Merrimon Water System

- Wastewater Treatment Plants
- Drinking Water Wells
- Surface Water Intakes
- Water Service Areas
- Water Supply Watersheds
- Streams and Rivers
  - Headwater Streams
  - Larger Streams
  - Rivers
- Lakes
- Cities and Towns
- US Highways
- Interstates



NOTE: Points, lines, polygons, and related information on this map are from publicly available datasets managed by both North Carolina state and U.S. federal agencies as of April 2015. UNC-TV is not responsible for any missing or inaccurate features or information.

CWSNC W-354 SUB 398
Carteret Fair Value Determination
Form Application Exhibit 1A

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Environmental Finance Center

NC Water and Wastewater Rates Dashboard
Rates as of January 1, 2022
Last updated: January 12, 2022

Water Infrastructure
ENVIRONMENTAL QUALITY

Carteret County — Carteret County

Rates Comparison | Financial Benchmarks | Characteristics | Links | Affordability | System and Community Info

Utility Owner

Ownership type	County District
Primary County	Carteret
Primary service area	Carteret County
Date Rates Effective	07/01/2021

◉ Water ○ Sewer ○ Water + Sewer

Select comparison group: All Utilities

	Carteret County	Median for all utilities in survey	Statewide Stats
Number of Systems	1	493	567
Est. Number of Connections	1,232	1,699	
Est. Service Population	3,021	4,199	
Operating Revenue	737,858	1,680,581	
Operating Expense	1,042,012	1,719,244	
Current Assests	2,058,529	1,744,640	
Census Year	2019		2020
Average Household Size	2.28	2.42	
Median Household Income	57,194	42,213	
Poverty Rate	10.69	18.47	

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Please select a utility above to view current North Carolina rates survey data.

When the dashboard appears, you will see the first utility alphabetically in the survey group. Please select the desired utility/rate structure, selecting service(s), monthly usage, and comparison group of your choosing on the left half of the dashboard.

Please click the “OK” button below when you are ready to proceed.
OK

Data sources: Environmental Finance Center at UNC School of Government & 2022 North Carolina water & wastewater rates survey, NC Local Government Commission (North Carolina Office of the State Treasurer), U.S. Environmental Protection Agency Safe Drinking Water Information System, U.S. Census Bureau American Community Survey 2015-2019, and North Carolina Department of Commerce.

Email feedback or comments: Environmental Finance Center.

CWSNC W-354 SUB 398
Carteret Fair Value Determination
Form Application Exhibit 1A

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UNC SCHOOL OF GOVERNMENT Environmental Finance Center

NC Water and Wastewater Rates Dashboard
Rates as of January 1, 2022
Last updated: January 12, 2022

NC Water Infrastructure ENVIRONMENTAL QUALITY

Carteret County - Merrimon System

Carteret County - Merrimon System

Rates Comparison | Financial Benchmarks | Characteristics | Links | Affordability | System and Community Info

Utility Owner

Ownership type	County District
Primary County	Carteret
Primary service area	Carteret County
Date Rates Effective	07/01/2021

◉ Water ○ Sewer ○ Water + Sewer

Select comparison group: All Utilities

	Carteret County	Median for all utilities in survey	Statewide Stats
Number of Systems	1	493	567
Est. Number of Connections	32	1,699	
Est. Service Population	71	4,199	
Operating Revenue	737,858	1,680,581	
Operating Expense	1,042,012	1,719,244	
Current Assests	2,058,529	1,744,640	
Census Year	2019		2020
Average Household Size	2.28	2.42	
Median Household Income	57,194	42,213	
Poverty Rate	10.69	18.47	

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Please select a utility above to view current North Carolina rates survey data.

When the dashboard appears, you will see the first utility alphabetically in the survey group. Please select the desired utility/rate structure, selecting service(s), monthly usage, and comparison group of your choosing on the left half of the dashboard.

Please click the “OK” button below when you are ready to proceed.
OK

Data sources: Environmental Finance Center at UNC School of Government & 2022 North Carolina water & wastewater rates survey, NC Local Government Commission (North Carolina Office of the State Treasurer), U.S. Environmental Protection Agency Safe Drinking Water Information System, U.S. Census Bureau American Community Survey 2015-2019, and North Carolina Department of Commerce.

Email feedback or comments: Environmental Finance Center.

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Carteret County, North Carolina

Operating Indicators by Function
Last Ten Fiscal Years

	Fiscal Year		
	2012	2013	2014
Function			
Sheriff:			
Physical arrests	2,288	2,091	2,018
Environmental Protection:			
Solid waste convenience sites:			
Refuse collected (tons / day)	45.46	43.74	46.25
Recycled Material (tons / day)	4.24	4.26	5.15
Yard Waste (tons / day)	2.61	3.50	11.00
Culture and recreation:			
Park reservations	5,792	6,099	6,462
Senior center and community center admissions	98,616	124,177	110,435
Public libraries:			
Admissions	293,613	286,588	269,839
Electronic resources users	365,516	400,407	292,250
Water:			
New connections	30	35	25
Water mains breaks	3	2	2
Average daily consumption (gallons / day)	150	125	127

Sources: Various government departments.

Notes:
No indicators are available for the general government, economic development, and human services functions.

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Schedule 17

2015	2016	2017	2018	2019	2020	**2021**
1,659	1,773	1,815	1,086	1,170	1,154	**1,052**
45.23	38.36	42.17	51.65	58.04	60.74	**59.48**
3.90	2.38	4.19	4.62	2.68	2.74	**3.45**
4.80	3.24	9.28	9.59	23.21	4.67	**4.35**
7,888	7,192	7,508	8,220	5,916	2,216	**4,340**
103,007	117,355	128,229	112,893	92,109	58,576	**5,105**
269,184	261,578	259,850	261,347	235,673	260,899	**234,810**
332,243	286,530	227,773	206,564	298,768	239,584	**215,626**
18	15	14	13	14	13	**23**
-	-	1	1	1	-	**-**
117	118	119	121	121	115	**125**

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FEASIBILITY STUDY FOR WATER SYSTEM MERGER

Carteret County, NC

December 2019

DAA Project Number: 18080125-010204

Draper Aden Associates
Engineering • Surveying • Environmental Services

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3RD PARTY REVIEW

This Report has been subjected to technical and quality reviews by:

Andy Dastidar		12/5/2019
Name:	Signature	Date
Project Engineer		

Aziz Ahmed		12/5/2019
Name:	Signature	Date
Project Manager		

C. Tyrus Clayton, Jr		12/5/2019
Name:	Signature	Date
Quality Reviewer		

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Appendix A Carteret County Water System Maps
Appendix B Carteret County Water Rates
Appendix C Town of Beaufort Water Rates

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EXECUTIVE SUMMARY

Carteret County (the County) retained Draper Aden Associates (DAA) to evaluate the feasibility of a "merger" of the County's water systems with Town of Beaufort's (the Town) water system. The proposed "merger" would entail the Town of Beaufort taking over the ownership and operation of the County's water systems.

The following tasks were performed:

1. Evaluated the County's water systems assets and maintenance programs.
2. Developed estimated present value of the County's water systems.
3. Reviewed current staffing and potential impacts on the Town's water system staffing, if the merger were to occur.
4. Reviewed the County's water rates, revenues, operating expenses and debt service.
5. Analyzed the projected fiscal impact on the Town of Beaufort water system, if the merger occurs.
6. Developed recommendations for a win-win merger condition for both the Town and the County.

Major findings from the study include:

1. County's water infrastructure is well documented and in good condition.
2. Estimated present value of the County's water system is approximately $12.3 million.
3. County's current water rate ($55.10 / 5,000 gallons) is less than the Town's out of town water rate ($58.79 / 5,000 gallons).
4. County has outstanding water debt of $2,066,128 (principal only) which will be retired in Fiscal Year 2051-2052.
5. The operating expenses of the County's water system have exceeded revenues in recent years and the deficits have been subsidized by the tax revenues generated from the Special Water Tax District. FY 2019 is the first year where projected expenses will be lower than the revenue. The County believes that FY 2019 will be the new normal as the water system is in good condition now, and the County does not have any need for large capital investment in the foreseeable future.
6. Currently, the County has three (3) water staff and the Town has four (4) water staff. The merged system will need services of a full-time and part time County staff in addition to the four (4) Town staff. There will be a $165,000 savings in staff compensation. These excess funds can be used for system upgrades or capital expenditures.

DAA's findings show that a merger will be beneficial for both the County and the Town, but to make it workable for the Town, DAA made some recommendations.

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Recommendations:

1. The County transfers the water systems to the Town at a cost of $1.
2. The County continues to pay off the current debt service ($245,800 / per year) for next 11 years to retire the debt earlier and remove or modify the water tax district after debt retirement.
3. Based on the current tax rate, the County will have excess fund (difference between water district tax revenue and debt service fee, $177,000 per year) after merger until the debt is retired. County will work in good faith with the Town utilizing these funds for upgrades and expansions to the system during the 11-years debt pay-down period. County may also continue to participate in extensions and upgrades beyond the 11 years, for specific county needs within the existing water district boundaries.
4. The Town will maintain the water rates for the special water district at a rate that is less than the County water rates at the merger date and can increase or decrease the rates in future by the same percentage change as the in-Town water rates.

Benefits for the Town:

1. Acquisition of $12.3 million worth of infrastructure without any financial investment.
2. Expansion of Town's water system and customer base.
3. County's financial support for at least 11 years to address special capital and maintenance issues in the system previously owned by the County.
4. Potential opportunity for annexation.

The advantages of this potential merger outweigh the few economic and financial limitations. Prior to merger of these water systems, the County and Town will need to address all legal and financial aspects of the merger, which will require good-faith negotiations from both entities.

-- End of Section --

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1.0 INTRODUCTION

Carteret County and the Town of Beaufort are interested in "merging" the water systems of the two entities – with the Town taking over ownership and operation of the County's water system.

1.1 Objectives

The objective of this feasibility study is to determine the value of Carteret County's water systems, understand the staffing needs to operate and maintain the County's systems, evaluate the financial condition of the County's water department, identify the potential impact of the proposed merger on the utilities, and develop recommendations to make the merger beneficial for the Town and the County. The findings and recommendations are documented in this DRAFT report for further discussions with the County and the Town staff. This report will be updated based on the discussions between the County and the Town to be facilitated by DAA.

1.2 Report Organization

This report is organized as outlined below:

- Chapter 2.0 (Carteret County Water System Assessment) describes the County's water system including land, physical assets, maintenance programs, and near-term capital improvement program.
- Chapter 3.0 (Estimated Current Value of Carteret County's Water System) describes the monetary value of the assets and how the values were calculated.
- Chapter 4.0 (Organization of Carteret County Water Department) describes the current staffing structure and responsibilities.
- Chapter 5.0 (Revenues and Expenses of Carteret County Water System) describes the water rates, debt service and current financial conditions.
- Chapter 6.0 (Feasibility of Merger) describes the Town of Beaufort system, advantages to the Town in taking over the Carteret County System, and recommendations to make the merger beneficial to both the County and the Town.
- Chapter 7.0 (Conclusion) describes the outcome of this feasibility study.

-- End of Section --

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2.0 CARTERET COUNTY WATER SYSTEM ASSESSMENT

2.1 System Overview

Carteret County (the County) relies on two groundwater wells for water supply. Water from the first well is treated at the Laurel Road Water Treatment Plant before it is pumped to three (3) elevated storage tanks for distribution within the community. These storage tanks are located with water lines extending to the Craven County line along NC Highway 101 and into the Mill Creek area. There are also water lines extending from the Beaufort Town limits along Highway 70 to East Carteret High School and along Merrimon Road to Laurel Road. The system serves approximately 1,206 customers.

The County also owns and operates a small water system about 20 miles north of Laurel Rd and Merrimon Rd intersection. This small system known as Merrimon Water System (MWS), serves approximately 25 – 30 customers. MWS receives water from the Jonaquins Creek well that consists of a well and an above-ground storage tank.

A map showing Carteret County's water system (including its water district boundary) is shown in Figure 1 of Appendix A. The MWS is shown at the inset of Figure 1 and in Figure 2 of Appendix A.

MWS system is an integral part of the County's water system and should be included in any potential water system merger or transfer discussions. Legalities of such a merger / transfer will be agreed upon and processed by participating agencies prior to acceptance and completion of the merger process.

2.2 Special Water Tax District

The Board of Commissioners of Carteret County established the Special Water Tax District (SWTD) in 2010. Within this district, there is a special tax assessed to taxpayers for water supply and distribution services. The tax rate in the special water district has been 5.5 cents since 2012. In addition, sales tax revenues in the SWTD are used to support the water operations. Table 1 provides the revenue and expenditures for the SWTD for FY2018, FY2019 and FY2020.

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Table 1. Revenue and Expenses for the Special Water Tax District

	FY 2018 (Actual) $	FY 2019 (Amended Budget) $	FY2020 (Budget) $
Expenditure Category			
Fees	1,240	3,000	3,000
Transfer to Water Fund	433,600	400,000	420,000
Total	434,840	403,000	423,000
Revenue Sources			
Ad Valorem Taxes	299,136	292,000	292,000
Sales Tax	96,329	95,000	100,000
Interest	1,505	1,000	6,000
Appropriated Fund Balances	0	15,000	25,000
Total	**396,969**	**403,000**	**423,000**

2.3 Water System Assets

The County water system assets include water mains, valves, water meters, fire hydrants, tanks, booster pump stations, a Supervisory Control and Data Acquisition (SCADA) system and land parcels. These assets are listed in Table 2.

Table 2. Water System Assets of Carteret County

Items	Quantity	Description
Water Plant	1	
Land	8 Parcels	16.49 acres
Pump Stations/Pump Houses	3	Booster Pumps 1, 2, and 3
Water Tanks	4	3 elevated tanks and one ground tank
Valves	599	
Water Meters	1,206	
Fire Hydrants	175	
Water Lines	5 miles	2 inches
	0.25 miles	4 inches

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Items	Quantity	Description
	29.6 miles	6 inches
	20.4 miles	8 inches
	0.6 miles	10 inches
SCADA System	1	Management of elevated water tanks and Jonaquins Creek well house

2.3.1 Storage Tanks

Details for the three elevated storage tanks are provided in Table 3.

Table 3. Elevated Water Tanks

Types of Tanks	Capacity (gallons)	Manufacturer	Design Type	Year Constructed
Taylor Farm Road Tank	200,000	Caldwell	Torus Bottom	2012
Laurel Road Tank	200,000	Phoenix	Double Ellipsoidal	1988
Mayflower Drive Tank	200,000	Phoenix	Torus Bottom	2012

2.3.2 Pump Stations

The County has three booster pump stations. Details of these pump stations are shown in Table 4. Booster Pump 2 provides water at the emergency connection between the Town of Beaufort and the County.

Table 4. Pump Stations

Types of Pump	Cat No/Model Number	Manufacturer	Horsepower (HP)	Design Type (RPM)	Installation Date
Booster Pump #1	R5P 3D/H317	Emerson Motor Co.	5	1170	2012*
Booster Pump #2	EM3774T	Baldor Electric Co.	10	1760	2012
Booster Pump #3	EM3770T	Baldor Electric Co.	7.5	1770	2012

*Estimated, actual date of installation is not available.

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2.3.3 Land

The total acreage utilized by the County's water system is approximately 16.49 acres. Table 5 summarizes the properties, the street address and the acreage.

Table 5. Carteret County Water System Property

Property	Address	Total Acres
Laurel Road Aerial Tank	524 Laurel Road	2.04
Laurel Road Treatment Plant	526 Laurel Road	8.12
Jonaquins Creek Water House	150 Jonaquins Creek Road	0.82
Taylor Farm Elevated Tank	209 Taylor Farm Road	1.01
Booster Pump Station #1	142 Shell Landing Road	0.47
Booster Pump Station #2	1109 Hwy 101	0.60
Booster Pump Station #3	3510 Hwy 101	2.56
Mayflower Drive Elevated Tank	104 Mayflower Drive	0.87
Total		**16.49**

2.4 Asset Maintenance

2.4.1 Pipeline Maintenance

The County's Public Works Department (PWD) performs system maintenance including, but limited to, the following:

- Detection and repair of leaks in the pipe lines
- Maintenance of booster pumps and other associated components of the water distribution system
- Maintenance and replacement of water meters, valves and fire hydrants
- Water service installations and / or inspections

2.4.2 Tank Maintenance

Southern Corrosion Inc (SCI) has an existing water tank management addendum to contract with the County until year 2030. Per contract, the tanks will be inspected every year and will be washed-out at five (5) year intervals. The tank interior will be recoated at fifteen (15) year intervals, and the exterior will be recoated at five (5) year intervals. The next wash-out is scheduled for year eight (8) of the service

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(year 2023), repainting of the tank exterior is scheduled for year twelve (12) of the service (year 2027) repainting of tank interior is scheduled for year twelve (12) of the service (2027).

The contract does not include the complete abrasive blasting of tank exterior nor the pressure washing of tank exterior as a stand-alone apart from a surface preparation for painting.

SCI provides the following services to the County in accordance with the tank's maintenance program:

- Emergency services (tank leaks, tank failures, etc.)
- Scheduled cleaning/washout of tanks interiors
- Inspection of interior and exterior surfaces of tanks
- Application of protective coatings
- Maintenance, upkeep and long-term maintenance needs

Table 6 below indicates the scheduled maintenance activities that have taken place under this contract for the last four years. Based on the 2018 inspection results as shown in Table 6, all three tanks are in good condition without any serious deficiencies that require immediate attention.

2.5 Carteret County Water System Capital Improvement Plan

In 2013, the County completed a $3.51 million water system improvement project. Since 2013, there has been little need for significant capital projects; there were no capital projects scheduled in FY2019 and the FY2020 budget does not include any. The County continues to fund "pay as you go" capital projects, as needed. Recent capital investments include:

- Fiscal Year 2011: WTP Telemetry Base Upgrade, Addition of 10-inch Color MMI, Replace Tank Level Meter/Digital DSP-MMI, Use Existing Probe Relays-Raw Well Control, and Replace Remotes /Upgrade Phone Line and Radio. Total cost for upgrade was $27,998.
- Fiscal Year 2016: BPS Flow Meter and RTU Repair. Total cost for repair was $4,697.
- Fiscal Year 2017: Discharge Pump Station SCADA TIE-IN. Total cost for this implementation was $3,309.
- Fiscal Year 2018: Softener and filter refurbishment. The total cost was $121,446

Overall, the water system is in good condition and the County is not expecting any major capital investment in the near future.

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Table 6. Tank Maintenance Report (2015-2018)

Tank	Year Constructed	Year-2015	Year-2016	Year-2017	Year-2018
Taylor Farm Road Tank	2012	The tank, its components, and coating systems are in good condition. The interior coating system deficiencies ranged between 0% and 10%, whereas, the exterior coating deficiencies ranged between 0%-2%. Some of the exterior deficiencies included; Pin Point Rust, and Irregular Surface Deterioration. No visual deficiencies were observed pertaining to internal coating system. The safety inspection yielded satisfactory and compliant results pertaining to structural integrity of exterior, storage, safety, and other associated components	The tank, its components, and coating systems are in good condition. The interior coating system is free of any premature failure and provides adequate protection to the structure. The upper portions of the leg ladder, sway rods, and shell wall ladder are showing signs of premature coating failure causing surface corrosion. Repair and scheduled maintenance maybe required	There was no maintenance required during this time. The coating in the exterior and interior are in excellent condition	No deficiencies or touchups were noted, and the overall visual appearance of the water tank is satisfactory
Laurel Road Tank	1988	The tank, its components, and coating systems are in good condition. The interior coating system deficiencies ranged between 0% and 10%, whereas, the exterior coating deficiencies ranged between 0%-2%. Some of the exterior deficiencies included; Irregular Surface Deterioration, Mildew, Peeling Multiple Coats, and Undercutting. Deficiencies pertaining to internal coating system included Pin Point Rust, and Irregular Surface	There were no deficiencies or touch ups noted and the overall visual appearance of the water tank (internal and external) is satisfactory. The obstruction light on tank roof was repaired	Both exterior and interior protective coating seems to be in excellent condition. The interior and exterior coating systems are free of any serious deficiencies and provides adequate protection to the structure.	The water tank, its components, and coating systems are in good condition. The interior and exterior coating systems are free of any serious deficiencies and provides adequate protection to the structure.

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		Deterioration. The safety inspection yielded satisfactory and compliant results pertaining to structural integrity of exterior, safety, and other associated components. The side wall coating of the storage exterior needs to be monitored as per the report.			
Mayflower Drive Tank	2010	The tank, its components, and coating systems are in good condition. The interior coating system deficiencies ranged between 0% and 10%, whereas, the exterior coating deficiencies ranged between 0%-2%. Some of the exterior deficiencies included; Pin Point Rust, Irregular Surface Deterioration, etc. No visual deficiencies were observed pertaining to internal coating system. The safety inspection yielded satisfactory and compliant results pertaining to structural integrity of exterior, storage, safety, and other associated components	The tank, its components, and coating systems are in good condition. The interior coating system is free of any premature failure and provides adequate protection to the structure. On the exterior, such as the ladder and sway/spider rods, are showing signs of premature failure and surface corrosion. Repair and a scheduled maintenance may be required.	Exterior deficiencies included Mildew, Fading, Chalking, Irregular Surface Deterioration, Undercutting, Peeling Paint to Substrate. Adhesion failures and surface corrosion present on 20% of the surfaces. 10% Adhesion failures and surface corrosion observed on the rods and struts. And close to 2% adhesion failure and surface corrosion observed on the catwalk and handrails. The interior protective coating system seems to be in excellent condition	Structural wise, the tank is in good condition, but a planned renovation needs to be scheduled by the County Officials. A weathered and weakened coating system is nearing the end of its protective cycle

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3.0 ESTIMATED CURRENT VALUE OF THE CARTERET COUNTY WATER SYSTEM

3.1 Theory of Asset Valuation

DAA estimated the value of the County's water system using an asset evaluation approach as described below.

Book Value (BV) approach was used in estimating the value of the fixed assets. The BV approach uses equation (1) to estimate the present worth of an asset as stated below:

Present BV of Asset ($) = Historical Cost ($) – ((Accumulated Depreciation ($) + Current Depreciation ($)) *(1)*

Traditionally, straight line depreciation (SLD) technique is used to estimate depreciated value of water system assets. Historical cost represents the cost of the assets on the day of acquisition. DAA was able to locate financial records pertaining to purchase prices on some of these assets from the County's finance department.

Accumulated depreciation is calculated using equation (2), and incorporates useful life of the water distribution system component:

Accumulated depreciation ($) = (Net Amount to be depreciated/Total useful life in months) x ((Fiscal year beginning date-date of acquisition)/30.4167)) *(2)*

The value of 30.4167 is used for converting days to months.

Depreciation value ($) for each asset for the current year is estimated using the following equation:

Current Depreciation ($) = Net amount to be depreciated ($) / Total useful life (months) *(3)*

The equation (3) may be modified if the depreciation amount ($) in equation (3) exceeds the difference of net amount to be depreciated and accumulated depreciation. The revised equation for Current Depreciation is stated below:

Depreciation Current Year ($) = Net Amount to be depreciated ($) - Accumulated depreciation ($) *(4)*

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The Net amount to be depreciated ($) is calculated using the equation (5)

Net Amount to be depreciated ($) = Historical Cost ($) – Salvage Value ($) *(5)*

For purpose of estimation, the salvage value of each system component was assumed at zero dollar ($0). With this assumption, the net amount to be depreciated was equaled to the historical cost of the asset.

3.2 Estimated Value of the County's Water Systems

The County provided detailed asset data and historical costs for the pump stations and the water tanks. Book Value (BV) of these assets was calculated and is documented in Table 7. Historical cost data for other assets such as fire hydrants, the water treatment plant, water mains, and the SCADA system installed at Booster Pump 1 were not available, but the County provided financial data that detailed the present book value of the assets as listed in Table 8. Adding the total book values listed in the Tables 7 and 8, the net worth of the water system assets owned by the County was calculated to be approximately $12,335,392.

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Table 7. Estimated Book Value of Carteret County Water System

Assets	Date of Acquisition	Design Life (yrs)	Historical Cost ($)	Total Useful life (months)	Net Amount to Be Depreciated ($)	Accumulated Depreciation ($)	Current Depreciation ($)	Total Depreciation ($)	Present Book value of Asset ($)
Booster Pump 1	2012	50	174,284	600	174,284	19,462	3,486	22,947	151,337
Booster Pump 2	2012	50	253,111	600	253,111	28,264	5,062	33,326	219,785
Booster Pump 3	2012	50	253,111	600	253,111	28,264	5,062	33,326	219,785
		Subtotal	**680,507**				**Subtotal**	**89,600**	**590,907**
Water Tank 1	1988	50	619,263	600	619,263	366,397	12,385	378,783	240,480
Water Tank 2	2012	50	689,091	600	689,091	76,949	13,782	90,730	598,361
Water Tank 3	2012	50	765,262	600	765,262	85,454	15,305	100,759	664,502
		Subtotal	**2,073,616**				**Subtotal**	**570,272**	**1,503,344**
		Total	**2,754,123**				**Total**	**659,872**	**2,094,250**

See Section 3.1 for the equations used in BV calculations

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Table 8. Present Book Value of Carteret County Water System

System No	Description	Present Book value of Asset ($)
SCADA		
Booster Pump House1	SCADA System*	**280,000**
Land		
Laurel Road Aerial Tank	Land Property	25,428
Laurel Road Treatment Plant	Land Property	57,220
Jonaquins Creek Water House	Land Property	26,097
Aerial Tank	Land Property	130,312
Booster Pump Station-1	Land Property	40,578
Booster Pump Station-2	Land Property	35,312
Booster Pump Station-3	Land Property	34,160
Elevated Tank	Land Property	20,615
	Sub Total	**369,722**
Well House	Water withdrawal house*	**200,000**
Jonaquins Creek Well House and Storage	Merrimon Water System*	**400,000**
Fire Hydrants	Fire rescue purposes	**300,000**
Water Treatment Plants	Supply/Distribution*	**1,500,000**
Piping System		
2" PVC	(26,400 ft, $10/ft)	264,000
4" PVC	(1,320 ft, $16/ft)	21,120
6" PVC	(151,588 ft, $24/ft)	3,638,112
6" Ductile	(4,700 ft, $28/ft)	131,600
8 " PVC	(104,477 ft, $28/ft)	2,925,356
8" Ductile	(3,235 ft, $32/ft)	103,520
10" PVC	(3,168 ft, $34/ft)	107,712
	Sub Total	**7,191,420**
	Total ($)	**10,241,142**

*Estimated value

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4.0 ORGANIZATION OF CARTERET COUNTY WATER DEPARTMENT

The County's water system is managed by the Public Works Department (PWD) Director. Water operations are managed by a lead water plant operator and utilities technician who report to the PWD Director. The PWD Directors reports to General Service Director who in turn is managed by the Assistant Manager of the County. The Assistant Manager reports to the County Manager. Billing and collection responsibilities for the systems are provided by the County Finance Office. An organizational chart for the Water Department is shown in Figure 1.

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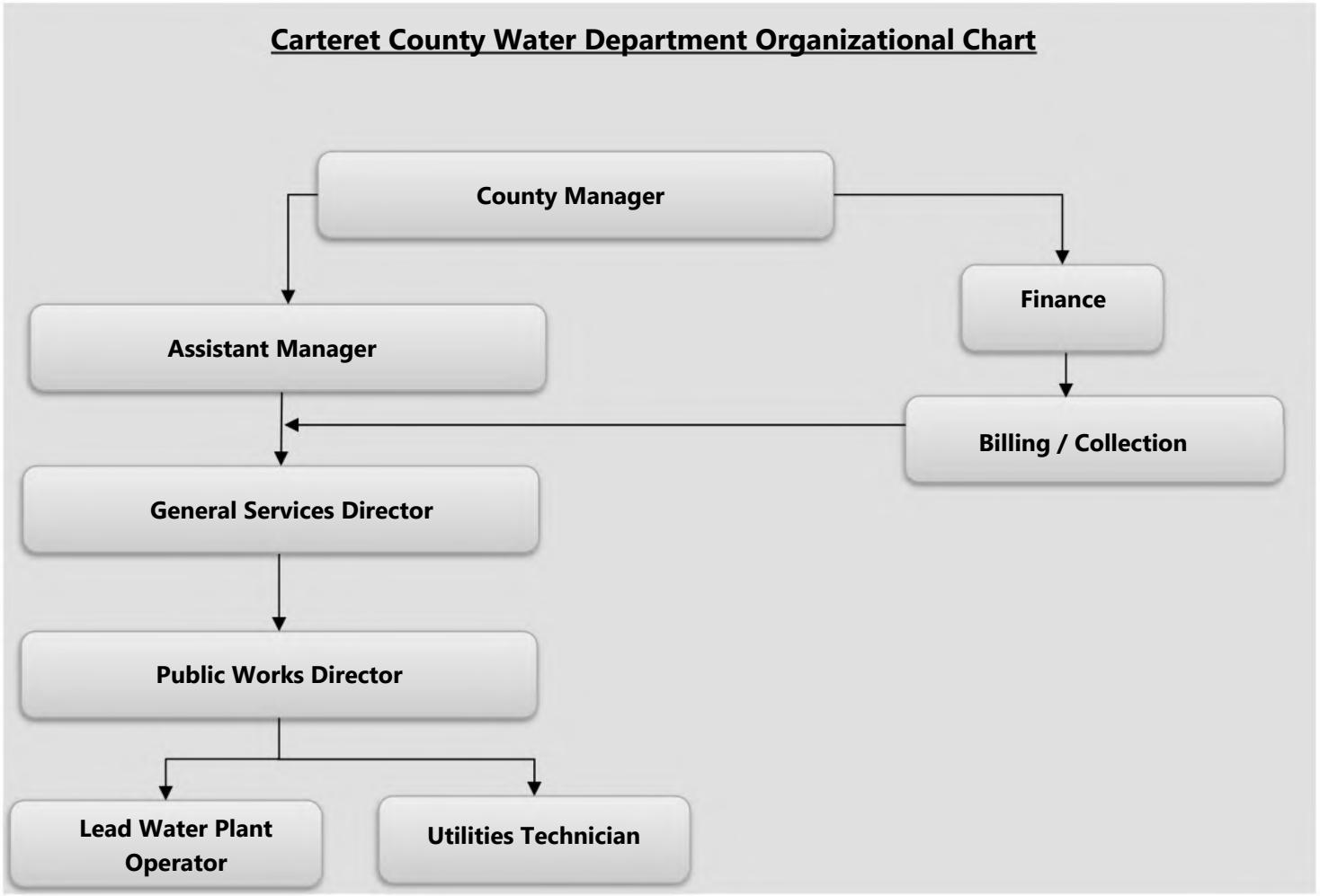

Figure 1. Carteret County Organizational Chart

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5.0 REVENUES AND EXPENSES OF CARTERET COUNTY WATER SYSTEM

5.1 Water Rates

Currently, the County charges $55.10 for every 5,000 gallons of water to customers who are billed per measurements recorded on a three-fourth (3/4) inch meter (See the County's Water Rate Sheet in Appendix B). There is a separate water rate structure for customers served by 1, 2, and 4-inch meters. The County has also developed a specific readiness to serve rate for the Merrimon water system customers. For this study, only three-fourth (3/4) inch meter is used to conduct comparative analysis of the water rates for both the County and the Town system.

The Town charges $35.72 for every 5,000 gallons to in-town customers using three fourth (3/4) inch meters (See the Town's Water Rate Schedule in Appendix C). The comparative out-of-town water rate is $58.79.

5.2 Outstanding Debts and Repayment Schedule

Current utility debt for the County is at $2,066,128 with an estimated interest of $619,319 until the loan amount is retired by the year 2052. Table 9 and Figure 2 below show the debt payment schedule for each year. The debt payment amount for each year will significantly lower after FY 2025-26 and the debt amount per year will remain relatively constant until the loans are completely retired.

Table 9. Water Utility Debt Payment Schedule for Carteret County

FY Year	Principal ($)	Interest ($)	Total Utility Debt ($)	Years
FY 19-20	$189,032	$55,202	$244,234	1
FY 20-21	$190,032	$49,835	$239,867	2
FY 21-22	$190,032	$44,442	$234,474	3
FY 22-23	$191,032	$39,047	$230,079	4
FY 23-24	$160,000	$33,626	$193,626	5
FY 24-25	$161,000	$29,989	$190,989	6
FY 25-26	$161,000	$26,322	$187,322	7
FY 26-27	$22,000	$22,660	$44,660	8
FY 27-28	$23,000	$22,055	$45,055	9
FY 28-29	$23,000	$21,423	$44,423	10

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FY Year	Principal ($)	Interest ($)	Total Utility Debt ($)	Years
FY 29-30	$24,000	$20,790	$44,790	11
FY 30-31	$25,000	$20,130	$45,130	12
FY 31-32	$25,000	$19,443	$44,443	13
FY 32-33	$26,000	$18,755	$44,755	14
FY 33-34	$27,000	$18,040	$45,040	15
FY 34-35	$27,000	$17,298	$44,298	16
FY 35-36	$28,000	$16,555	$44,555	17
FY 36-37	$29,000	$15,785	$44,785	18
FY 37-38	$30,000	$14,988	$44,988	19
FY 38-39	$31,000	$14,163	$45,163	20
FY 39-40	$31,000	$13,310	$44,310	21
FY 40-41	$32,000	$12,458	$44,458	22
FY 41-42	$33,000	$11,578	$44,578	23
FY 42-43	$34,000	$10,670	$44,670	24
FY 43-44	$35,000	$9,735	$44,735	25
FY 44-45	$36,000	$8,773	$44,773	26
FY 45-46	$37,000	$7,783	$44,783	27
FY 46-47	$38,000	$6,765	$44,765	28
FY 47-48	$39,000	$5,720	$44,720	29
FY 48-49	$40,000	$4,648	$44,648	30
FY 49-50	$42,000	$3,548	$45,548	31
FY 50-51	$43,000	$2,393	$45,393	32
FY 51-52	$44,000	$1,210	$45,210	33
Total	**$2,066,128**	**$619,139**	**$2,685,267**	

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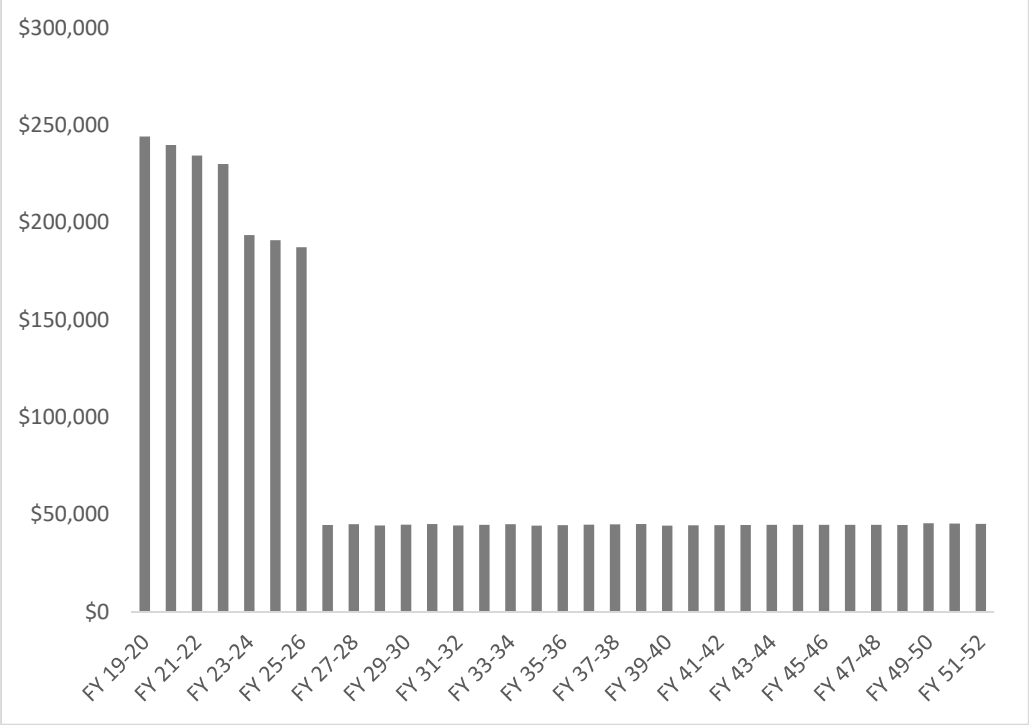

Figure 2. Carteret County Water Utility Debt Payment Schedule

5.3 Revenue and Expenses

5.3.1 Review of Historical Revenue and Expenses

A review of the County's historical water system budget (including the debt services) between FY 2016 and FY 2019 listed in Table 10 shows significant water system operating expenses beyond the revenue earned. This data indicates that the County has been losing money with the water system and needed to subsidize the system with the SWTD funds to keep the system solvent. The deficit margin widened in 2018 considering the additional capital improvement expense for that year. However, for 2019, there was a marginal decline in the water system operating expense which lead to the deficit being similar to that of 2016 and 2017 respectively.

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Table 10. Budget for F2016-FY2019

Year	Water System Revenue	Water System Operating Expense	Water System Debt Service Fee	Water System Capital Outlay	Net Income (Deficit)
2016	$576,598	$554,733	$263,589	-	($241,724)
2017	$584,344	$668,215	$259,277	-	($343,148)
2018	$678,879	$828,412	$253,939	$37,898	($441,370)
2019	$711,732	$726,384	$249,600	$25,500	($289,752)
Total	$2,551,553.00	$2,777,744.00	$1,026,405.00	$63,398.00	($1,315,994)

5.3.2 Review of FY 2020 Finances

The projected fiscal budget for the County in the year 2020 is presented in Table 11. Per projected water fund revenue and water fund expenses for FY 2020, there is a net fiscal deficit of $162,990. This deficit may be eliminated by using revenue generated from the SWTD. Using this fund to eliminate the deficit leaves a net balance of $14,130 that may be used for other operational expenses.

Table 11. Projected Fiscal Budget for year 2020

Items Description	Budget
Water Distribution System Value[1]	$12,335,392
Total Utility Debt (including interests)[2]	$2,685,267
Debt Pay Off Period	2051-2052
FY 2020 Debt Service Fee[3]	$245,880
Water Tax District Revenue (FY 2020 Projected)[4]	$423,000
Water Fund Revenue (FY 2020 Budget)[4]	$710,400
Water Fund Expense (FY 2020 Budget)[4]	$873,390
Water Fund Loss[5]	($162,990)
Water Tax District Revenue Balance[6]	$14,130

Notes:

1. See Section 3.2 for reference
2. See Table 9 for reference
3. See Tables 9 for reference. The difference between the monetary value of $245,880 in Table 11 compared to the fiscal value of $244,234 in Table 9 for FY2020 may due to budgetary discretion
4. Projected FY 2020 Budget
5. Water Fund Loss/Deficit is estimated using the equation: Water Fund Revenue ($710,400) - Water Fund Expense ($873,390)
6. Water Tax District Revenue Balance is estimated using the equation: Water Tax District Revenue – (FY20 Debt Service Fee + Water Fund Loss)

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5.4 Opportunity to Eliminate Deficit

The expense in 2019 shows significant reduction over the previous years and is expected to be the norm as the County's system does not anticipate significant capital investment in near future.

A moderate projection of 2% yearly increase in both water district tax revenue and water system expense may be adequate to run the system sustainably. Table 12 lists the yearly revenue and expenses from 2020 to 2025 using 2019 as the base year for projection. This projection shows a positive yearly cash flow. Thus, if the water system in its current condition (with a value of $12.3 million) can be separated from the debt services, it would offer an attractive acquisition option for any utility.

Table 12. Fiscal and Projected Budget for FY 2019-FY 2025

Year	Water Tax District Revenue	Water System Expense	Cash Flow
2019	$711,555	$704,255	$7,300
2020	$725,786	$718,340	$7,446
2021	$740,302	$732,707	$7,595
2022	$755,108	$747,361	$7,747
2023	$770,210	$762,308	$7,902
2024	$785,614	$777,554	$8,060
2025	$801,327	$793,106	$8,221

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6.0 FEASIBILITY OF MERGER

6.1 Water System of Town of Beaufort

The Town of Beaufort provides water and sewer services to its residents through established water rates that covers existing financial debts and other operational costs pertaining to these enterprise funds. The Town purchases water from the County for distribution in Eastman Creek subdivision. Currently the Town provides limited sewer service to approximately 200 customers located within County's SWTD with water purchased from the District at its existing rate. The Town has sewer force mains along NC Highway 70 serving sewer needs to East Carteret High School, also extending along NC Highway 101 serving sewer needs to Eastman's Creek and Jarrets Bay Industrial Park. This existing layout of the sewer force mains provides an opportunity to serve sewer needs within a large area of the County's SWTD which could offer an attractive condition to grow the customer base for the Town's sewer system.

Current water and sewer rate for an out-of- town customer is approximately double the rate of in-town customer. Acquiring the County's water system would increase the Town's customer base by approximately 34% with no cost for infrastructure. The potential opportunity to grow both water and sewer services within the County, at a lower rate will encourage businesses and developers to seriously consider annexation when planning growth within the merged service area.

6.2 Organizational Impact of Merger

Currently, the County's PWD has three personnel who are directly responsible for water operations. The organizational responsibilities of these people have been described in Chapter 3. If a merger is executed, one and possibly two of these employees could be transferred to Town's Public Utilities Department, which now has a total of four (4) full time employees. For the purpose of this report we will calculate the Town's additional personnel needs to support the merger at service provided by a full-time and a part-time employees. The County would transfer the remaining employee to another area of need with their other operations. Based on 2020 budget, salaries for the County's 3 water staff are approximately $330,000, including benefits. The merger could provide an opportunity to save a

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minimum of half ($165,000) that expense. With other redundancies within the budgets, this number could very well be higher.

Water billing, collection and customer service support would be completely transferred from the County to the Town. As the Town is already managing its own billing, it is assumed that no additional employee is needed for billing the merged system.

6.3 Key Advantages of Merger for Town of Beaufort

There are several advantages for the Town to acquire the County's water distribution system. Some of the key benefits are listed below:

- The Town will acquire approximately $12.3 million worth of infrastructure from the County.
- The Town will be able to operate the system largely with existing personnel plus 1.5 additional staff and equipment.
- The merged water systems would provide an opportunity not only for system growth but could also spur business and residential growth in the Town's tax base through potential annexations.
- With the merger, a new rate structure may be proposed to attract developers and business that are near the existing sewer force mains to consider annexation to avoid out-of-town rates.

6.4 Recommendation for Carteret County

As shown in Table 9, the water district system has an existing debt of $2,066,128 (principal only) that will be fully retired by the year 2052. This debt poses a liability and concern for the Town if they acquire the County's water distribution system. For a successful merger of the two water distribution systems, the following are recommended measures for the County:

- The County would maintain the SWTD for a minimum of eleven (11) years until FY 2031. The debt service for FY 2020 is $245,800 (adopted by the County Commissioner) which will be paid using the revenue generated from special water district funds. The County should pay this same debt service fee amount for the next eleven (11) years to retire the debt. Once this existing debt is retired, the County may no longer need to maintain this special water tax district and can either eliminate the tax altogether or modify it for future needs within the district for health and safety.
- If the County transfers ownership of its water systems to the Town and agrees to continue pay $245,880 per fiscal year toward the debt, there will be a net balance of $177,120 (Table 11; $423,000-$245,880) every year, in the special water district funds. The County may use

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these remaining funds to participate in capital improvement upgrades and replacements of the existing infrastructure transferred to the Town. However, capital improvements directly benefiting the Town would be subject to negotiation.

- The County would maintain the right to request upgrades to the existing system within the SWTD boundaries with mutual understanding that the cost for such an upgrade will be paid by the County for a negotiated number of years. A potential negotiated period may include the next 11 years when the County would continue to collect the SWTD revenue to pay off the debt service. It is also expected that both the Town and the County will work together to accomplish these projects through a fair assessment of capital project benefits to each entity.

6.5 Recommendation for Rate Modification

Existing out-of-town rates (Appendix C) established by the Town are currently seven percent (7%) higher than rates charged by the County (Appendix B). In exchange for the County's commitment to transfer ownership of the system, participate in capital costs for a period of eleven (11) years and retire the existing debt, it is recommended that the Town adopts a readiness to serve charge for the SWTD that is the same as that for the out of town customers but keep the water use rate as that of in town customers, shown in Table 13.

Table 13. Proposed Out of Town Water Rates

Description	Amount ($)
Readiness to Serve Charge[1]	$20.74
Variable Rate for Water[2]	$5.07/1,000 gallons
Cost for 5,000 gallons[3]	$46.09

Notes:
1. Out of Town Readiness to Serve
2. Water Usage rate for in Town customers (Appendix c)
3. Cost =$20.74 + ($5.07*5) = $46.09

This rate is a recommendation only that still keeps the water rate for the current County customers below their present water rate. For this report, only the rate for 3/4 inch meters was considered; the rates for other size meters serving customers within the water district boundary can be set using similar logic.

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Accepting this water rate structure in addition to acquiring the County water system infrastructure, would not limit the Town's right to maintain another out-of-town rate for customers outside the County's current water district boundary.

6.6 Financial Advantages for Town

The proposed rate structure (for 3/4-inch meters) shown in Table 13 would save County customers an estimated $9.01 per month compared to the existing county water rate of $55.10 per month. Though the new rate structure would reduce water sales revenues generated from the County customers, the savings in operating expense through reductions in salaries (1.5 persons instead of 3 persons) and other redundant expenses needed for operation would more than compensate for any losses. As described in Section 6.2, the merger would save nearly $165,000 per year in salaries and benefits. Considering that saving, water system revenues and expenses for before and after merger conditions are calculated and shown in Table 14.

Table 14. Comparison of Cash Flow - Before and After Merger

Year	Projected Special Water District Revenue (Before Merger)[1]	Projected Special Water District Revenue (After Merger)[2]	Projected Water System Expense (Before Merger)[1]	Water System Expense (After Merger)[3]
2020	$725,786	$606,757	$718,340	$553,340
2021	$740,302	$618,892	$732,707	$567,707
2022	$755,108	$631,270	$747,361	$582,361
2023	$770,210	$643,896	$762,308	$597,308
2024	$785,614	$656,773	$777,554	$612,554
2025	$801,327	$669,909	$793,106	$628,106
Total	**$4,578,346.51**	**$3,871,471**	**$3,827,121**	**$3,3,541,376**

Notes:
1. From Table 12
2. 83.6% of Revenue (Before Merger); 83.6% is based on Current County rate of $55.1 and proposed rate of $46.09 as calculated in Table 13
3. Expense (Before Merger) minus savings in staff compensation ($165,000)

Projected after-merger revenue and expense show positive cash flow for the County system that would be acquired by the Town. The higher out-of-town rate for the acquired system would encourage

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customers and developers to strongly consider the option of annexation. The annexation would lead to lowering of utility rates and eventually increase tax base for the Town.

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7.0 CONCLUSION

The merger of the two water systems will be beneficial for both the County and the Town. Acceptance of merger conditions would benefit the Town from acquiring $12.3 million of water system assets. This would also lead to expansion of their customer base without the expenditure of major funds for years to come.

Acquiring the County's water system would require periodic upgrades and capital improvement investments, however, the capital associated with such an upgrade is not a concern due to the following reasons:

- Potential for growth in utility revenues and tax base.
- Recommended agreement for County participation in costs for a period of a minimum of eleven (11) years after transfer of the water distribution system for capital improvements to the existing system.
- County participation toward "county specific" upgrades and extensions within the district.

Considering the advantages and disadvantages of this potential merger, DAA recommends transfer of the County's water distribution system to the Town, for the sum of one dollar and other valuable considerations. The acceptance of the merger conditions by the Town will be based on refinement of these conditions and other concessions by both parties. All legal issues regarding such transfer will need to be addressed before the merger of the two water systems can be completed and executed.

-- End of Section --

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8.0 REFERENCES

Blank Depreciation Worksheet Developed for City of Dogwood Depreciation Calculation Worksheet-Government Capital Assets.

Laurel Park / Hendersonville Water System Merger Feasibility Study, Town of Laurel Park, North Carolina, June 2017.

Jordan Lake Water Supply Storage Allocation Request, City of Raleigh and Merger Partners, January 13, 2015.

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Appendix A

Carteret County Water System Maps

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Figure 1

Carteret County's Water System

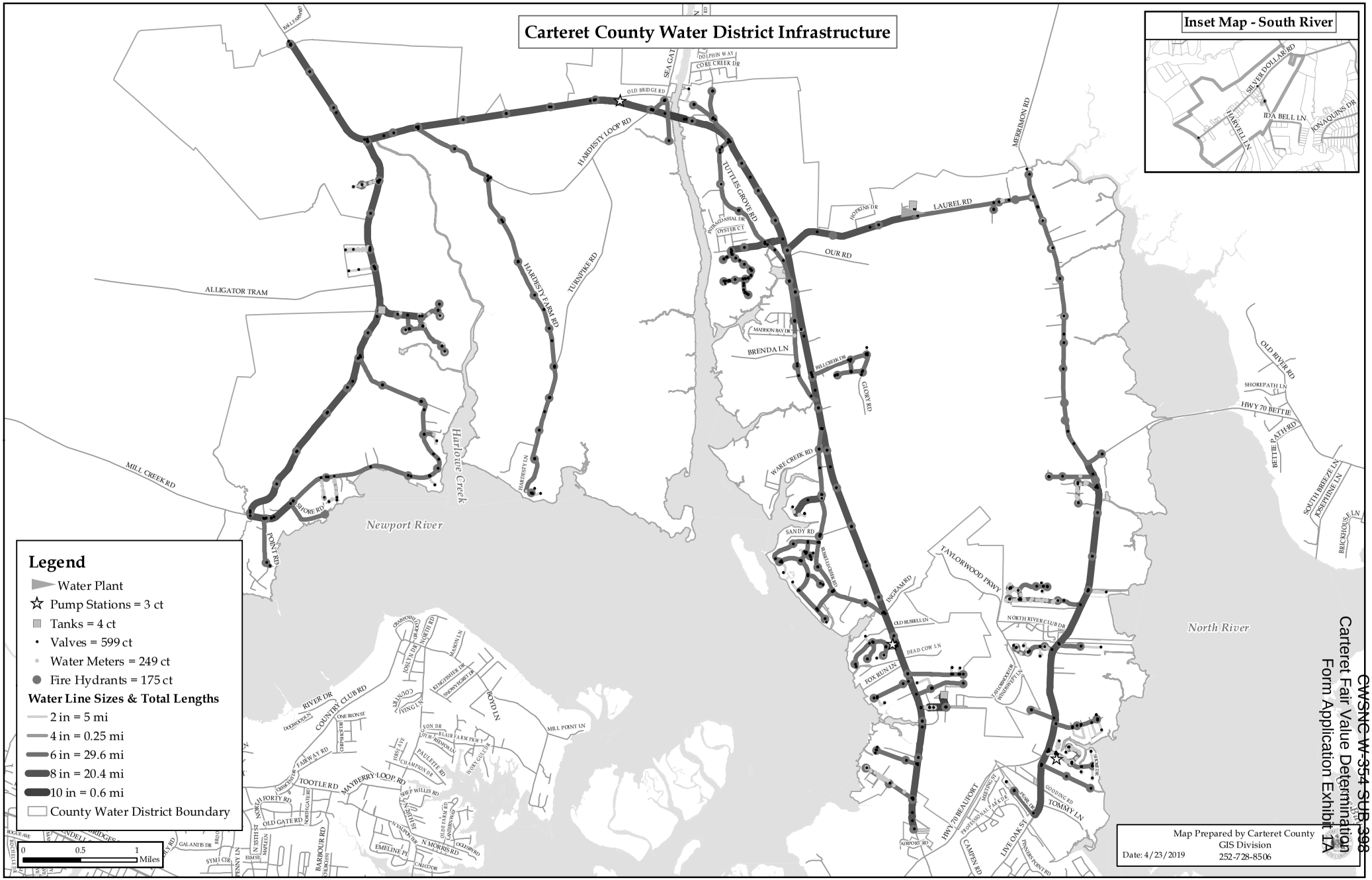

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Figure 2

Merrimon Water System

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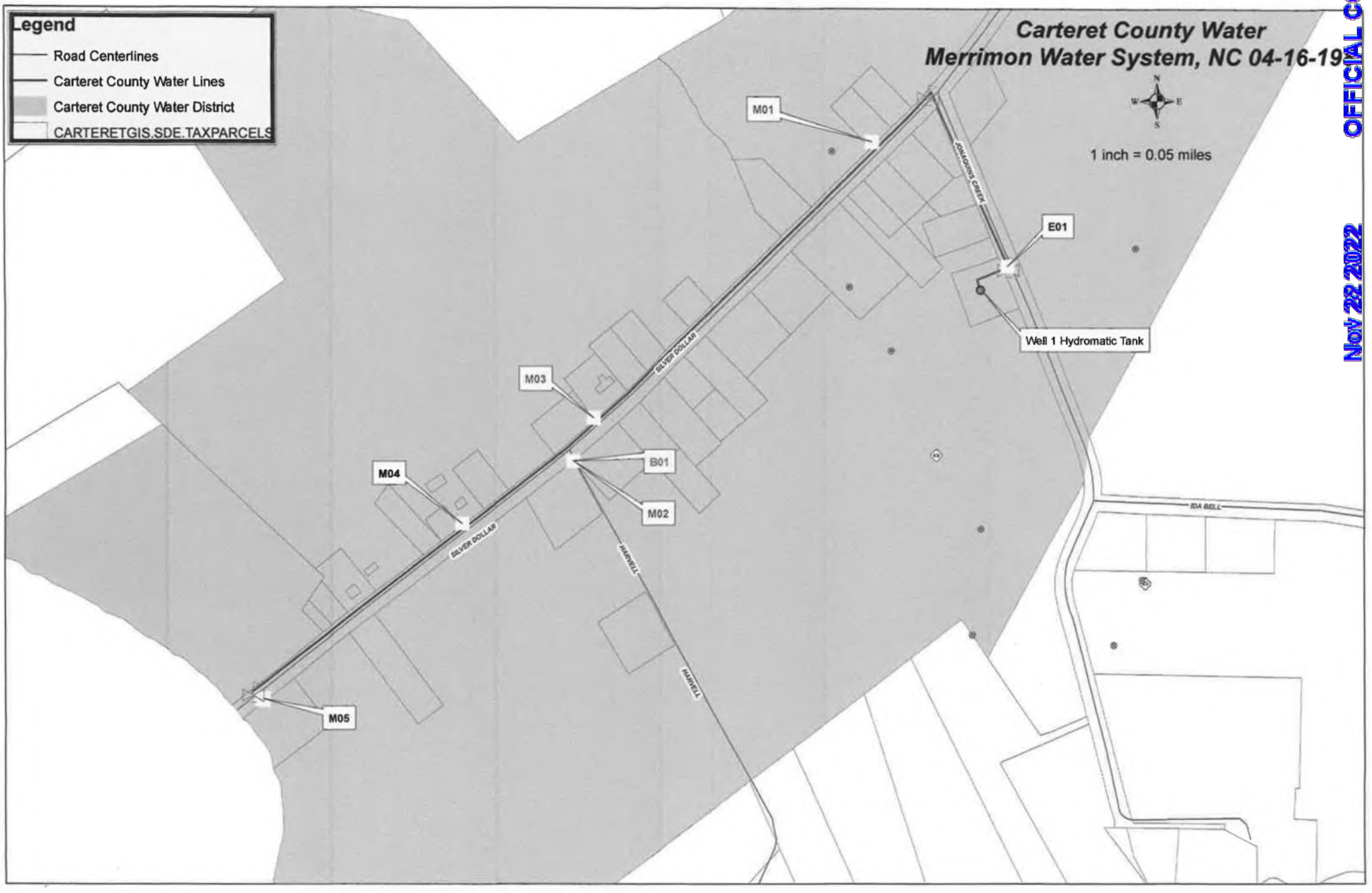

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Appendix B
Carteret County Water Rates

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Water Service
Fee Schedule
FY 2018-2019

3/4" Meter
Basic Charge (No Usage) Flat Fee — $27.50 / mo. Covers 1st 1,000 gals.
Volume Charge — $6.90 per 1,000 gals

1" Meter
Basic Charge (No Usage) Flat Fee — $38.00 / mo. Covers 1st 1,000 gals.
Volume Charge — $6.90 per. 1,000 gals

2" Meter
Basic Charge (No Usage) Flat Fee — $110.00 / mo. Covers 1st 15,000 gals.
Volume Charge — $6.90 per 1,000 gals

4" Meter
Basic Charge (No Usage) Flat Fee — $340.00 / mo. Covers 1st 53,000 gals.
Volume Charge — $6.90 per 1,000 gals

Merrimon System (3/4" Meter)
Basic Charge (No Usage) Flat Fee — $16.00 / mo. Covers 1st 1,000 gals.
Volume Charge — $6.90 per 1,000 gals

Town of Beaufort (Eastman's Creek)
Basic Charge (No Usage) Flat Fee — $27.50 / mo. Covers 1st 1,000 gals.
Volume Charge — $6.90 per 1,000 gals

Fire Hydrant Usage

Hookup & Service Charge: $75.00/Monthly
Mobilization to hydrant site and employee on site during tank fill.
$200.00 Deposit
$8.75 per 1,000 gallons.

Hydrant & Hydrant Meter Tampering $250.00 1st offense
$500.00 2nd offense (and Legal Action)
Damage Fee – Fire Hydrant $2,500.00

Fire Line – Sprinkler Fee

Size	Monthly fee
2"	$27.50
4"	$32.50
6"	$75.00
8"	$105.00

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Tap Fees

Meter Size	Tap Fee**
3/4 "	$1,000.00
1"	$1,150.00
2"	Cost + 10%
4"	Cost + 10 %

****Additional $900.00 Tap Fee for any meter requiring road bore work**

Any meter 2 inch or larger will be engineered by Mc David & Associates and County will charge cost of materials and installation, engineering fees and additional 10%.

Security Deposits

Property Owner	$100.00
Renter/Lease holder	$200.00

Damage and Tampering Fees

Tampering Fee - Meters	$100.00
2nd Offense (and Legal Action)	$500.00
Damage Fee – Meters	$135.00
Damage Fee – MXU Remote Unit	$135.00

Other Fees

Non-Sufficient Check Fee	$25.00
Bank Inspections	$30.00
Late Charges	10% of balance
Service Fee*	$30.00

*At the time of reconnection the deposit on account must be equal to the deposit amount required for new accounts as of that date.

*All accounts subject to disconnection that have not been paid by 5:00 pm on the day prior to disconnections will be charged the service fee.

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Appendix C
Town of Beaufort Water Rates

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Water & Sewer Rates & Fees

All water and sewer taps made outside Town limits are double in-town rates shown above. Water or sewer capacity fees outside Town limits are negotiable but will not exceed 2X rates shown above.

Upgrades in service, i.e., changing from a 3/4" meter to a 1" meter, are subject to a difference in the water tap, water capacity, and sewer capacity fees.

All taps larger than 2" shall be installed at developer's cost in accordance with Town of Beaufort standards and developers shall pay a tap-on fee as shown above.

▶ Tap & System Development Fees

TAP FEES		
SIZE	WATER	SEWER
¾"	$ 700	$ 750
1"	800	750
1 ½"	1,075	750
2"	1,375	750
3"	575	750
4"	625	750
6"	850	750
8"	1,175	750

SYSTEM DEVELOPMENT FEES		
SIZE	WATER	SEWER
¾"	$ 476	$ 5,524
1"	793	6,207
1 ½"	1,585	7,015
2"	2,536	8,064
3"	4,755	10,445
4"	7,925	15,875
6"	15,850	22,550
8"	25,360	26,240

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▶ Water & Sewer Usage Rates

WATER USAGE RATES

TYPE	SIZE	IN TOWN	OUTSIDE
BASE	¾"	$ 10.37	$ 20.74
	1"	17.32	37.33
	1 ½"	34.53	82.96
	2"	55.27	147.25
	3"	110.65	333.91
	4"	172.87	NA
	6"	345.63	1,327.36
VARIABLE	1000 gal	5.07	7.61

SEWER USAGE RATES

TYPE	SIZE	IN TOWN	OUTSIDE
BASE	¾"	$ 21.17	$ 42.34
	1"	35.85	70.01
	1 ½"	70.50	140.99
	2"	112.20	225.67
	3"	225.88	451.77
	4"	352.90	705.81
	6"	705.60	1,411.19
VARIABLE	1000 gal	16.80	33.60

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▶ Water & Sewer Service Charges

WATER & SEWER SERVICE CHARGES

New Account Service Fee	$20	Waived with bank draft
Application Fee	5	
SECURITY DEPOSITS		
3/4" meter	$75-225,	based on credit score
1" meter	100	
1 1/2" meter	140	
2" meter	275	
Transfer Account	25	
Returned Check Fee	25	
Late Fees	10%	added to late portion
Reconnect Fee - Business Hours	25	
Reconnect Fee - After Hours	75	
After Hours Service Calls	75	
Temporary Connection (for cleaning, renovation inspection, etc.)	25	available for a 2-week period, plus water and sewer usage charges
Fire Hydrant Meters	75	mobilization, on site-employee, and 5,000 gal of water; additional $.01/gal
Irrigation/Dock Meter	700	tap fee
Meter-Only Install	400	no new tap fee
Meter Testing	30	
Meter Tampering	100	

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2	186	$13,178,743	$28,808,073	12.82%	1.04	1.01%
3	210	$6,743,361	$13,177,828	13.66%	1.11	1.85%
4	218	$3,861,858	$6,710,676	13.67%	1.13	1.86%
5	255	$2,445,693	$3,836,536	14.49%	1.17	2.68%
6	246	$1,591,865	$2,444,745	14.82%	1.18	3.01%
7	306	$911,586	$1,591,765	15.63%	1.26	3.82%
8	365	$451,955	$911,103	15.91%	1.31	4.10%
9	412	$190,019	$451,800	16.69%	1.34	4.88%
10 - Smallest	569	$2,194	$189,831	19.64%	1.40	7.83%
1 through 2	385	$13,178,743	$1,966,078,882	11.32%	0.94	(0.48%)
3 through 5	683	$2,445,693	$13,177,828	13.80%	1.13	1.99%
6 through 8	917	$451,955	$2,444,745	15.27%	1.23	3.46%
9 through 10	981	$2,194	$451,800	17.53%	1.35	5.72%
1 through 5	1,068	$2,445,693	$1,966,078,882	11.64%	0.96	(0.17%)
6 through 10	1,898	$2,194	$2,444,745	15.49%	1.24	3.68%

S&P 500 Annual Return for Period 1928 - 2020 : 11.81%

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	WORKING NOTES										WORKING NOTES	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
GROSS Property, plant and equipment	-	-	-		14,873,314	14,873,314	15,101,281	15,332,741	15,567,749	15,806,359	16,048,626	16,294,607
Accumulated Depreciation	-	-	-		3,615,459	3,979,729	4,214,896	4,453,667	4,696,098	4,942,245	5,192,164	5,445,914
NET PPE	-	-	-		11,257,855	10,893,585	10,886,385	10,879,074	10,871,651	10,864,114	10,856,462	10,848,693
Total Debt	-	-	-	1,687,064	*1,687,064*	*1,687,064*						
Net Equity	-	-	-	5,392,898	*5,392,898*	*5,392,898*						
Investor Provided Capital	-	-	-	7,079,962	7,079,962	7,079,962	-					
Depreciation / GROSS PPE	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	1.84%						

Muni CAPX				0	0	0	0	0	0	0	0	0
IOU savings				0%			100%	100%	100%	100%	100%	100%
CAPX/Prior Yr. GROSS PPE							1.80%	1.80%	1.80%	1.80%	1.80%	1.80%
CAPX					0	0	268,196	272,306	276,480	280,718	285,020	289,389
Dep rate					0.00%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%
Half yr. Dep					0.00%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Dep on CAPX					-	-	2,467	2,505	2,544	2,583	2,622	2,662
Rate of retirement					15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
Retired property					-	-	40,229	40,846	41,472	42,108	42,753	43,408
Dep on Retired property					-	-	740	752	763	775	787	799
Dep on Prior yr. GROSS					364,887	364,270	273,669	277,864	282,122	286,447	290,837	295,295
Total Dep					364,887	364,270	275,396	279,617	283,903	288,255	292,672	297,158
Carteret												
Depreciation Expense	-	-	369,612	364,887	364,270							
				part of OCN								

NET PPE							PURTA	0.001527765				
Rev							Reg Assessment Fee	0.005652534				
					2021	2022	1 2023	2 2024	3 2025	4 2026	5 2027	6 2028
Carteret												
FIX CIP				CIP	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
					part of OCN	= to DepX						
					0	0						
									191	71	72	56
					2021	2022						
						-	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00
Sewer Rental Charges	0	0	680,476	676,001	733,693	1,260,000	1,260,502	577,530	577,990	578,450		
EDUs	0	0	0	0	1,254	1,254	1255	1256	1257	1258	1259	1260
					0	0	1	1	1	1	1	1
		0	0	0	627	1254	1254.5	1255.5	1256.5	1257.5		
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	585.0821372							
						$ 460.00	$ 460.00	$ 460.00	$ 460.00	$ 460.00		
		#DIV/0!	#DIV/0!	#DIV/0!	1170.164274	1004.784689						
Carteret					C	1,254	1					
					E	1,254	1					
						1.00						
				1742000								

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Form Application Exhibit 1A

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		WORKING NOTES									WORKING NOTES	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
		Customer Growth				0	1	1	1	1	0.10%	0.10%
		Delivered to Customer	-	47.85	48	48	48	48	48	48	48	48
Carteret		Customers	1,254	1,254	1,254	1,254	1,255	1,256	1,257	1,258	1,259	1,261
		Total Revenue (Less TAP)	680,476	676,001	733,693	1,260,000	1,260,502	1,261,004	1,362,969	1,364,054	1,365,279	1,407,643
										100.00%		
		avg CUST rev	542.64	539.08	585.08	1,004.78	1,004.38	1,003.98	1,084.30	1,084.30	1,084.19	1,116.72
		avg CUST flow	-	0	0	0	0	0	0	0	0	0
		avg EDU rev	#DIV/0!	#DIV/0!	585.08	1,004.78	1,004.38	1,003.98	1,084.30	1,084.30	1,084.42	1,117.18
		avg EDU flow	#DIV/0!	#DIV/0!	0	0	0	0	0	0	0	0
		Rev Calculated				733,693	1,260,502	1,261,004	1,261,506	1,363,511	1,364,736	1,365,962

			2022	2023	2024	2025	2026	2027	2028
			Change		8.0%			3.0%	
		$ 585.08	$ 1,004.78	$ 1,004.38	$ 1,084.73	$ 1,084.73	$ 1,084.73	$ 1,117.28	$ 1,117.28
					$ 80.35	$ -	$ -	$ 32.54	$ -
			-	502	502	1,362,969	542	682	683
			733,693	1,260,502	1,261,004	1,362,969	1,364,054	1,365,279	1,407,643
			-	-	100,880	-	-	40,958	-

Prior yr	REV Regulatory Fee	0.1300%		1,638	1,639	1,770	1,772	1,773	1,828
Prior yr	fix REV W/WW Gross Receipts	4.0000%		50,400	50,420	54,475	54,519	54,562	56,249
Prior yr	NET Property	0.7700%		83,881	83,825	83,769	83,712	83,654	83,595
				135,919	135,884	140,014	140,003	139,989	141,672

Gross Receipts	Water	4.0000%
Gross Receipts	Sewer	6.0%

Carteret County Water System Assets	
Investor Provide	7,079,962
Gross PP&E	14,873,314
Net PP&E	11,257,855
Revenues	1,260,000
EBITDA	663,205
EBIT	298,935
Customers	1,254
Population	3,092

G PPE	-	-	14,873,314	14,873,314		
NPPE	-	-	3,615,459	10,893,585		
Cust	1,254	1,254	1,254	1,254		

	2017	2018	2019	2020	2021	2022	2023		
Carteret									
LESS: EOS - Wages & Benefits	0	-	-	-	-	-		0.15	LESS: EOS - Wages & Wages & Benefits
LESS: EOS - Professional Services	0	0	0	0	-	-		0.5	LESS: EOS - Professi Net Professional Serv
LESS: EOS - Eliminated Expenses	0	0	0	0	-	59,680			LESS: EOS - Eliminated Expenses

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	WORKING NOTES							WORKING NOTES				
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Carteret												
Wages			0	0	0	0						
Professional Services					0	0						
Eliminated Exp			0	0	0	59,680						

Carteret				included in OCN	= to DepX
Reported CAPX - from the financials	0	0	25,500	0	0	0

	2017	2018	2019	2020	2021		Assets	Per Books	Difference
GROSS Property, plant and equipment	-	-	-	-	14,873,314		14,873,314	-	
Accumulated Depreciation	-	-	-	-	3,615,459		3,615,459	-	
NET PPE	-	-	-	-	11,257,855		11,257,855	-	11,257,855
Total Debt	-	-	-	1,687,064	1,687,064		273,193		
Net Equity	-	-	-	5,392,898	5,392,898				
Investor Provided Capital	-	-	-	7,079,962	7,079,962				
Depreciation Rate	0.00%	0.00%	0.00%	#DIV/0!	1.84%				
Depreciation Expense	-	-	369,612	364,887	364,270	273,193.00	Copy item from 2021 to 2022		

	2022	2023	2024	2025	2026	
CAPX	0	0	0	0	0	0

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	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
GROSS Property, plant and equipment	16,544,357	16,797,936	17,055,401	17,316,813	17,582,231	17,851,718	18,125,335	18,403,146	18,685,215	18,971,607	19,262,389	19,557,627	19,857,391	20,161,749
Accumulated Depreciation	5,703,553	5,965,142	6,230,740	6,500,408	6,774,210	7,052,209	7,334,468	7,621,054	7,912,032	8,207,470	8,507,437	8,812,001	9,121,233	9,435,205
NET PPE	10,840,804	10,832,794	10,824,661	10,816,405	10,808,021	10,799,509	10,790,867	10,782,092	10,773,183	10,764,137	10,754,952	10,745,626	10,736,158	10,726,544
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%
	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%
	293,824	298,328	302,900	307,543	312,257	317,043	321,902	326,836	331,846	336,932	342,096	347,339	352,663	358,068
	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%
	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
	2,703	2,745	2,787	2,829	2,873	2,917	2,961	3,007	3,053	3,100	3,147	3,196	3,244	3,294
	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%
	44,074	44,749	45,435	46,131	46,839	47,556	48,285	49,025	49,777	50,540	51,314	52,101	52,899	53,710
	811	823	836	849	862	875	888	902	916	930	944	959	973	988
	299,821	304,416	309,082	313,819	318,629	323,513	328,472	333,506	338,618	343,808	349,078	354,428	359,860	365,376
	301,713	306,338	311,033	315,800	320,641	325,555	330,544	335,611	340,755	345,978	351,280	356,665	362,131	367,682

Carteret

Depreciation Expense

	7 2029	8 2030	9 2031	10 2032	11 2033	12 2034	13 2035	14 2036	15 2037	16 2038	17 2039	18 2040	19 2041	20 2042
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00
Sewer Rental Charges														
EDUs	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274
	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Carteret

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	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
	48	48	48	48	48	48	48	48	49	49	49	49	49	49
Carteret	1,262	1,263	1,264	1,266	1,267	1,268	1,269	1,271	1,272	1,273	1,274	1,276	1,277	1,278
	1,409,051	1,410,460	1,454,227	1,455,681	1,457,136	1,502,351	1,503,854	1,505,358	1,552,069	1,553,621	1,629,823	1,631,453	1,704,940	1,706,645
	100.00%													
	1,116.72	1,116.72	1,150.22	1,150.22	1,150.22	1,184.73	1,184.73	1,184.73	1,220.27	1,220.27	1,278.84	1,278.84	1,335.11	1,335.11
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1,117.41	1,117.64	1,151.41	1,151.65	1,151.89	1,186.69	1,186.94	1,187.19	1,223.06	1,223.32	1,282.32	1,282.59	1,339.31	1,339.60
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1,408,347	1,409,756	1,411,165	1,454,954	1,456,409	1,457,865	1,503,102	1,504,606	1,506,111	1,552,845	1,554,398	1,630,638	1,632,269	1,705,792

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
		3.0%			3.0%			3.0%		4.8%		4.4%		3.9%
	$ 1,117.28	$ 1,150.80	$ 1,150.80	$ 1,150.80	$ 1,185.32	$ 1,185.32	$ 1,185.32	$ 1,220.88	$ 1,220.88	$ 1,279.48	$ 1,279.48	$ 1,335.78	$ 1,335.78	$ 1,387.87
	$ -	$ 33.52	$ -	$ -	$ 34.52	$ -	$ -	$ 35.56	$ -	$ 58.60	$ -	$ 56.30	$ -	$ 52.10
	704	705	705	727	728	729	751	752	753	776	777	815	816	852
	1,409,051	1,410,460	1,454,227	1,455,681	1,457,136	1,502,351	1,503,854	1,505,358	1,552,069	1,553,621	1,629,823	1,631,453	1,704,940	1,706,645
	-	42,314	-	-	43,714	-	-	45,161	-	74,574	-	71,784	-	66,559
Prior yr	1,830	1,832	1,889	1,890	1,892	1,951	1,953	1,955	2,016	2,018	2,117	2,119	2,214	2,216
Prior yr	56,306	56,362	58,111	58,169	58,227	60,034	60,094	60,154	62,021	62,083	65,128	65,193	68,129	68,198
Prior yr	83,535	83,474	83,413	83,350	83,286	83,222	83,156	83,090	83,022	82,954	82,884	82,813	82,741	82,668
	141,671	141,668	143,413	143,409	143,405	145,207	145,203	145,199	147,059	147,055	150,129	150,125	153,084	153,082

Gross Receipts
Gross Receipts

Carteret

LESS: EOS - Wages & Benefits		15% savings	15%	0.15
LESS: EOS - Professional Services	ices	50% savings	50%	0.5
LESS: EOS - Eliminated Expenses		10% savings	10%	0.1

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	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Carteret														
Wages														
Professional Services														
Eliminated Exp														
Carteret														
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														

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	WORKING NOTES										WORKING NOTES	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
GROSS Property, plant and equipment	-	-	-		14,873,314	14,873,314	15,101,281	15,332,741	15,567,749	15,806,359	16,048,626	16,294,607
Accumulated Depreciation	-	-	-		3,615,459	3,979,729	4,214,896	4,453,667	4,696,098	4,942,245	5,192,164	5,445,914
NET PPE	-	-	-		11,257,855	10,893,585	10,886,385	10,879,074	10,871,651	10,864,114	10,856,462	10,848,693
Total Debt	-	-	-	1,687,064	*1,687,064*	*1,687,064*						
Net Equity	-	-	-	5,392,898	*5,392,898*	*5,392,898*						
Investor Provided Capital	-	-	-	7,079,962	7,079,962	7,079,962	-					
Depreciation / GROSS PPE	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	1.84%						

Muni CAPX				0	0	0	0	0	0	0	0	0
IOU savings				0%			100%	100%	100%	100%	100%	100%
CAPX/Prior Yr. GROSS PPE							1.80%	1.80%	1.80%	1.80%	1.80%	1.80%
CAPX					0	0	268,196	272,306	276,480	280,718	285,020	289,389
Dep rate					0.00%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%
Half yr. Dep					0.00%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
Dep on CAPX					-	-	2,467	2,505	2,544	2,583	2,622	2,662
Rate of retirement					15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
Retired property					-	-	40,229	40,846	41,472	42,108	42,753	43,408
Dep on Retired property					-	-	740	752	763	775	787	799
Dep on Prior yr. GROSS					364,887	364,270	273,669	277,864	282,122	286,447	290,837	295,295
Total Dep					364,887	364,270	275,396	279,617	283,903	288,255	292,672	297,158
Carteret												
Depreciation Expense	-	-	369,612	364,887	364,270							
				part of OCN								

NET PPE							PURTA	0.001527765				
Rev							Reg Assessment Fee	0.005652534				
					2021	2022	1 2023	2 2024	3 2025	4 2026	5 2027	6 2028
Carteret												
FIX CIP				CIP	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
					part of OCN	= to DepX						
					0	0						
									191	71	72	56
					2021	2022						
						-	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00
Sewer Rental Charges	0	0	680,476	676,001	733,693	1,260,000	1,260,502	577,530	577,990	578,450		
EDUs	0	0	0	0	1,254	1,254	1255	1256	1257	1258	1259	1260
					0	0	1	1	1	1	1	1
		0	0	0	627	1254	1254.5	1255.5	1256.5	1257.5		
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	585.0821372							
						$ 460.00	$ 460.00	$ 460.00	$ 460.00	$ 460.00		
		#DIV/0!	#DIV/0!	#DIV/0!	1170.164274	1004.784689						
Carteret					C	1,254	1					
					E	1,254	1					
						1.00						
				1742000								

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		WORKING NOTES									WORKING NOTES	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
		Customer Growth				0	1	1	1	1	0.10%	0.10%
		Delivered to Customer	-	47.85	48	48	48	48	48	48	48	48
Carteret		Customers	1,254	1,254	1,254	1,254	1,255	1,256	1,257	1,258	1,259	1,261
		Total Revenue (Less TAP)	680,476	676,001	733,693	1,260,000	1,260,502	1,261,004	1,893,013	1,894,519	1,896,220	1,993,022
										100.00%		
		avg CUST rev	542.64	539.08	585.08	1,004.78	1,004.38	1,003.98	1,505.98	1,505.98	1,505.82	1,581.11
		avg CUST flow	-	0	0	0	0	0	0	0	0	0
		avg EDU rev	#DIV/0!	#DIV/0!	585.08	1,004.78	1,004.38	1,003.98	1,505.98	1,505.98	1,506.13	1,581.76
		avg EDU flow	#DIV/0!	#DIV/0!	0	0	0	0	0	0	0	0
		Rev Calculated				733,693	1,260,502	1,261,004	1,261,506	1,893,766	1,895,466	1,897,168

				2022	2023	2024	2025	2026	2027	2028
				Change		50.0%			5.0%	
			$ 585.08	$ 1,004.78	$ 1,004.38	$ 1,506.58	$ 1,506.58	$ 1,506.58	$ 1,581.90	$ 1,581.90
						$ 502.19	$ -	$ -	$ 75.33	$ -
				-	502	502	1,893,013	753	947	948
				733,693	1,260,502	1,261,004	1,893,013	1,894,519	1,896,220	1,993,022
				-	-	630,502	-	-	94,811	-

Prior yr	REV	Regulatory Fee	0.1300%		1,638	1,639	2,459	2,461	2,463	2,588
Prior yr	fix REV W/WW	Gross Receipts	4.0000%		50,400	50,420	75,660	75,721	75,781	79,641
Prior yr	NET	Property	0.7700%		83,881	83,825	83,769	83,712	83,654	83,595
					135,919	135,884	161,888	161,894	161,898	165,824

Gross Receipts	Water	4.0000%
Gross Receipts	Sewer	6.0%

Carteret County Water System Assets	
Investor Provide	7,079,962
Gross PP&E	14,873,314
Net PP&E	11,257,855
Revenues	1,260,000
EBITDA	663,205
EBIT	298,935
Customers	1,254
Population	3,092

G PPE	-	-	14,873,314	14,873,314		
NPPE	-	-	3,615,459	10,893,585		
Cust	1,254	1,254	1,254	1,254		

	2017	2018	2019	2020	2021	2022	2023			
Carteret										
LESS: EOS - Wages & Benefits	0	-	-	-	-	-		0.15	LESS: EOS - Wages &	Wages & Benefits
LESS: EOS - Professional Services	0	0	0	0	-	-		0.5	LESS: EOS - Professi	Net Professional Serv
LESS: EOS - Eliminated Expenses	0	0	0	0	-	59,680			LESS: EOS - Eliminated Expenses	

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	WORKING NOTES							WORKING NOTES				
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Carteret												
Wages			0	0	0	0						
Professional Services					0	0						
Eliminated Exp			0	0	0	59,680						

Carteret				included in OCN	= to DepX
Reported CAPX - from the financials	0	0	25,500	0	0	0

	2017	2018	2019	2020	2021		Assets	Per Books	Difference
GROSS Property, plant and equipment	-	-	-	-	14,873,314		14,873,314	-	
Accumulated Depreciation	-	-	-	-	3,615,459		3,615,459	-	
NET PPE	-	-	-	-	11,257,855		11,257,855	-	11,257,855
Total Debt	-	-	-	1,687,064	1,687,064		273,193		
Net Equity	-	-	-	5,392,898	5,392,898				
Investor Provided Capital	-	-	-	7,079,962	7,079,962				
Depreciation Rate	0.00%	0.00%	0.00%	#DIV/0!	1.84%				
Depreciation Expense	-	-	369,612	364,887	364,270	273,193.00	Copy item from 2021 to 2022		

	2022	2023	2024	2025	2026	
CAPX	0	0	0	0	0	0

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	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
GROSS Property, plant and equipment	16,544,357	16,797,936	17,055,401	17,316,813	17,582,231	17,851,718	18,125,335	18,403,146	18,685,215	18,971,607	19,262,389	19,557,627	19,857,391	20,161,749
Accumulated Depreciation	5,703,553	5,965,142	6,230,740	6,500,408	6,774,210	7,052,209	7,334,468	7,621,054	7,912,032	8,207,470	8,507,437	8,812,001	9,121,233	9,435,205
NET PPE	10,840,804	10,832,794	10,824,661	10,816,405	10,808,021	10,799,509	10,790,867	10,782,092	10,773,183	10,764,137	10,754,952	10,745,626	10,736,158	10,726,544
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%
	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%
	293,824	298,328	302,900	307,543	312,257	317,043	321,902	326,836	331,846	336,932	342,096	347,339	352,663	358,068
	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%	1.84%
	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%	0.92%
	2,703	2,745	2,787	2,829	2,873	2,917	2,961	3,007	3,053	3,100	3,147	3,196	3,244	3,294
	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%
	44,074	44,749	45,435	46,131	46,839	47,556	48,285	49,025	49,777	50,540	51,314	52,101	52,899	53,710
	811	823	836	849	862	875	888	902	916	930	944	959	973	988
	299,821	304,416	309,082	313,819	318,629	323,513	328,472	333,506	338,618	343,808	349,078	354,428	359,860	365,376
	301,713	306,338	311,033	315,800	320,641	325,555	330,544	335,611	340,755	345,978	351,280	356,665	362,131	367,682

Carteret

Depreciation Expense

	7 2029	8 2030	9 2031	10 2032	11 2033	12 2034	13 2035	14 2036	15 2037	16 2038	17 2039	18 2040	19 2041	20 2042
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00
Sewer Rental Charges														
EDUs	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274
	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Carteret

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	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
	48	48	48	48	48	48	48	48	49	49	49	49	49	49
Carteret	1,262	1,263	1,264	1,266	1,267	1,268	1,269	1,271	1,272	1,273	1,274	1,276	1,277	1,278
	1,995,015	1,997,010	2,058,978	2,061,037	2,063,098	2,147,767	2,149,915	2,152,065	2,240,386	2,242,626	2,300,990	2,303,291	2,374,763	2,377,137
	100.00%													
	1,581.11	1,581.11	1,628.55	1,628.55	1,628.55	1,693.69	1,693.69	1,693.69	1,761.44	1,761.44	1,805.47	1,805.47	1,859.64	1,859.64
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1,582.09	1,582.42	1,630.23	1,630.57	1,630.91	1,696.50	1,696.85	1,697.21	1,765.47	1,765.85	1,810.38	1,810.76	1,865.49	1,865.88
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1,994,019	1,996,013	1,998,009	2,060,007	2,062,068	2,064,130	2,148,841	2,150,990	2,153,141	2,241,506	2,243,747	2,302,140	2,304,443	2,375,950

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
		3.0%			4.0%			4.0%		2.5%		3.0%		3.0%
	$ 1,581.90	$ 1,629.36	$ 1,629.36	$ 1,629.36	$ 1,694.54	$ 1,694.54	$ 1,694.54	$ 1,762.32	$ 1,762.32	$ 1,806.38	$ 1,806.38	$ 1,860.57	$ 1,860.57	$ 1,916.38
	$ -	$ 47.46	$ -	$ -	$ 65.17	$ -	$ -	$ 67.78	$ -	$ 44.06	$ -	$ 54.19	$ -	$ 55.82
	997	998	999	1,029	1,031	1,032	1,074	1,075	1,076	1,120	1,121	1,150	1,152	1,187
	1,995,015	1,997,010	2,058,978	2,061,037	2,063,098	2,147,767	2,149,915	2,152,065	2,240,386	2,242,626	2,300,990	2,303,291	2,374,763	2,377,137
	-	59,910	-	-	82,524	-	-	86,083	-	56,066	-	69,099	-	71,314
Prior yr	2,591	2,594	2,674	2,677	2,679	2,789	2,792	2,795	2,910	2,913	2,988	2,991	3,084	3,087
Prior yr	79,721	79,801	82,277	82,359	82,441	85,825	85,911	85,997	89,526	89,615	91,948	92,040	94,896	94,991
Prior yr	83,535	83,474	83,413	83,350	83,286	83,222	83,156	83,090	83,022	82,954	82,884	82,813	82,741	82,668
	165,847	165,869	168,364	168,386	168,406	171,836	171,859	171,882	175,458	175,482	177,820	177,844	180,721	180,746

Gross Receipts
Gross Receipts

Carteret

LESS: EOS - Wages & Benefits		15% savings	15%	0.15
LESS: EOS - Professional Services	ices	50% savings	50%	0.5
LESS: EOS - Eliminated Expenses		10% savings	10%	0.1

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	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Carteret														
Wages														
Professional Services														
Eliminated Exp														
Carteret														
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														

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	WORKING NOTES										WORKING NOTES	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
GROSS Property, plant and equipment	-	-	-		15,386,913	15,386,913	15,611,216	15,838,788	16,069,678	16,303,934	16,541,604	16,782,740
Accumulated Depreciation	-	-	-		-	364,270	595,574	830,251	1,068,348	1,309,916	1,555,006	1,803,669
NET PPE	-	-	-		15,386,913	15,022,643	15,015,641	15,008,537	15,001,329	14,994,017	14,986,597	14,979,071
Total Debt	-	-	-	1,687,064	*1,687,064*	*1,687,064*						
Net Equity	-	-	-	5,392,898	*5,392,898*	*5,392,898*						
Investor Provided Capital	-	-	-	7,079,962	7,079,962	7,079,962	-					
Depreciation / GROSS PPE	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	1.75%						

				Muni CAPX	0	0	0	0	0	0	0	0
			IOU savings	0%			100%	100%	100%	100%	100%	100%
				CAPX/Prior Yr. GROSS PPE			1.72%	1.72%	1.72%	1.72%	1.72%	1.72%
				CAPX	0	0	263,886	267,732	271,635	275,595	279,612	283,689
				Dep rate	0.00%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
				Half yr. Dep	0.00%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%
				Dep on CAPX	-	-	2,309	2,343	2,377	2,411	2,447	2,482
				Rate of retirement	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
				Retired property	-	-	39,583	40,160	40,745	41,339	41,942	42,553
				Dep on Retired property	-	-	693	703	713	723	734	745
				Dep on Prior yr. GROSS	364,887	364,270	269,271	273,196	277,179	281,219	285,319	289,478
				Total Dep	364,887	364,270	270,887	274,836	278,843	282,907	287,032	291,215
Carteret												
Depreciation Expense	-	-	369,612	364,887	364,270							
				part of OCN								

				NET PPE			PURTA	0.001527765				
				Rev			Reg Assessment Fee	0.005652534				
							1	2	3	4	5	6
					2021	2022	2023	2024	2025	2026	2027	2028
Carteret												
	FIX CIP			CIP	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
					part of OCN	= to DepX						
					0	0						
									191	71	72	56

					2021	2022						
						-	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00
Sewer Rental Charges	0	0	680,476	676,001	733,693	1,260,000	1,260,502	577,530	577,990	578,450		
EDUs	0	0	0	0	1,254	1,254	1255	1256	1257	1258	1259	1260
					0	0	1	1	1	1	1	1
		0	0	0	627	1254	1254.5	1255.5	1256.5	1257.5		
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	585.0821372							
						$ 460.00	$ 460.00	$ 460.00	$ 460.00	$ 460.00		
		#DIV/0!	#DIV/0!	#DIV/0!	1170.164274	1004.784689						
Carteret					C	1,254	1					
					E	1,254	1					
						1.00						
				1742000								

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		WORKING NOTES									WORKING NOTES	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
		Customer Growth				0	1	1	1	1	0.10%	0.10%
		Delivered to Customer	-	47.85	48	48	48	48	48	48	48	48
Carteret		Customers	1,254	1,254	1,254	1,254	1,255	1,256	1,257	1,258	1,259	1,261
		Total Revenue (Less TAP)	680,476	676,001	733,693	1,260,000	1,260,502	1,261,004	1,438,690	1,439,835	1,441,127	1,504,599
										100.00%		
		avg CUST rev	542.64	539.08	585.08	1,004.78	1,004.38	1,003.98	1,144.54	1,144.54	1,144.43	1,193.64
		avg CUST flow	-	0	0	0	0	0	0	0	0	0
		avg EDU rev	#DIV/0!	#DIV/0!	585.08	1,004.78	1,004.38	1,003.98	1,144.54	1,144.54	1,144.66	1,194.13
		avg EDU flow	#DIV/0!	#DIV/0!	0	0	0	0	0	0	0	0
		Rev Calculated				733,693	1,260,502	1,261,004	1,261,506	1,439,262	1,440,555	1,441,848

	2022	2023	2024	2025	2026	2027	2028
Change			14.0%			4.3%	
$ 585.08	$ 1,004.78	$ 1,004.38	$ 1,145.00	$ 1,145.00	$ 1,145.00	$ 1,194.23	$ 1,194.23
			$ 140.61	$ -	$ -	$ 49.23	$ -
	-	502	502	1,438,690	572	720	721
	733,693	1,260,502	1,261,004	1,438,690	1,439,835	1,441,127	1,504,599
	-	-	176,541	-	-	61,968	-

Prior yr	REV Regulatory Fee	0.1300%		1,638	1,639	1,869	1,870	1,872	1,954
Prior yr	fix REV W/WW Gross Receipts	4.0000%		50,400	50,420	57,502	57,548	57,593	60,124
Prior yr	NET Property	0.7700%		115,674	115,620	115,566	115,510	115,454	115,397
				167,712	167,679	174,937	174,928	174,919	177,475

Gross Receipts	Water	4.0000%
Gross Receipts	Sewer	6.0%

Carteret County Water System Assets	
Investor Provide	7,079,962
Gross PP&E	15,386,913
Net PP&E	15,386,913
Revenues	1,260,000
EBITDA	663,205
EBIT	298,935
Customers	1,254
Population	3,092

G PPE	-	-	15,386,913	15,386,913		
NPPE	-	-	-	15,022,643		
Cust	1,254	1,254	1,254	1,254		

	2017	2018	2019	2020	2021	2022	2023			
Carteret										
LESS: EOS - Wages & Benefits	0	-	-	-	-	-		0.15	LESS: EOS - Wages &	Wages & Benefits
LESS: EOS - Professional Services	0	0	0	0	-	-		0.5	LESS: EOS - Professi	Net Professional Serv
LESS: EOS - Eliminated Expenses	0	0	0	0	-	59,680			LESS: EOS - Eliminated Expenses	

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	WORKING NOTES											WORKING NOTES
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Carteret												
Wages			0	0	0	0						
Professional Services					0	0						
Eliminated Exp			0	0	0	59,680						

Carteret					included in OCN	= to DepX	
Reported CAPX - from the financials	0	0	25,500	0	0	0	

	2017	2018	2019	2020	2021		Assets	Per Books	Difference
GROSS Property, plant and equipment	-	-	-	-	15,386,913		15,386,913	-	
Accumulated Depreciation	-	-	-	-	-		-	-	
NET PPE	-	-	-	-	15,386,913		15,386,913	-	15,386,913
Total Debt	-	-	-	1,687,064	1,687,064		269,271		
Net Equity	-	-	-	5,392,898	5,392,898				
Investor Provided Capital	-	-	-	7,079,962	7,079,962				
Depreciation Rate	0.00%	0.00%	0.00%	#DIV/0!	1.75%				
Depreciation Expense	-	-	369,612	364,887	364,270	269,271.00	Copy item from 2021 to 2022		

	2022	2023	2024	2025	2026	
CAPX	0	0	0	0	0	0

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	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
GROSS Property, plant and equipment	17,027,390	17,275,607	17,527,442	17,782,949	18,042,180	18,305,190	18,572,034	18,842,767	19,117,447	19,396,131	19,678,878	19,965,747	20,256,798	20,552,091
Accumulated Depreciation	2,055,955	2,311,920	2,571,615	2,835,097	3,102,420	3,373,640	3,648,814	3,927,999	4,211,254	4,498,637	4,790,210	5,086,034	5,386,170	5,690,681
NET PPE	14,971,434	14,963,687	14,955,826	14,947,851	14,939,759	14,931,549	14,923,219	14,914,768	14,906,193	14,897,493	14,888,667	14,879,713	14,870,628	14,861,410
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%
	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%
	287,824	292,020	296,277	300,596	304,978	309,423	313,934	318,510	323,153	327,864	332,644	337,493	342,413	347,404
	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%
	2,518	2,555	2,592	2,630	2,669	2,707	2,747	2,787	2,828	2,869	2,911	2,953	2,996	3,040
	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%
	43,174	43,803	44,442	45,089	45,747	46,413	47,090	47,777	48,473	49,180	49,897	50,624	51,362	52,111
	756	767	778	789	801	812	824	836	848	861	873	886	899	912
	293,698	297,979	302,323	306,730	311,202	315,738	320,341	325,011	329,748	334,555	339,432	344,380	349,401	354,494
	295,460	299,768	304,137	308,571	313,070	317,633	322,264	326,961	331,728	336,564	341,470	346,447	351,498	356,622

Carteret

Depreciation Expense

	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00
Sewer Rental Charges														
EDUs	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274
	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Carteret

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	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
	48	48	48	48	48	48	48	48	49	49	49	49	49	49
Carteret	1,262	1,263	1,264	1,266	1,267	1,268	1,269	1,271	1,272	1,273	1,274	1,276	1,277	1,278
	1,506,104	1,507,610	1,574,009	1,575,583	1,577,159	1,646,622	1,648,268	1,649,917	1,722,584	1,724,307	1,788,168	1,789,956	1,856,249	1,858,105
	100.00%													
	1,193.64	1,193.64	1,244.96	1,244.96	1,244.96	1,298.50	1,298.50	1,298.50	1,354.33	1,354.33	1,403.09	1,403.09	1,453.60	1,453.60
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1,194.37	1,194.62	1,246.25	1,246.51	1,246.77	1,300.65	1,300.92	1,301.20	1,357.43	1,357.72	1,406.90	1,407.20	1,458.17	1,458.48
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1,505,351	1,506,857	1,508,364	1,574,796	1,576,371	1,577,948	1,647,445	1,649,092	1,650,742	1,723,445	1,725,169	1,789,062	1,790,851	1,857,177

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
		4.3%			4.3%			4.3%		3.6%		3.6%		3.6%
	$ 1,194.23	$ 1,245.58	$ 1,245.58	$ 1,245.58	$ 1,299.14	$ 1,299.14	$ 1,299.14	$ 1,355.01	$ 1,355.01	$ 1,403.79	$ 1,403.79	$ 1,454.32	$ 1,454.32	$ 1,506.68
	$ -	$ 51.35	$ -	$ -	$ 53.56	$ -	$ -	$ 55.86	$ -	$ 48.78	$ -	$ 50.54	$ -	$ 52.36
	752	753	754	787	788	789	823	824	825	861	862	894	895	928
	1,506,104	1,507,610	1,574,009	1,575,583	1,577,159	1,646,622	1,648,268	1,649,917	1,722,584	1,724,307	1,788,168	1,789,956	1,856,249	1,858,105
	-	64,827	-	-	67,818	-	-	70,946	-	62,075	-	64,438	-	66,892
Prior yr	1,956	1,958	2,044	2,046	2,048	2,138	2,141	2,143	2,237	2,239	2,322	2,325	2,411	2,413
Prior yr	60,184	60,244	62,897	62,960	63,023	65,799	65,865	65,931	68,835	68,903	71,455	71,527	74,176	74,250
Prior yr	115,339	115,280	115,220	115,160	115,098	115,036	114,973	114,909	114,844	114,778	114,711	114,643	114,574	114,504
	177,479	177,482	180,161	180,166	180,169	182,973	182,979	182,983	185,916	185,920	188,488	188,495	191,161	191,167

Gross Receipts
Gross Receipts

Carteret

LESS: EOS - Wages & Benefits		15% savings	15%	0.15
LESS: EOS - Professional Services	ices	50% savings	50%	0.5
LESS: EOS - Eliminated Expenses		10% savings	10%	0.1

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	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Carteret														
Wages														
Professional Services														
Eliminated Exp														
Carteret														
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														

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	WORKING NOTES										WORKING NOTES	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
GROSS Property, plant and equipment	-	-	-		15,386,913	15,386,913	15,611,216	15,838,788	16,069,678	16,303,934	16,541,604	16,782,740
Accumulated Depreciation	-	-	-		-	364,270	595,574	830,251	1,068,348	1,309,916	1,555,006	1,803,669
NET PPE	-	-	-		15,386,913	15,022,643	15,015,641	15,008,537	15,001,329	14,994,017	14,986,597	14,979,071
Total Debt	-	-	-	1,687,064	*1,687,064*	*1,687,064*						
Net Equity	-	-	-	5,392,898	*5,392,898*	*5,392,898*						
Investor Provided Capital	-	-	-	7,079,962	7,079,962	7,079,962	-					
Depreciation / GROSS PPE	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	1.75%						

				Muni CAPX	0	0	0	0	0	0	0	0
			IOU savings	0%			100%	100%	100%	100%	100%	100%
				CAPX/Prior Yr. GROSS PPE			1.72%	1.72%	1.72%	1.72%	1.72%	1.72%
				CAPX	0	0	263,886	267,732	271,635	275,595	279,612	283,689
				Dep rate	0.00%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
				Half yr. Dep	0.00%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%
				Dep on CAPX	-	-	2,309	2,343	2,377	2,411	2,447	2,482
				Rate of retirement	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
				Retired property	-	-	39,583	40,160	40,745	41,339	41,942	42,553
				Dep on Retired property	-	-	693	703	713	723	734	745
				Dep on Prior yr. GROSS	364,887	364,270	269,271	273,196	277,179	281,219	285,319	289,478
				Total Dep	364,887	364,270	270,887	274,836	278,843	282,907	287,032	291,215
Carteret												
Depreciation Expense	-	-	369,612	364,887	364,270							
				part of OCN								

				NET PPE			PURTA	0.001527765				
				Rev			Reg Assessment Fee	0.005652534				
							1	2	3	4	5	6
					2021	2022	2023	2024	2025	2026	2027	2028
Carteret												
	FIX CIP			CIP	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
					part of OCN	= to DepX						
					0	0						
									191	71	72	56

					2021	2022						
						-	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00
Sewer Rental Charges	0	0	680,476	676,001	733,693	1,260,000	1,260,502	577,530	577,990	578,450		
EDUs	0	0	0	0	1,254	1,254	1255	1256	1257	1258	1259	1260
					0	0	1	1	1	1	1	1
		0	0	0	627	1254	1254.5	1255.5	1256.5	1257.5		
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	585.0821372							
						$ 460.00	$ 460.00	$ 460.00	$ 460.00	$ 460.00		
		#DIV/0!	#DIV/0!	#DIV/0!	1170.164274	1004.784689						
Carteret					C	1,254	1					
					E	1,254	1					
						1.00						
				1742000								

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		WORKING NOTES									WORKING NOTES	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
		Customer Growth				0	1	1	1	1	0.10%	0.10%
		Delivered to Customer	-	47.85	48	48	48	48	48	48	48	48
Carteret		Customers	1,254	1,254	1,254	1,254	1,255	1,256	1,257	1,258	1,259	1,261
		Total Revenue (Less TAP)	680,476	676,001	733,693	1,260,000	1,260,502	1,261,004	2,271,615	2,273,423	2,275,464	2,380,238
										100.00%		
		avg CUST rev	542.64	539.08	585.08	1,004.78	1,004.38	1,003.98	1,807.17	1,807.17	1,806.99	1,888.30
		avg CUST flow	-	0	0	0	0	0	0	0	0	0
		avg EDU rev	#DIV/0!	#DIV/0!	585.08	1,004.78	1,004.38	1,003.98	1,807.17	1,807.17	1,807.36	1,889.08
		avg EDU flow	#DIV/0!	#DIV/0!	0	0	0	0	0	0	0	0
		Rev Calculated				733,693	1,260,502	1,261,004	1,261,506	2,272,519	2,274,560	2,276,602

	2022	2023	2024	2025	2026	2027	2028
	Change		80.0%			4.5%	
	$ 1,004.78	$ 1,004.38	$ 1,807.89	$ 1,807.89	$ 1,807.89	$ 1,889.25	$ 1,889.25
			$ 803.51	$ -	$ -	$ 81.36	$ -
	-	502	502	2,271,615	904	1,137	1,138
	733,693	1,260,502	1,261,004	2,271,615	2,273,423	2,275,464	2,380,238
	-	-	1,008,803	-	-	102,396	-

Prior yr	REV	Regulatory Fee	0.1300%	1,638	1,639	2,951	2,953	2,955	3,091
Prior yr	fix REV W/WW	Gross Receipts	4.0000%	50,400	50,420	90,792	90,865	90,937	95,114
Prior yr	NET	Property	0.7700%	115,674	115,620	115,566	115,510	115,454	115,397
				167,712	167,679	209,309	209,328	209,346	213,602

Gross Receipts	Water	4.0000%
Gross Receipts	Sewer	6.0%

Carteret County Water System Assets

Investor Provide	7,079,962
Gross PP&E	15,386,913
Net PP&E	15,386,913
Revenues	1,260,000
EBITDA	663,205
EBIT	298,935
Customers	1,254
Population	3,092

G PPE	-	-	15,386,913	15,386,913		
NPPE	-	-	-	15,022,643		
Cust	1,254	1,254	1,254	1,254		

	2017	2018	2019	2020	2021	2022	2023			
Carteret										
LESS: EOS - Wages & Benefits	0	-	-	-	-	-		0.15	LESS: EOS - Wages &	Wages & Benefits
LESS: EOS - Professional Services	0	0	0	0	-	-		0.5	LESS: EOS - Professi	Net Professional Serv
LESS: EOS - Eliminated Expenses	0	0	0	0	-	59,680			LESS: EOS - Eliminated Expenses	

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	WORKING NOTES											WORKING NOTES
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Carteret												
Wages			0	0	0	0						
Professional Services					0	0						
Eliminated Exp			0	0	0	59,680						

Carteret					included in OCN	= to DepX	
Reported CAPX - from the financials	0	0	25,500	0	0	0	

	2017	2018	2019	2020	2021		Assets	Per Books	Difference
GROSS Property, plant and equipment	-	-	-	-	15,386,913		15,386,913	-	
Accumulated Depreciation	-	-	-	-	-		-	-	
NET PPE	-	-	-	-	15,386,913		15,386,913	-	15,386,913
Total Debt	-	-	-	1,687,064	1,687,064		269,271		
Net Equity	-	-	-	5,392,898	5,392,898				
Investor Provided Capital	-	-	-	7,079,962	7,079,962				
Depreciation Rate	0.00%	0.00%	0.00%	#DIV/0!	1.75%				
Depreciation Expense	-	-	369,612	364,887	364,270	269,271.00	Copy item from 2021 to 2022		

	2022	2023	2024	2025	2026	
CAPX	0	0	0	0	0	0

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	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
GROSS Property, plant and equipment	17,027,390	17,275,607	17,527,442	17,782,949	18,042,180	18,305,190	18,572,034	18,842,767	19,117,447	19,396,131	19,678,878	19,965,747	20,256,798	20,552,091
Accumulated Depreciation	2,055,955	2,311,920	2,571,615	2,835,097	3,102,420	3,373,640	3,648,814	3,927,999	4,211,254	4,498,637	4,790,210	5,086,034	5,386,170	5,690,681
NET PPE	14,971,434	14,963,687	14,955,826	14,947,851	14,939,759	14,931,549	14,923,219	14,914,768	14,906,193	14,897,493	14,888,667	14,879,713	14,870,628	14,861,410
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%
	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%	1.72%
	287,824	292,020	296,277	300,596	304,978	309,423	313,934	318,510	323,153	327,864	332,644	337,493	342,413	347,404
	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%	0.88%
	2,518	2,555	2,592	2,630	2,669	2,707	2,747	2,787	2,828	2,869	2,911	2,953	2,996	3,040
	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%
	43,174	43,803	44,442	45,089	45,747	46,413	47,090	47,777	48,473	49,180	49,897	50,624	51,362	52,111
	756	767	778	789	801	812	824	836	848	861	873	886	899	912
	293,698	297,979	302,323	306,730	311,202	315,738	320,341	325,011	329,748	334,555	339,432	344,380	349,401	354,494
	295,460	299,768	304,137	308,571	313,070	317,633	322,264	326,961	331,728	336,564	341,470	346,447	351,498	356,622

Carteret

Depreciation Expense

	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00	4,750.00
Sewer Rental Charges														
EDUs	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274
	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Carteret

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	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
	48	48	48	48	48	48	48	48	49	49	49	49	49	49
Carteret	1,262	1,263	1,264	1,266	1,267	1,268	1,269	1,271	1,272	1,273	1,274	1,276	1,277	1,278
	2,382,618	2,385,001	2,459,008	2,461,467	2,463,928	2,540,384	2,542,924	2,545,467	2,624,453	2,627,077	2,698,077	2,700,775	2,773,766	2,776,540
	100.00%													
	1,888.30	1,888.30	1,944.95	1,944.95	1,944.95	2,003.30	2,003.30	2,003.30	2,063.40	2,063.40	2,117.05	2,117.05	2,172.09	2,172.09
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1,889.47	1,889.86	1,946.96	1,947.36	1,947.77	2,006.62	2,007.04	2,007.47	2,068.13	2,068.56	2,122.80	2,123.25	2,178.92	2,179.39
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2,381,428	2,383,809	2,386,194	2,460,238	2,462,698	2,465,160	2,541,654	2,544,195	2,546,740	2,625,765	2,628,391	2,699,426	2,702,125	2,775,153

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
		3.0%			3.0%			3.0%		2.6%		2.6%		2.5%
	$ 1,889.25	$ 1,945.92	$ 1,945.92	$ 1,945.92	$ 2,004.30	$ 2,004.30	$ 2,004.30	$ 2,064.43	$ 2,064.43	$ 2,118.11	$ 2,118.11	$ 2,173.18	$ 2,173.18	$ 2,227.51
	$ -	$ 56.68	$ -	$ -	$ 58.38	$ -	$ -	$ 60.13	$ -	$ 53.68	$ -	$ 55.07	$ -	$ 54.33
	1,190	1,191	1,193	1,230	1,231	1,232	1,270	1,271	1,273	1,312	1,314	1,349	1,350	1,387
	2,382,618	2,385,001	2,459,008	2,461,467	2,463,928	2,540,384	2,542,924	2,545,467	2,624,453	2,627,077	2,698,077	2,700,775	2,773,766	2,776,540
	-	71,550	-	-	73,918	-	-	76,364	-	68,304	-	70,220	-	69,413
Prior yr	3,094	3,097	3,194	3,197	3,200	3,299	3,302	3,306	3,408	3,412	3,504	3,508	3,602	3,606
Prior yr	95,210	95,305	98,262	98,360	98,459	101,514	101,615	101,717	104,873	104,978	107,815	107,923	110,840	110,951
Prior yr	115,339	115,280	115,220	115,160	115,098	115,036	114,973	114,909	114,844	114,778	114,711	114,643	114,574	114,504
	213,643	213,682	216,676	216,717	216,757	219,849	219,890	219,932	223,125	223,168	226,030	226,074	229,016	229,061

Gross Receipts
Gross Receipts

Carteret

LESS: EOS - Wages & Benefits		15% savings	15%	0.15
LESS: EOS - Professional Services	ices	50% savings	50%	0.5
LESS: EOS - Eliminated Expenses		10% savings	10%	0.1

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	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Carteret														
Wages														
Professional Services														
Eliminated Exp														
Carteret														
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														

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State-Level Census Counts, 1900 to 2020

State	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010	2020
United States	76,212,168	92,228,496	106,021,537	123,202,624	132,164,569	151,325,798	179,323,175	203,302,031	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	2,646,248	2,832,961	3,061,743	3,266,740	3,444,354	3,893,888	4,040,587	4,447,100	4,779,736	5,024,279
Alaska	63,592	64,356	55,036	59,278	72,524	128,643	226,167	302,583	401,851	550,043	626,932	710,231	733,391
Arizona	122,931	204,354	334,162	435,573	499,261	749,587	1,302,161	1,775,399	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	1,854,482	1,949,387	1,909,511	1,786,272	1,923,322	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	5,677,251	6,907,387	10,586,223	15,717,204	19,971,069	23,667,902	29,760,021	33,871,648	37,253,956	39,538,223
Colorado	539,700	799,024	939,629	1,035,791	1,123,296	1,325,089	1,753,947	2,209,596	2,889,964	3,294,394	4,301,261	5,029,196	5,773,714
Connecticut	908,420	1,114,756	1,380,631	1,606,903	1,709,242	2,007,280	2,535,234	3,032,217	3,107,576	3,287,116	3,405,565	3,574,097	3,605,944
Delaware	184,735	202,322	223,003	238,380	266,505	318,085	446,292	548,104	594,338	666,168	783,600	897,934	989,948
District of Columbia	278,718	331,069	437,571	486,869	663,091	802,178	763,956	756,668	638,333	606,900	572,059	601,723	689,545
Florida	528,542	752,619	968,470	1,468,211	1,897,414	2,771,305	4,951,560	6,791,418	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	2,908,506	3,123,723	3,444,578	3,943,116	4,587,930	5,463,105	6,478,216	8,186,453	9,687,653	10,711,908
Hawaii	154,001	191,874	255,881	368,300	422,770	499,794	632,772	769,913	964,691	1,108,229	1,211,537	1,360,301	1,455,271
Idaho	161,772	325,594	431,866	445,032	524,873	588,637	667,191	713,015	943,935	1,006,749	1,293,953	1,567,582	1,839,106
Illinois	4,821,550	5,638,591	6,485,280	7,630,654	7,897,241	8,712,176	10,081,158	11,110,285	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	3,238,503	3,427,796	3,934,224	4,662,498	5,195,392	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	2,470,939	2,538,268	2,621,073	2,757,537	2,825,368	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	1,880,999	1,801,028	1,905,299	2,178,611	2,249,071	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	2,614,589	2,845,627	2,944,806	3,038,156	3,220,711	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	2,101,593	2,363,880	2,683,516	3,257,022	3,644,637	4,205,900	4,219,973	4,468,976	4,533,372	4,657,757
Maine	694,466	742,371	768,014	797,423	847,226	913,774	969,265	993,722	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	1,631,526	1,821,244	2,343,001	3,100,689	3,923,897	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	4,249,614	4,316,721	4,690,514	5,148,578	5,689,170	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	4,842,325	5,256,106	6,371,766	7,823,194	8,881,826	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	2,563,953	2,792,300	2,982,483	3,413,864	3,806,103	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	2,009,821	2,183,796	2,178,914	2,178,141	2,216,994	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	3,629,367	3,784,664	3,954,653	4,319,813	4,677,623	4,916,686	5,117,073	5,595,211	5,988,927	6,154,913
Montana	243,329	376,053	548,889	537,606	559,456	591,024	674,767	694,409	786,690	799,065	902,195	989,415	1,084,225
Nebraska	1,066,300	1,192,214	1,296,372	1,377,963	1,315,834	1,325,510	1,411,330	1,485,333	1,569,825	1,578,385	1,711,263	1,826,341	1,961,504
Nevada	42,335	81,875	77,407	91,058	110,247	160,083	285,278	488,738	800,493	1,201,833	1,998,257	2,700,551	3,104,614
New Hampshire	411,588	430,572	443,083	465,293	491,524	533,242	606,921	737,681	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	4,041,334	4,160,165	4,835,329	6,066,782	7,171,112	7,364,823	7,730,188	8,414,350	8,791,894	9,288,994
New Mexico	195,310	327,301	360,350	423,317	531,818	681,187	951,023	1,017,055	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	12,588,066	13,479,142	14,830,192	16,782,304	18,241,391	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	3,170,276	3,571,623	4,061,929	4,556,155	5,084,411	5,881,766	6,628,637	8,049,313	9,535,483	10,439,388
North Dakota	319,146	577,056	646,872	680,845	641,935	619,636	632,446	617,792	652,717	638,800	642,200	672,591	779,094
Ohio	4,157,545	4,767,121	5,759,394	6,646,697	6,907,612	7,946,627	9,706,397	10,657,423	10,797,630	10,847,115	11,353,140	11,536,504	11,799,448
Oklahoma	790,391	1,657,155	2,028,283	2,396,040	2,336,434	2,233,351	2,328,284	2,559,463	3,025,290	3,145,585	3,450,654	3,751,351	3,959,353
Oregon	413,536	672,765	783,389	953,786	1,089,684	1,521,341	1,768,687	2,091,533	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	9,631,350	9,900,180	10,498,012	11,319,366	11,800,766	11,863,895	11,881,643	12,281,054	12,702,379	13,002,700
Rhode Island	428,556	542,610	604,397	687,497	713,346	791,896	859,488	949,723	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	1,738,765	1,899,804	2,117,027	2,382,594	2,590,713	3,121,820	3,486,703	4,012,012	4,625,364	5,118,425
South Dakota	401,570	583,888	636,547	692,849	642,961	652,740	680,514	666,257	690,768	696,004	754,844	814,180	886,667
Tennessee	2,020,616	2,184,789	2,337,885	2,616,556	2,915,841	3,291,718	3,567,089	3,926,018	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	5,824,715	6,414,824	7,711,194	9,579,677	11,198,655	14,229,191	16,986,510	20,851,820	25,145,561	29,145,505
Utah	276,749	373,351	449,396	507,847	550,310	688,862	890,627	1,059,273	1,461,037	1,722,850	2,233,169	2,763,885	3,271,616
Vermont	343,641	355,956	352,428	359,611	359,231	377,747	389,881	444,732	511,456	562,758	608,827	625,741	643,077
Virginia	1,854,184	2,061,612	2,309,187	2,421,851	2,677,773	3,318,680	3,966,949	4,651,448	5,346,818	6,187,358	7,078,515	8,001,024	8,631,393
Washington	518,103	1,141,990	1,356,621	1,563,396	1,736,191	2,378,963	2,853,214	3,413,244	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	1,729,205	1,901,974	2,005,552	1,860,421	1,744,237	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	2,939,006	3,137,587	3,434,575	3,951,777	4,417,821	4,705,767	4,891,769	5,363,675	5,686,986	5,893,718
Wyoming	92,531	145,965	194,402	225,565	250,742	290,529	330,066	332,416	469,557	453,588	493,782	563,626	576,851

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

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	Company Name	AMERICAN STATES WATER COMPANY	AMERICAN WATER WORKS COMPANY, INC.	ARTESIAN RESOURCES CORPORATION	CALIFORNIA WATER SERVICE GROUP	ESSENTIAL UTILITIES, INC.	MIDDLESEX WATER COMPANY	SJW GROUP	THE YORK WATER COMPANY
2015	Sales-Net[y15]	458.641	3159	77.024	588.368	814.204	126.025	305.082	47.089
2016	Sales-Net[y16]	436.087	3302	79.089	609.37	819.875	132.906	339.706	47.584
2017	Sales-Net[y17]	440.603	3357	82.235	676.113	809.525	130.775	389.225	48.589
2018	Sales-Net[y18]	436.816	3440	80.411	698.196	838.091	138.077	397.699	48.437
2019	Sales-Net[y19]	473.869	3610	83.595	714.557	889.692	134.598	420.482	51.578
2020	Sales-Net[y20]	488.243	3777	88.141	794.307	1462.698	141.592	564.526	53.852
2015	Cash & Short Term Investment[y15]	4.364	45	0.209	8.837	3.229	3.469	5.239	2.879
2016	Cash & Short Term Investment[y16]	0.436	75	0.226	25.492	3.763	3.879	6.349	4.209
2017	Cash & Short Term Investment[y17]	0.214	55	0.952	94.776	4.204	4.937	7.799	0.002
2018	Cash & Short Term Investment[y18]	7.141	130	0.293	47.176	3.627	3.705	420.722	0.002
2019	Cash & Short Term Investment[y19]	1.334	60	0.596	42.653	1868.922	2.23	12.944	0.002
2020	Cash & Short Term Investment[y20]	36.737	547	0.028	44.555	4.827	4.491	5.269	0.002
2015	Current Assets-Total[y15]	132.697	657	14.444	127.578	128.37	24.41	73.376	11.577
2016	Current Assets-Total[y16]	166.875	784	14.635	142.069	128.65	26.716	99.611	12.62
2017	Current Assets-Total[y17]	155.463	720	18.985	227.873	131.246	29.247	66.858	8.611
2018	Current Assets-Total[y18]	131.468	781	16.118	188.702	147.172	30.815	502.722	9.011
2019	Current Assets-Total[y19]	122.456	1285	14.207	184.712	2015.127	29.133	122.046	9.384
2020	Current Assets-Total[y20]	157.115	1906	17.619	266.016	380.22	34.123	127.331	16.29
2015	Debt in Current Liabilities[y15]	28.312	682	12.322	39.658	52.314	8.739	38.091	0.044
2016	Debt in Current Liabilities[y16]	90.33	1423	8.478	123.308	169.822	18.159	14.325	0.044
2017	Debt in Current Liabilities[y17]	59.324	1230	11.258	291.02	139.048	34.865	25	1.044
2018	Debt in Current Liabilities[y18]	40.32	1049	17.784	170.011	228.723	55.843	100	1.03
2019	Debt in Current Liabilities[y19]	7.193	814	9.24	198.42	142.941	27.178	139.481	6.5
2020	Debt in Current Liabilities[y20]	2.371	1624	28.695	376.884	214.22	9.955	251.335	0
2015	Current Liabilities-Total[y15]	123.507	1533	22.403	147.898	193.199	28.319	79.623	6.197
2016	Current Liabilities-Total[y16]	177.944	2392	19.328	250.23	301.536	47.056	63.573	8.184
2017	Current Liabilities-Total[y17]	156.662	2325	28.461	490.959	284.488	64.537	85.052	9.145
2018	Current Liabilities-Total[y18]	146.585	2094	37.731	321.166	398.977	94.363	163.985	10.841
2019	Current Liabilities-Total[y19]	115.998	2045	25.599	358.721	323.461	64.981	234.567	15.156
2020	Current Liabilities-Total[y20]	118.572	2881	43.724	588.706	603.873	56.848	350.795	11.993
2015	noncash wkcap	33.138	-239	4.154	10.501	-15.744	1.361	26.605	2.545
2016	noncash wkcap	78.825	-260	3.559	-10.345	-6.827	-6.06	44.014	0.271
2017	noncash wkcap	57.911	-430	0.83	-66.842	-18.398	-25.877	74.914	9.653
2018	noncash wkcap	18.062	-394	-4.122	-9.629	-26.709	-11.41	18.015	-0.802
2019	noncash wkcap	12.317	-6	-2.748	-18.242	-34.315	-10.9	14.016	0.726
2020	noncash wkcap	4.177	102	2.562	9.639	-14.26	-17.261	22.602	4.295
2016	Change Non cashWrk Cap	45.687	-21	-0.595	-20.846	8.917	-7.421	17.409	-2.274
2017	Change Non cashWrk Cap	-20.914	-170	-2.729	-56.497	-11.571	-19.817	30.9	9.382
2018	Change Non cashWrk Cap	-39.849	36	-4.952	57.213	-8.311	14.467	-56.899	-10.455
2019	Change Non cashWrk Cap	-5.745	388	1.374	-8.613	-7.606	0.51	-3.999	1.528
2020	Change Non cashWrk Cap	-8.14	108	5.31	27.881	20.055	-6.361	8.586	3.569
2016		10.48%	-0.64%	-0.75%	-3.42%	1.09%	-5.58%	5.12%	-4.78%
2017	WK cap/sale	-4.75%	-5.06%	-3.32%	-8.36%	-1.43%	-15.15%	7.94%	19.31%
2018	WK cap/sale	-9.12%	1.05%	-6.16%	8.19%	-0.99%	10.48%	-14.31%	-21.58%
2019	WK cap/sale	-1.21%	10.75%	1.64%	-1.21%	-0.85%	0.38%	-0.95%	2.96%
2020	WK cap/sale	-1.67%	2.86%	6.02%	3.51%	1.37%	-4.49%	1.52%	6.63%
	Average	-1.25%	1.79%	-0.51%	-0.26%	-0.16%	-2.87%	-0.13%	0.51%
							Median		-0.21%

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Carteret Fair Value Determination
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The Water Utility Industry consists of seven companies that provide water services to residential, commercial, and industrial customers. The group is now ranked 46th for relative year-ahead performance, which is near the middle of the pack of the 97 industries followed by *Value Line*.

Many investors are drawn to the water utility group for its well-defined earnings and dividend growth prospects. The stocks also have low Beta coefficients.

Every company here is in the midst of a large construction program. This is due to the nation's water infrastructure being in poor shape. Capital budgets should remain meaningful for years to come, which will require external financing.

The role of regulators cannot be overstated. Fortunately, relations between the water companies and authorities has been constructive.

Stocks in the Water Utility Industry do not come cheap. Indeed, they trade at high price/ earnings multiples. Scarcity is one of the reasons. The market capitalization of the entire industry is small compared to others, on a relative basis.

INDUSTRY TIMELINESS: 46 (of 97)

COVID-19 Update

Since the pandemic began, water utilities' earnings and revenues have been not been affected. Demand for water is very inelastic when it is priced reasonably, as is the case in most of the country. The biggest change was just the cessation of shutoffs for nonpayment. This has never been a major issue in this industry, as water is essential and is often one of the first bill paid by consumers. Going forward, even if more deviant types of the coronavirus emerge, the impact on these companies' bottom line ought to be marginal.

Fragmented Industry

An overwhelming majority of water districts in the United States are small and operated by local municipalities or states. Indeed, there are easily more than 50,000 separate water entities operating throughout the country. As a result, it is a very inefficient market. *American Water Works* has been the most active acquirer of these smaller districts. With the average age of a typical domestic pipeline being well over 50 years (more below), many operators do not have the needed funds to modernize their assets. We expect consolidation to remain a trend.

Aging Infrastructure

For decades, there was too little investment made in replacing pipes, valves and other assets associated with the collection and distribution of water. Customers bills were also kept artificially low. This caused the water infrastructure to become old and badly in need of repair. In addition, as the nation's population grew, water usage increased significantly. As water supplies came under more pressure, especially in the Southwest, the amount of water lost while being transported because of broken pipes took on more importance.

Large Building Programs

Investment in infrastructure has increased significantly over the past decade, as the industry is now trying to upgrade its water systems. Every company in this group is now undertaking a strategy of spending heavily to address the problem. To finance the new construction, water bills have had to be raised. Regions of the country where water is not plentiful even had to raise the price to consumers to reduce excess consumption. In one of the spending bills now before Congress, the federal government would allocate $111 billion toward helping the water industry. The aid would be meant mostly for the many different water authorities that are owned by cities and states, however.

Financial Strength And Regulation

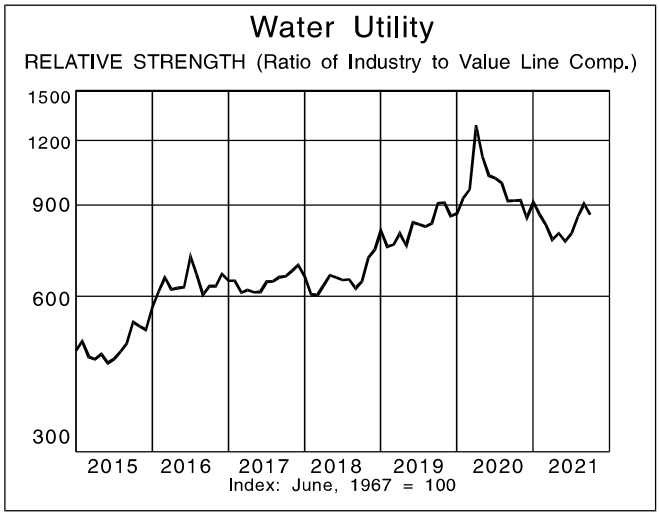
These construction projects forced utilities to issue debt to finance a healthy part of the expenditures. Thus, balance sheets in the group, are just in average condition. We expect them to become slightly more leveraged in the future, as borrowing increases.

As we stated earlier, the role played by state water authorities in the process is critical. They establish the rate of return that water utilities can earn on their equity. Should regulation be too restrictive, utilities will be less inclined to spend money. Regulators have to find that fine line between where water customers aren't being overcharged, but their monthly bill are high enough so that these companies can make a profit. Unlike gas and electric utilities, where there can discord between the parties involved, the water industry has generally been harmonious. This has enabled large sums to be spent by companies to better maintain and refurbish their existing assets.

Conclusion

In the Water Utility Industry, *California Water* is the only stock that is ranked favorably for year-ahead price performance. Investors typically have to pay a premium to own these stocks. Also, because the stocks in the group have performed so well over the past five years, almost all of them have well-below average total return prospects over the pull to 2024-2026. As always, we recommend that subscribers read each individual report before making commitments.

James A. Flood



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AMER. STATES WATER NYSE-AWR

RECENT PRICE 86.71 | P/E RATIO 35.7 (Trailing: 34.7 Median: 24.0) | RELATIVE P/E RATIO 1.89 | DIV'D YLD 1.7% | VALUE LINE

TIMELINESS 3 Raised 3/5/21
SAFETY 2 Raised 7/20/12
TECHNICAL 2 Raised 10/8/21
BETA .65 (1.00 = Market)

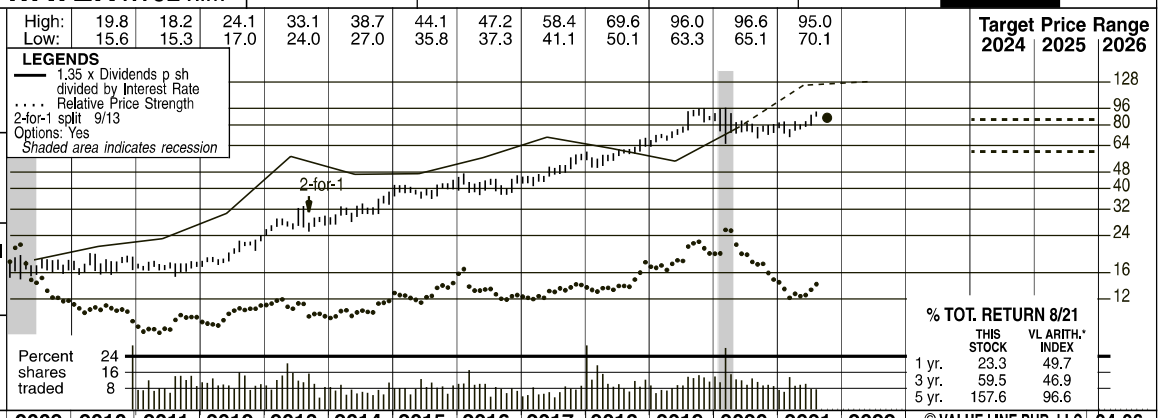
18-Month Target Price Range
Low-High Midpoint (% to Mid)
$75-$118 $97 (10%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	85	(Nil)	2%
Low	60	(-30%)	-6%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	121	120	126
to Sell	142	128	117
Hld's(000)	25483	25737	25636



2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
7.03	7.88	8.75	9.21	9.74	10.71	11.12	12.12	12.19	12.17	12.56	11.92	12.01	11.88	12.86	13.24	13.55	13.75	Revenues per sh	17.20
1.32	1.45	1.65	1.69	1.70	2.11	2.13	2.48	2.65	2.67	2.81	2.70	2.96	2.84	3.26	3.34	3.50	3.75	"Cash Flow" per sh	4.80
.66	.67	.81	.78	.81	1.11	1.12	1.41	1.61	1.57	1.61	1.62	1.88	1.72	2.28	2.33	2.45	2.60	Earnings per sh A	3.05
.45	.46	.48	.50	.51	.52	.55	.64	.76	.83	.87	.91	.99	1.06	1.16	1.28	1.40	1.52	Div'd Decl'd per sh B■	2.00
2.12	1.95	1.45	2.23	2.09	2.12	2.13	1.77	2.52	1.89	2.39	3.55	3.08	3.44	4.12	3.54	4.05	4.20	Cap'l Spending per sh	4.25
7.86	8.32	8.77	8.97	9.70	10.13	10.84	11.80	12.72	13.24	12.77	13.52	14.45	15.19	16.33	17.39	17.45	20.00	Book Value per sh D	23.20
33.60	34.10	34.46	34.60	37.06	37.26	37.70	38.53	38.72	38.29	36.50	36.57	36.68	36.76	36.85	36.89	37.25	37.50	Common Shs Outst'g C	37.50
21.9	27.7	24.0	22.6	21.2	15.7	15.4	14.3	17.2	20.1	24.6	25.6	25.7	34.0	34.4	34.3	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	24.0
1.17	1.50	1.27	1.36	1.41	1.00	.97	.91	.97	1.06	1.24	1.34	1.29	1.84	1.83	1.78			Relative P/E Ratio	1.35
3.1%	2.5%	2.5%	2.9%	2.9%	3.0%	3.2%	3.1%	2.7%	2.6%	2.2%	2.2%	2.0%	1.8%	1.5%	1.6%			Avg Ann'l Div'd Yield	2.8%
419.3	466.9	472.1	465.8	458.6	436.1	440.6	436.8	473.9	488.2	510	525	Revenues ($mill)	645
42.0	54.1	62.7	61.1	60.5	59.7	69.4	63.9	84.3	86.4	90.0	95.0	Net Profit ($mill)	115
41.7%	39.9%	36.3%	38.4%	38.4%	36.8%	36.0%	22.0%	22.6%	24.6%	23.5%	24.0%	Income Tax Rate	23.0%
2.0%	2.5%	--	--	--	--	--	--	2.5%	--	1.0%	1.0%	AFUDC % to Net Profit	1.0%
45.4%	42.2%	39.8%	39.1%	41.1%	39.4%	38.0%	40.5%	44.4%	47.2%	45.5%	48.5%	Long-Term Debt Ratio	53.5%
54.6%	57.8%	60.2%	60.9%	58.9%	60.6%	62.0%	59.5%	55.6%	52.8%	54.5%	51.5%	Common Equity Ratio	46.5%
749.1	787.0	818.4	832.6	791.5	815.3	854.9	938.4	1082.5	1216.2	1260	1390	Total Capital ($mill)	1620
896.5	917.8	981.5	1003.5	1060.8	1150.9	1205.0	1296.3	1415.7	1512.0	1600	1700	Net Plant ($mill)	1925
7.1%	8.3%	8.9%	8.6%	9.0%	8.6%	9.3%	7.9%	8.9%	8.0%	8.0%	8.0%	Return on Total Cap'l	8.5%
10.3%	11.9%	12.7%	12.0%	13.0%	12.1%	13.1%	11.4%	14.0%	13.5%	13.5%	13.5%	Return on Shr. Equity	13.0%
10.3%	11.9%	12.7%	12.0%	13.0%	12.1%	13.1%	11.4%	14.0%	13.5%	13.5%	13.5%	Return on Com Equity	13.0%
5.3%	6.6%	6.8%	5.7%	6.0%	5.3%	6.2%	4.5%	6.9%	6.1%	6.0%	5.5%	Retained to Com Eq	4.5%
49%	45%	47%	53%	54%	56%	52%	61%	51%	55%	57%	60%	All Div'ds to Net Prof	66%

CAPITAL STRUCTURE as of 6/30/21
Total Debt $412.7 mill. **Due in 5 Yrs** $136.0 mill.
LT Debt $412.3mill. **LT Interest** $24.0 mill. (38% of Cap'l)

Leases, Uncapitalized: Annual rentals $2.6 mill.
Pension Assets-12/20 $213.1 mill. **Oblig.** $272.8 mill.
Pfd Stock None

Common Stock 36,931,771 shs. as of 7/30/21

MARKET CAP: $3.2 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2019	2020	6/30/21
Cash Assets	1.3	36.7	5.4
Accts Receivable	20.9	29.2	28.5
Other	100.3	91.2	33.9
Current Assets	122.5	157.1	136.3
Accts Payable	55.6	63.8	66.0
Debt Due	5.3	.4	.4
Other	55.1	54.4	45.0
Current Liab.	116.0	118.6	111.4

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	2.5%	.5%	5.0%
"Cash Flow"	5.5%	3.0%	7.0%
Earnings	9.0%	5.5%	6.5%
Dividends	8.5%	7.5%	9.5%
Book Value	5.5%	5.0%	5.5%

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	94.7	106.9	124.2	111.0	436.8
2019	101.7	124.7	134.5	113.0	473.9
2020	109.1	121.3	133.6	124.2	488.2
2021	117.1	128.4	139	125.5	510
2022	120	130	145	130	525

Calendar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	.29	.44	.62	.37	1.72
2019	.35	.72	.76	.45	2.28
2020	.38	.69	.72	.54	2.33
2021	.52	.72	.75	.46	2.45
2022	.50	.75	.78	.57	2.60

Calendar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.242	.242	.255	.255	.99
2018	.255	.255	.275	.275	1.06
2019	.275	.275	.305	.305	1.16
2020	.305	.305	.335	.335	1.28
2021	.335	.335	.365		

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Co., it supplies water to 261,976 customers in 10 California counties. Service areas include the metropolitan areas of Los Angeles and Orange Counties. The company also provides electricity to 24,545 customers in Big Bear Lake and San Bernardino Cnty. Provides water & wastewater services to U.S. military bases through its ASUS subsidiary. Sold Chaparral City Wtr. of AZ. (6/11). Employs 841. BlackRock, Inc. owns 16.4% of out. shares; Vanguard, 12.0%; off. & dir., 1.0% (4/21 Proxy). Chairman: Lloyd Ross. Pres. & CEO: Robert Sprowls. Inc: CA. Address: 630 East Foothill Blvd., San Dimas, CA 91773. Tel.: 909-394-3600. Internet: www.aswater.com.

American States Water has raised its dividend. In the September interim, the quarterly share payout was increased from $0.335 to $0.365. This 9% hike was well above the average growth rate compared to the other water utilities that make up this group.

The company is on track for a decent showing in 2021. Thanks to a better-than-expected first half, we think that earnings per share could well rise 5% this year. This is not bad, considering that utilities often do not perform well when operating in the final year of a three-year-old rate case.

Earnings from 2022 will be heavily influenced by a pending regulatory case. In California, utilities petition state authorities for permission to charge higher fees triennially. American States filed for rate relief for the 2022 to 2024 period several years ago, and a ruling by the California Public Utility Commission should be made early next year. (Any rate hike would be retroactive to January 1st.) Management has been in discussions, and it's possible that a settlement can be reached earlier. In any case, the decision on the previous request for higher rates was relatively constructive.

Inflation may stall some of the expected growth in the nonregulated segment. Through its ASUS subsidiary, the company provides water services to military installations in the United States. The armed forces are in the midst of privatizing these operations, and ASUS has done well winning its fair share of the contracts. In the second quarter, shares earnings were off here about 8% due to a spike in the price of commodities and other costs. Unlike its water operations, profitability in this business is not controlled. Hence, there is greater risk, as well as a chance to make more income from investments. Should inflation not be transitory, it would not be helpful because the company operates on 50-year contracts.

Theses shares are only expected to perform in line with the broader market averages in the year ahead. Looking further out to 2024-2026, AWR total return prospects are well below the *Value Line* median, which is the case for most stocks in this industry.

James A. Flood *October 8, 2021*

(A) Primary earnings. Excludes nonrecurring gains/(losses): '05, 13¢; '06, 3¢; '08, (14¢); '10, (23¢); '11, 10¢. Next earnings report due early November.
(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for split.
(D) Includes intangibles. As of 6/30/20; $1.1 million/$0.03 a share.

Company's Financial Strength	A
Stock's Price Stability	100
Price Growth Persistence	85
Earnings Predictability	90

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AMERICAN WATER NYSE-AWK

RECENT PRICE 170.71 | P/E RATIO 39.5 (Trailing: 41.3 Median: 24.0) | RELATIVE P/E RATIO 2.09 | DIV'D YLD 1.4% | VALUE LINE

TIMELINESS 3 Lowered 6/25/21
SAFETY 3 New 7/25/08
TECHNICAL 2 Raised 10/8/21
BETA .90 (1.00 = Market)

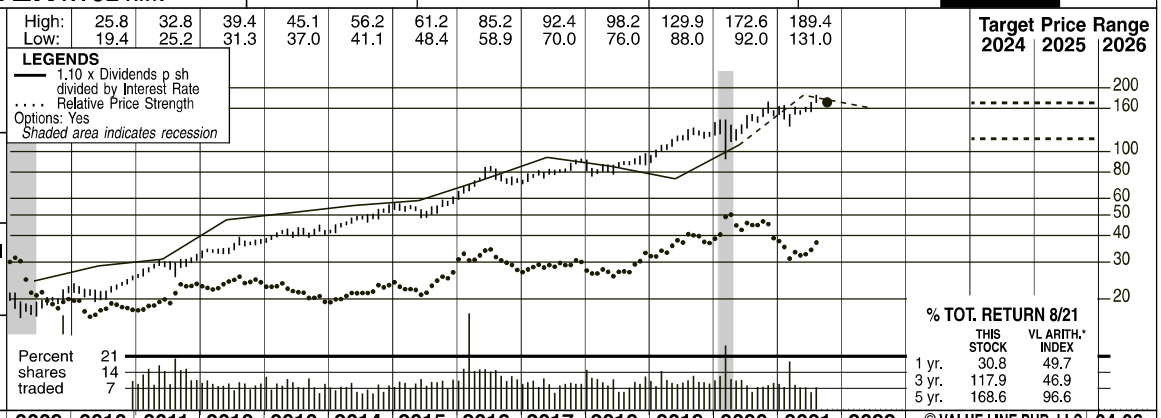
18-Month Target Price Range
Low-High Midpoint (% to Mid)
$120-$279 $200 (15%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	170	(Nil)	2%
Low	115	(-35%)	-7%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	449	434	444
to Sell	344	388	377
Hld's(000)	148917	148561	150291



	2005	2006E	2007E	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
High:	25.8	32.8	39.4	45.1	56.2	61.2	85.2	92.4	98.2	129.9	172.6	189.4								
Low:	19.4	25.2	31.3	37.0	41.1	48.4	58.9	70.0	76.0	88.0	92.0	131.0								
	--	13.08	13.84	14.61	13.98	15.49	15.18	16.25	16.28	16.78	17.72	18.54	18.81	19.04	19.97	20.83	*22.10*	*23.30*	Revenues per sh	*25.80*
	--	.65	d.47	2.87	2.89	3.56	3.73	4.27	4.36	4.75	5.13	5.26	5.14	6.15	6.65	7.24	*7.70*	*8.25*	"Cash Flow" per sh	*9.70*
	--	d.97	d2.14	1.10	1.25	1.53	1.72	2.11	2.06	2.39	2.64	2.62	2.38	3.15	3.43	3.91	*4.25*	*4.60*	Earnings per sh A	*5.50*
	--	--	--	.40	.82	.86	.90	1.21	.84	1.21	1.33	1.47	1.62	1.78	1.96	2.15	*2.36*	*2.57*	Div'd Decl'd per sh B■	*3.10*
	--	4.31	4.74	6.31	4.50	4.38	5.27	5.25	5.50	5.33	6.51	7.36	8.04	8.78	9.15	10.05	*10.60*	*12.60*	Cap'l Spending per sh	*11.75*
	--	23.86	28.39	25.64	22.91	23.59	24.11	25.11	26.52	27.39	28.25	29.24	30.13	32.42	33.83	35.58	*37.95*	*40.20*	Book Value per sh D	*50.00*
	--	160.00	160.00	160.00	174.63	175.00	175.66	176.99	178.25	179.46	178.28	178.10	178.44	180.68	180.81	181.30	*181.50*	*182.00*	Common Shs Outst'g C	*190.00*
	--	--	--	--	18.9	15.6	14.6	16.8	16.7	19.9	20.0	20.5	27.7	33.8	27.3	32.9	35.3	*Bold figures are Value Line estimates*	Avg Ann'l P/E Ratio	*26.0*
	--	--	--	--	1.14	1.04	.93	1.05	1.06	1.12	1.05	1.03	1.45	1.70	1.47	1.75	1.83		Relative P/E Ratio	*1.45*
	--	--	--	--	1.9%	4.2%	3.8%	3.1%	3.4%	2.0%	2.5%	2.5%	2.0%	2.0%	2.1%	1.7%	1.6%		Avg Ann'l Div'd Yield	*2.2%*
							2666.2	2876.9	2901.9	3011.3	3159.0	3302.0	3357.0	3440.0	3610.0	3777.0	*4025*	*4240*	Revenues ($mill)	*4900*
							304.9	374.3	369.3	429.8	476.0	468.0	426.0	567.0	621.0	709.0	*770*	*835*	Net Profit ($mill)	*1045*
							39.5%	40.7%	39.1%	39.4%	39.1%	39.2%	53.3%	28.2%	25.5%	23.3%	*19.5%*	*23.5%*	Income Tax Rate	*24.0%*
							--	6.2%	5.1%	--	--	--	--	--	5.1%	4.0%	*4.5%*	*5.0%*	AFUDC % to Net Profit	*5.0%*
							55.7%	53.9%	52.4%	52.4%	53.7%	52.4%	54.7%	56.3%	58.5%	59.1%	*59.0%*	*61.5%*	Long-Term Debt Ratio	*61.0%*
							44.2%	46.1%	47.6%	47.4%	46.2%	47.5%	45.3%	43.6%	41.4%	40.9%	*41.0%*	*39.5%*	Common Equity Ratio	*39.0%*
							9580.3	9635.5	9940.7	10364	10911	10967	11875	13433	14760	15787	*16900*	*18700*	Total Capital ($mill)	*20000*
							11021	11739	12391	12900	13933	14992	16246	17409	18232	19710	*20750*	*22150*	Net Plant ($mill)	*24500*
							4.8%	5.4%	5.1%	5.5%	5.7%	5.6%	4.9%	5.4%	5.4%	5.7%	*5.5%*	*5.5%*	Return on Total Cap'l	*6.0%*
							7.2%	8.4%	7.8%	8.7%	9.4%	9.0%	7.9%	9.7%	10.1%	11.0%	*11.0%*	*11.5%*	Return on Shr. Equity	*11.0%*
							7.2%	8.4%	7.8%	8.7%	9.4%	9.0%	7.9%	9.7%	10.1%	11.0%	*11.0%*	*11.5%*	Return on Com Equity	*11.0%*
							3.5%	3.6%	4.7%	4.3%	4.7%	4.0%	2.5%	4.2%	4.4%	5.0%	*5.0%*	*5.5%*	Retained to Com Eq	*4.5%*
							52%	57%	40%	50%	50%	56%	68%	56%	57%	55%	*56%*	*56%*	All Div'ds to Net Prof	*56%*

CAPITAL STRUCTURE as of 6/30/21
Total Debt $10998 mil. **Due in 5 Yrs** $2867 mil.
LT Debt $10343 mil. **LT Interest** $384 mil.
(61% of Cap'l)

Leases, Uncapitalized: Annual rentals $13.0 mill.
Pension Assets 12/20 $1990.0 mill
Oblig. $2386.0 mill.
Pfd Stock $3.0 mill. **Pfd Div'd** $.2 mill

Common Stock 181,495,720 shares
as of 7/27/21

MARKET CAP: $31.0 billion (Large Cap)

CURRENT POSITION ($MILL.)	2019	2020	6/30/21
Cash Assets	91	576	104
Accts Receivable	294	321	311
Other	900	1009	1155
Current Assets	1285	1906	1570
Accts Payable	203	189	146
Debt Due	814	1611	655
Other	1028	1081	909
Current Liab.	2045	2881	1710

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	3.0%	3.5%	*4.5%*
"Cash Flow"	8.0%	7.0%	*6.5%*
Earnings	10.5%	8.0%	*8.5%*
Dividends	11.0%	11.5%	*8.5%*
Book Value	3.5%	4.5%	*5.0%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	761	853	976	850	3440
2019	813	882	1013	902	3610
2020	844	931	1079	923	3777
2021	888	999	*1160*	*975*	*4025*
2022	*935*	*1055*	*1200*	*1050*	*4240*

Calendar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	.59	.91	1.03	.62	3.15
2019	.62	.94	1.33	.54	3.43
2020	.68	.97	1.46	.80	3.91
2021	.73	1.14	*1.53*	*.85*	*4.25*
2022	*.80*	*1.15*	*1.70*	*.95*	*4.60*

Calendar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.375	.415	.415	.415	1.62
2018	.415	.455	.455	.455	1.78
2019	.455	.50	.50	.50	1.96
2020	.50	.55	.55	.55	2.15
2021	.55	.6025	.6025		

BUSINESS: American Water Works Company, Inc. is the largest investor-owned water and wastewater utility in the U.S., providing services to approximately 15 million people in 46 states. Nonregulated business assists municipalities and military bases with the maintenance and upkeep as well. Regulated operations made up 86% of 2020 revenues. New Jersey is its largest market accounting for 24.5% of regulated revenues; Pennsylvania, 22.5%; Missouri, 10.6%. Has 6,800 employees. The Vanguard Grp, owns 11.7% of outstanding shares; BlackRock, Inc., 8.1%; officers & directors, less than 1.0%. (3/21 Proxy). President & CEO: Susan N. Story. Chairman: George MacKenzie. Address: 1 Water Street, Camden, NJ 08102. Tel.: 856-346-8200. Internet: www.amwater.com.

American Water Works' earning prospects are among the best in the water utility industry. The company got off to a strong start in 2021, as share earnings were up 13% in the first half. For the full year, our share-net estimate remains at $4.25, which would represent a 9% gain over 2020's record showing. We think this will be followed in 2022 by an 8% increase to $4.60 a share. What's more, the bottom line ought to grow 7%-10% through mid-decade.

The company's strategy is very straightforward. By far, it is the largest publicly traded water utility in the United States. Thus, it has the financial wherewithal and widespread distribution to better take advantage of a very inefficient fractured industry. American Water is able to buy a number of small municipally owned water districts each year and absorb them into its operations. Moreover, because there are such redundancies in this group, substantial cost savings are able to be realized. American is also able to expand its plant base, upon which is earns a return.

The building budget is massive. The country's water pipelines, valves, and treatment plants are outdated and in urgent need of replacement and repair. With it sprawling operations, American Water plans on spending almost $2 billion this year alone. The level of annual outlays ought to remain elevated, as the company believes that once this decade is completed, its capital expenditures budget will have been between $22 billion-$25 billion.

Regulatory treatment remains a key factor in the company's performance. As a regulated utility, American Water and its subsidiaries must file rate cases in the states where they operate. In the past, most authorities have had a constructive relationship with water companies because there is general agreement that underinvestment in the past was the reason for the poor state of the country's water infrastructure. Should the relationship become more adversarial, earnings growth would be hurt.

These shares do not stand out at this juncture. In addition to a 3 (Average) Timeliness rank, AWK's long-term total return potential is subpar.

James A. Flood *October 8, 2021*

(A) Diluted earnings. Excludes nonrecur. losses: '08, $4.62; '09, $2.63; '11, $0.07. Disc. oper.: '06, ($0.04); '11, $0.03; '12, ($0.10); '13,($0.01). GAAP used as of 2014. Next earnings report due early November.
(B) Dividends paid in March, June, September, and December. ■ Div. reinvestment available.
(C) In millions. (D) Includes intangibles. On 6/30/21: $1.561 billion, $8.60/share.
(E) Pro forma numbers for '06 & '07.

Company's Financial Strength	B++
Stock's Price Stability	80
Price Growth Persistence	100
Earnings Predictability	90

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CWSNC W-354 SUB 398
Carteret Fair Value Determination
Form Application Exhibit 1A

CALIFORNIA WATER NYSE-CWT

RECENT PRICE 58.99 | P/E RATIO 26.7 (Trailing: 20.1 Median: 24.0) | RELATIVE P/E RATIO 1.41 | DIV'D YLD 1.6% | VALUE LINE

TIMELINESS 2 Raised 10/1/21
SAFETY 3 Lowered 7/27/07
TECHNICAL 2 Raised 9/24/21
BETA .70 (1.00 = Market)

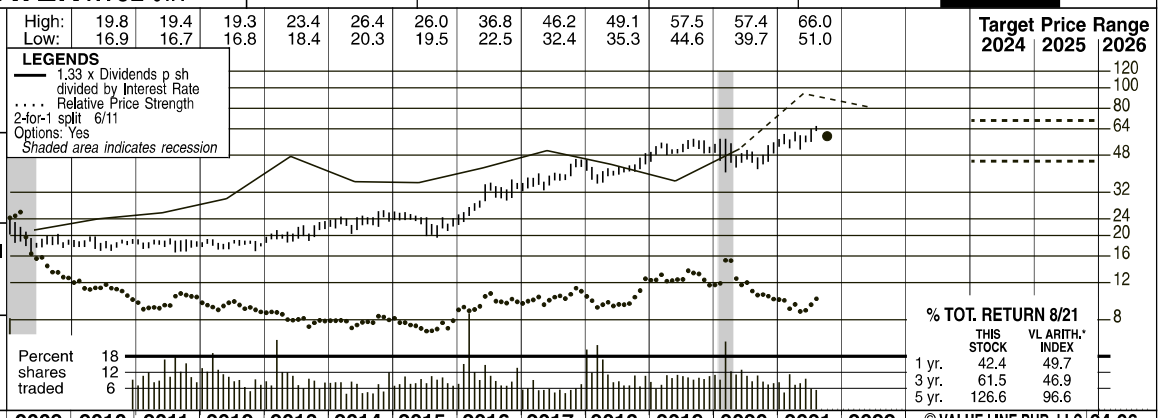
18-Month Target Price Range
Low-High Midpoint (% to Mid)
$49-$81 $65 (10%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	70	(+20%)	6%
Low	45	(-25%)	-4%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	122	112	113
to Sell	91	104	99
Hld's(000)	37534	38005	39103



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
High:	19.8	19.4	19.3	23.4	26.4	26.0	36.8	46.2	49.1	57.5	57.4	66.0								
Low:	16.9	16.7	16.8	18.4	20.3	19.5	22.5	32.4	35.3	44.6	39.7	51.0								
	8.72	8.10	8.88	9.90	10.82	11.05	12.00	13.34	12.23	12.50	12.29	12.70	13.89	14.53	14.72	15.78	*15.85*	*16.35*	Revenues per sh	*16.70*
	1.52	1.36	1.56	1.86	1.93	1.93	2.07	2.32	2.21	2.47	2.22	2.34	3.00	3.11	3.14	3.88	*3.60*	*3.75*	"Cash Flow" per sh	*3.85*
	.74	.67	.75	.95	.98	.91	.86	1.02	1.02	1.19	.94	1.01	1.40	1.36	1.31	1.97	*2.05*	*2.20*	Earnings per sh A	*2.35*
	.57	.58	.58	.59	.59	.60	.62	.63	.64	.65	.67	.69	.72	.75	.79	.85	*.92*	*.98*	Div'd Decl'd per sh B ■	*1.15*
	2.01	2.14	1.84	2.41	2.66	2.97	2.83	3.04	2.58	2.76	3.69	4.77	5.40	5.65	5.64	5.93	*5.25*	*5.50*	Cap'l Spending per sh	*5.85*
	7.90	9.07	9.25	9.72	10.13	10.45	10.76	11.28	12.54	13.11	13.41	13.75	14.44	15.19	16.07	18.30	*19.90*	*19.70*	Book Value per sh C	*20.30*
	36.78	41.31	41.33	41.45	41.53	41.67	41.82	41.98	47.74	47.81	47.88	47.97	48.01	48.07	48.53	50.33	*51.50*	*52.00*	Common Shs Outst'g D	*53.00*
	24.9	29.2	26.1	19.8	19.7	20.3	21.3	17.9	20.1	19.7	24.8	29.6	26.9	30.3	39.3	24.9	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*24.0*
	1.33	1.58	1.39	1.19	1.31	1.29	1.34	1.14	1.13	1.04	1.25	1.55	1.35	1.64	2.09	1.29			Relative P/E Ratio	*1.30*
	3.1%	2.9%	3.0%	3.1%	3.1%	3.2%	3.4%	3.5%	3.1%	2.8%	2.9%	2.3%	1.9%	1.8%	1.5%	1.7%			Avg Ann'l Div'd Yield	*2.0%*
	501.8	560.0	584.1	597.5	588.4	609.4	666.9	698.2	714.6	794.3	*815*	*850*	Revenues ($mill) E	*885*
	36.1	42.6	47.3	56.7	45.0	48.7	67.2	65.6	63.1	96.8	*105*	*115*	Net Profit ($mill)	*124*
	40.5%	37.5%	30.3%	33.0%	36.0%	35.5%	30.1%	24.5%	19.1%	11.1%	*21.0%*	*21.0%*	Income Tax Rate	*21.0%*
	7.6%	8.0%	4.3%	2.7%	4.3%	6.1%	3.5%	3.1%	5.8%	3.3%	*5.0%*	*5.0%*	AFUDC % to Net Profit	*5.0%*
	51.7%	47.8%	41.6%	40.1%	44.4%	44.6%	42.7%	49.3%	50.2%	45.9%	*49.5%*	*45.5%*	Long-Term Debt Ratio	*41.0%*
	48.3%	52.2%	58.4%	59.9%	55.6%	55.4%	57.3%	50.7%	49.8%	54.1%	*50.5%*	*54.5%*	Common Equity Ratio	*59.0%*
	931.5	908.2	1024.9	1045.9	1154.4	1191.2	1209.3	1440.2	1566.7	1702.4	*2025*	*1875*	Total Capital ($mill)	*1825*
	1381.1	1457.1	1515.8	1590.4	1701.8	1859.3	2048.0	2232.7	2406.4	2650.6	*2775*	*2800*	Net Plant ($mill)	*2925*
	5.5%	6.3%	6.0%	6.3%	5.2%	5.5%	7.1%	5.9%	5.5%	7.0%	*6.0%*	*7.0%*	Return on Total Cap'l	*7.5%*
	8.0%	9.0%	7.9%	9.1%	7.0%	7.4%	9.7%	9.0%	8.1%	10.5%	*10.5%*	*11.0%*	Return on Shr. Equity	*11.5%*
	8.0%	9.0%	7.9%	9.1%	7.0%	7.4%	9.7%	9.0%	8.1%	10.5%	*10.5%*	*11.0%*	Return on Com Equity	*11.5%*
	2.3%	3.4%	3.4%	4.1%	2.0%	2.4%	4.7%	4.0%	3.2%	6.0%	*5.5%*	*6.0%*	Retained to Com Eq	*6.0%*
	71%	62%	56%	55%	71%	68%	51%	55%	60%	43%	*45%*	*45%*	All Div'ds to Net Prof	*49%*

CAPITAL STRUCTURE as of 6/30/21
Total Debt $1210.1 mill. **Due in 5 Yrs** $357.0 mill.
LT Debt $1059.9 mill. **LT Interest** $40.0 mill.
(Total interest coverage: 6.2x) (51% of Cap'l)

Pension Assets-12/20 $716.8 mill.
Oblig. $833.9 mill.

Pfd Stock None

Common Stock 51,535,000 shs.

MARKET CAP: $3.0 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2019	2020	6/30/21
Cash Assets	42.7	44.6	66.5
Other	142.0	221.4	239.1
Current Assets	184.7	266.0	305.6
Accts Payable	108.5	131.7	133.0
Debt Due	197.0	375.1	150.2
Other	53.2	81.9	79.2
Current Liab.	358.7	588.7	362.4

BUSINESS: California Water Service Group provides regulated and nonregulated water service to 492,600 customers in 100 communities in the state of California. Accounts for about 94% of total customers. Also operates in Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired Rio Grande Corp; West Hawaii Utilities (9/08). Revenue breakdown, '20: residential, 70%; business, 18%; industrial, 4%; public authorities, 5%; other 3%. Off. and dir. own 1% of common stock (4/21 proxy). Has 1,184 employees. Pres. and CEO: Martin A. Kropelnicki. Inc.: DE. Addr.: 1720 North First St., San Jose, CA 95112-4598. Tel.: 408-367-8200. Internet: www.calwatergroup.com.

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	3.5%	4.0%	*2.0%*
"Cash Flow"	6.0%	8.0%	*2.0%*
Earnings	5.0%	8.0%	*7.0%*
Dividends	3.0%	4.0%	*6.5%*
Book Value	5.0%	5.0%	*3.5%*

Calendar	QUARTERLY REVENUES ($ mill.) E Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	134.6	174.9	221.3	167.4	698.2
2019	126.1	179.0	232.6	176.9	714.6
2020	125.6	175.5	304.1	189.1	794.3
2021	147.7	213.1	*250*	*204.2*	*815*
2022	*160*	*220*	*260*	*210*	*850*

Calendar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	d.02	.31	.75	.32	1.36
2019	d.16	.35	.88	.24	1.31
2020	d.42	.11	1.94	.31	1.97
2021	d.06	.75	*.95*	*.41*	*2.05*
2022	*.10*	*.65*	*1.00*	*.45*	*2.20*

Calendar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.18	.18	.18	.18	.72
2018	.1875	.1875	.1875	.1875	.75
2019	.1975	.1975	.1975	.1975	.79
2020	.2125	.2125	.2125	.2125	.85
2021	.230	.230	.230		

California Water's second-quarter results markedly exceeded expectations. The stronger-than-anticipated showing can be largely attributed to the company's December, 2020 general rate case approval (as noted in our previous report). Specifically, cumulative rate increases and the continuation of various regulatory benefits helped bolster California Water's June-period operating results. Revenues of $213 million improved 21% year over year, easily outpacing our $200 million projection. Likewise, earnings of $0.75 per share smashed consensus estimates, jumping more than six times the previous-year tally. Positives from the abovementioned rate case vastly outweighed a modest uptick in administrative expenses. All told, we are adding $15 million and $0.35 to our current-year top- and bottom-line estimates, to $815 million and $2.05 per share, respectively.

The West Coast utility recently received the nod to acquire the water and wastewater systems of Preserve community in Millerton. The planned community consists of 1,400 mixed-use units, including residential, commercial, parks, and offices. California Water will begin operating and servicing the community upon official occupancy, which is slated for early next year.

Business prospects are bright 3- to 5-years out. First, economic conditions are apt to improve over the coming years, which ought to support residential and commercial water consumption. Second, the ball has just started rolling on the company's strategic capital investment initiatives (service pipeline and wastewater treatment facility upgrades). To this point, further rate case filings are likely to follow, suggesting higher rates for customers will eventually be on tap as well.

Momentum investors are best suited here, at the moment. California Water is favorably ranked (Timeliness: 2) for relative year-ahead price performance. But at the recent quotation, the stock does not particularly stand out for the pull to mid-decade, as total return potential is below the *Value Line* median. In sum, patient subscribers looking to add a noncyclical utility to their portfolios should probably turn the page, for now.

Nicholas P. Patrikis *October 8, 2021*

(A) Basic EPS. Excl. nonrecurring gain (loss): '11, 4¢. Next earnings report due early Nov.
(B) Dividends historically paid in late Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available.
(C) Incl. intangible assets. In '20 : $27.6 mill., $0.55/sh.
(D) In millions, adjusted for split.
(E) Excludes non-regulated revenues

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	70
Earnings Predictability	60

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Nov 22 2022

CWSNC W-354 SUB 398
Carteret Fair Value Determination
Form Application Exhibit 1A

ESSENTIAL UTIL. NYSE-WTRG

RECENT PRICE 46.48 | P/E RATIO 28.2 (Trailing: 28.0 Median: 23.0) | RELATIVE P/E RATIO 1.49 | DIV'D YLD 2.3% | VALUE LINE

TIMELINESS 3 Lowered 7/30/21
SAFETY 3 Lowered 1/8/21
TECHNICAL 3 Raised 9/3/21
BETA 1.00 (1.00 = Market)

18-Month Target Price Range
Low-High Midpoint (% to Mid)
$37-$87 $62 (35%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	65	(+40%)	11%
Low	45	(-5%)	2%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	264	258	244
to Sell	221	238	231
Hld's(000)	169334	176001	171680

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
High:	18.4	19.0	21.5	28.1	28.2	31.1	35.8	39.6	39.4	47.3	54.5	51.4								
Low:	13.2	15.4	16.8	20.6	22.4	24.4	28.0	29.4	32.1	32.7	30.4	41.1								
	3.08	3.23	3.61	3.71	3.93	4.21	4.10	4.32	4.32	4.37	4.61	4.62	4.56	4.71	4.03	5.96	*7.45*	*8.00*	Revenues per sh	*8.70*
	.97	1.01	1.10	1.14	1.29	1.42	1.45	1.51	1.82	1.89	1.87	2.07	2.12	1.90	1.73	2.21	*2.55*	*2.80*	"Cash Flow" per sh	*3.05*
	.57	.56	.57	.58	.62	.72	.83	.87	1.16	1.20	1.14	1.32	1.35	1.08	1.04	1.12	*1.70*	*1.80*	Earnings per sh [A]	*2.00*
	.32	.35	.38	.41	.44	.47	.50	.54	.58	.63	.69	.74	.79	.85	.91	.97	*1.04*	*1.12*	Div'd Decl'd per sh [B■]	*1.40*
	1.47	1.64	1.43	1.58	1.66	1.89	1.90	1.98	1.73	1.84	2.07	2.16	2.69	2.78	2.49	3.41	*4.00*	*4.00*	Cap'l Spending per sh	*3.75*
	5.04	5.57	5.85	6.26	6.50	6.81	7.21	7.90	8.63	9.27	9.78	10.43	11.02	11.28	17.58	19.09	*20.90*	*21.80*	Book Value per sh	*24.15*
	161.21	165.41	166.75	169.21	170.61	172.46	173.60	175.43	177.93	178.59	176.54	177.39	177.71	178.09	220.76	245.39	*253.00*	*254.50*	Common Shs Outst'g [C]	*270.00*
	31.8	34.7	32.0	24.9	23.1	21.1	21.3	21.9	21.2	20.8	23.5	23.9	24.7	32.6	39.1	39.6	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*27.0*
	1.69	1.87	1.70	1.50	1.54	1.34	1.34	1.39	1.19	1.09	1.18	1.25	1.24	1.76	2.08	2.06			Relative P/E Ratio	*1.50*
	1.8%	1.8%	2.1%	2.8%	3.1%	3.1%	2.8%	2.8%	2.4%	2.5%	2.6%	2.3%	2.4%	2.4%	2.2%	2.2%			Avg Ann'l Div'd Yield	*2.8%*
	712.0	757.8	768.6	779.9	814.2	819.9	809.5	838.1	889.7	1462.7	*1890*	*2040*	Revenues ($mill)	*2350*						
	144.8	153.1	205.0	213.9	201.8	234.2	239.7	192.0	224.5	284.8	*420*	*455*	Net Profit ($mill)	*540*						
	32.9%	39.0%	10.0%	10.5%	6.9%	8.2%	6.6%	--	6.6%	6.6%	*5.0%*	*6.0%*	Income Tax Rate	*7.0%*						
	--	--	1.1%	2.4%	3.1%	3.8%	6.3%	6.8%	7.2%	4.5%	*7.0%*	*7.5%*	AFUDC % to Net Profit	*6.0%*						
	52.7%	52.7%	48.9%	48.5%	50.3%	48.4%	50.6%	54.4%	43.1%	54.0%	*54.0%*	*56.0%*	Long-Term Debt Ratio	*55.0%*						
	47.3%	47.3%	51.1%	51.5%	49.7%	51.6%	49.4%	45.6%	56.9%	46.0%	*46.0%*	*44.0%*	Common Equity Ratio	*45.0%*						
	2646.8	2929.7	3003.6	3216.0	3469.5	3587.7	3965.4	4407.8	6824.2	10192	*11325*	*12400*	Total Capital ($mill)	*14500*						
	3612.9	3936.2	4167.3	4402.0	4688.9	5001.6	5399.9	5930.3	6345.8	9512.9	*10175*	*10875*	Net Plant ($mill)	*12300*						
	6.9%	6.6%	8.0%	7.8%	6.9%	7.6%	7.1%	5.5%	4.2%	3.7%	*4.5%*	*5.0%*	Return on Total Cap'l	*5.5%*						
	11.6%	11.0%	13.4%	12.9%	11.7%	12.7%	12.2%	9.6%	5.8%	6.1%	*8.0%*	*8.5%*	Return on Shr. Equity	*8.5%*						
	11.6%	11.0%	13.4%	12.9%	11.7%	12.7%	12.2%	9.6%	5.8%	6.1%	*8.0%*	*8.5%*	Return on Com Equity	*8.5%*						
	4.6%	4.3%	6.7%	6.1%	4.7%	5.6%	5.1%	2.1%	.9%	1.1%	*3.0%*	*3.0%*	Retained to Com Eq	*3.0%*						
	60%	61%	50%	52%	60%	56%	59%	79%	84%	82%	*63%*	*62%*	All Div'ds to Net Prof	*70%*						

CAPITAL STRUCTURE as of 6/30/21
Total Debt $5799.7 mill. **Due in 5 Yrs** $1102 mill.
LT Debt $5648.2 mill. **LT Interest** $203.0 mill. (42% of Cap'l)

Pension Assets-12/20 $426.8 mill. **Oblig.** $486.2 mill.

Pfd Stock None
Common Stock 245,757,399 shares **as of 7/23/21**

MARKET CAP: $11.4 billion (Large Cap)

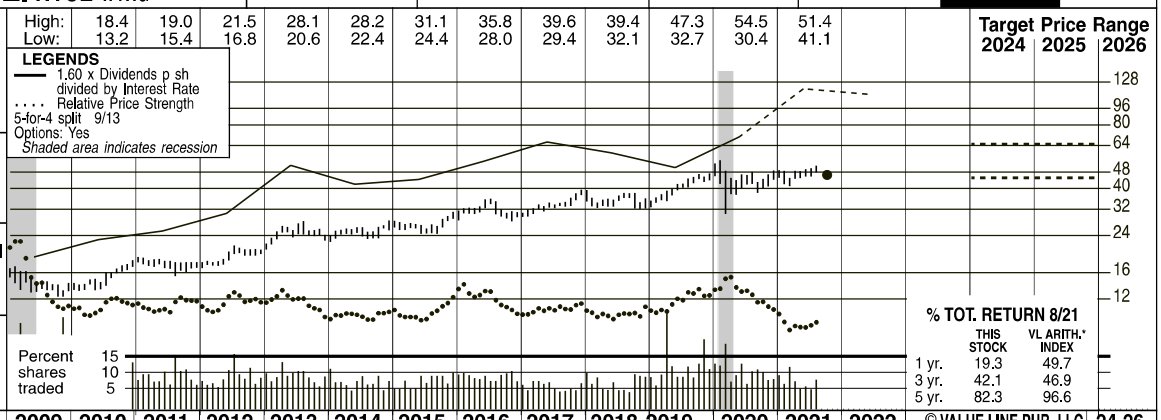
CURRENT POSITION ($MILL.)	2019	2020	6/30/21
Cash Assets	1868.9	4.8	8.4
Receivables	67.1	154.8	129.2
Inventory (AvgCst)	18.4	58.4	63.4
Other	58.3	162.2	103.7
Current Assets	2012.7	380.2	304.7
Accts Payable	74.9	177.5	131.8
Debt Due	130.8	162.6	151.5
Other	113.1	263.8	185.9
Current Liab.	318.8	603.9	469.2

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	2.0%	2.0%	*10.0%*
"Cash Flow"	4.5%	1.0%	*6.5%*
Earnings	5.5%	-1.5%	*10.0%*
Dividends	7.5%	7.5%	*7.5%*
Book Value	9.5%	11.5%	*6.5%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	194.3	211.9	226.2	205.7	838.1
2019	201.1	218.9	243.6	226.1	889.7
2020	255.6	384.5	348.6	474.0	1462.7
2021	583.6	397.0	*389.4*	*520*	*1890*
2022	*600*	*435*	*435*	*570*	*2040*

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	.29	.37	.44	d.02	1.08
2019	.09	.25	.38	.28	1.04
2020	.21	.29	.22	.40	1.12
2021	.72	.32	*.23*	*.43*	*1.70*
2022	*.67*	*.33*	*.35*	*.45*	*1.80*

Calendar	QUARTERLY DIVIDENDS PAID [B■] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.1913	.1913	.2047	.2047	.79
2018	.2047	.2047	.219	.219	.85
2019	.219	.219	.2343	.2343	.91
2020	.2343	.2343	.2507	.2507	.97
2021	.2507	.2507	.2682		



BUSINESS: Essential Utilities, Inc. became the new name for Aqua America on Feb. 3, 2020, to reflect the acquisition of Peoples, a natural gas utility, which occurred in 3/20. In 2020, Aqua Amer. provided water and wastewater services to about 5 million people in PA, OH, TX, IL, NC, NJ, IN, VA NS WS. Employed 3,180 Acquired AquaSource, 7/13; North Maine Utilities, 7/15; and others. Water respn. for 65% of revenues in 2020; residential, 39%; commercial, 10%; industrial, wastewater & other, 16%. Gas 35%. Off. & dir. own less than 1% of the common stock; Vanguard, 10.1%; BlackRock, 10.0%; Canadian Pension Plan about 8.8% (5/21 proxy). Pres. & CEO: Christopher Franklin. Inc.: PA Addr.: 762 W Lancaster Ave., Bryn Mawr, PA 19010. Tel.: 610-525-1400. Int.: www.essential.co.

Shares of Essential Water have not performed well of late. Since our July report, the price of the stock is up less than 1%. This compares unfavorably to the equities of other water utilities and the S&P 500 Index. Indeed, WTRG has trailed all but one equity in the group.

A major rate case has been filed in Pennsylvania. In late August, the company petitioned state regulators to recover the $1.1 billion (an average of $2,235 per customer), it has invested since its last filing. These funds were spent on replacing more than 400 miles of pipes and upgrading treatment plants. Historically, the regulatory commission has reached constructive decisions, as it's a recognized fact that like most other members in the industry, Essential's water infrastructure is badly in need of repair. If the full request is permitted, the average residential monthly bill would rise from $55.51 to $73.95. So, even though previous rulings have been positive, regulatory commissions are under pressure to keep rates low. Due to the necessity of these outlays, and knowing that the company must continue making large expenditures, we think state authorities will be fair.

Second-quarter earnings were better than expected. The June period was the first three-month income report in which Essential's numbers could be compared on an apple-to-apple basis to the previous year. (Recall that the company is the result of a large acquisition of the natural gas utility Peoples in mid-March of 2020.) Share net of $0.32 was 23% higher than we had forecast. This came despite weak demand for gas resulting from warmer-than-anticipated temperatures. We now expect the company to post earnings per share of $1.70, slightly above management's $1.64 to $1.69 range. In 2022, a more moderate advance of about 6% seems to be in the cards.

This neutrally ranked stock does not stand out for near- or long-term total return potential. However, its prospects are still better than most in the industry, and its dividend was recently raised a healthy 7%. Investors should also bear in mind that WTRG is no longer a pure water utility play, as its gas operations are now substantial.

James A. Flood *October 8, 2021*

(A) Diluted egs. Excl. nonrec. gains: '12, 18¢. Excl. gain from disc. operations: '12, 7¢; '13, 9¢; '14, 11¢. Quarterly EPS do not add in '19 due to a large change in the number of shares outstanding in the Dec. period. Next earnings report early November. **(B)** Dividends historically paid in early March, June, Sept., & Dec. ■ Div'd. reinvestment plan available (5% discount). **(C)** In millions, adjusted for stock splits. **(D)** Includes intangibles: 6/30/21, $2.341 bill./$9.53 a share.

Company's Financial Strength	B+
Stock's Price Stability	85
Price Growth Persistence	90
Earnings Predictability	60

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Nov 22 2022

CWSNC W-354 SUB 398
Carteret Fair Value Determination
Form Application Exhibit 1A

MIDDLESEX WATER NDQ-MSEX

RECENT PRICE 104.47 | P/E RATIO 43.9 (Trailing: 47.5 Median: 23.0) | RELATIVE P/E RATIO 2.32 | DIV'D YLD 1.1% | VALUE LINE

TIMELINESS 3 Lowered 6/4/21
SAFETY 2 New 10/21/11
TECHNICAL 3 Raised 10/1/21
BETA .70 (1.00 = Market)

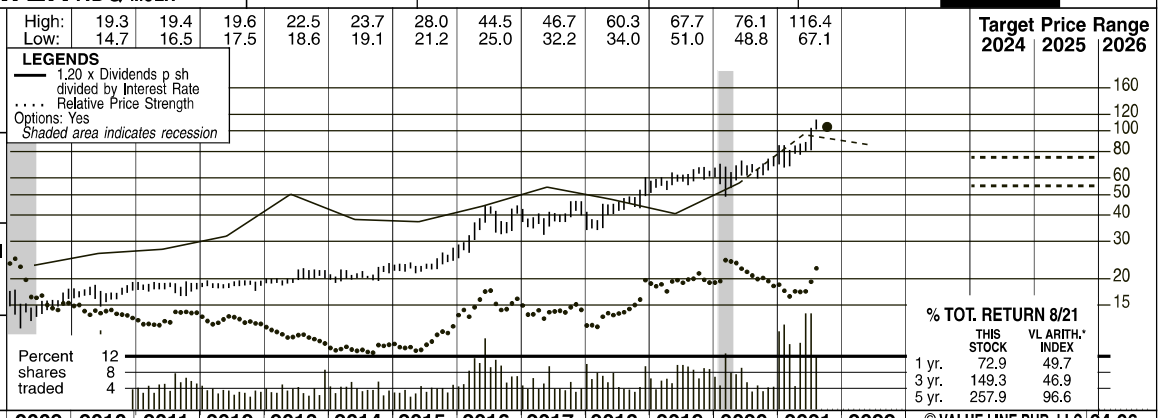
18-Month Target Price Range
Low-High Midpoint (% to Mid)
$65-$132 $99 (-5%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	75	(-30%)	-6%
Low	55	(-45%)	-13%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	67	64	71
to Sell	49	67	65
Hld's(000)	10675	10712	10852



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
High:	19.3	19.4	19.6	22.5	23.7	28.0	44.5	46.7	60.3	67.7	76.1	116.4								
Low:	14.7	16.5	17.5	18.6	19.1	21.2	25.0	32.2	34.0	51.0	48.8	67.1								
	6.44	6.16	6.50	6.79	6.75	6.60	6.50	6.98	7.19	7.26	7.77	8.16	8.00	8.42	7.72	8.10	*8.45*	*8.70*	Revenues per sh	*9.15*
	1.33	1.33	1.49	1.53	1.40	1.55	1.46	1.56	1.72	1.84	1.97	2.17	2.24	2.89	2.90	3.25	*3.20*	*3.35*	"Cash Flow" per sh	*3.75*
	.71	.82	.87	.89	.72	.96	.84	.90	1.03	1.13	1.22	1.38	1.38	1.96	2.01	2.18	*2.30*	*2.40*	Earnings per sh [A]	*2.75*
	.67	.68	.69	.70	.71	.72	.73	.74	.75	.76	.78	.81	.86	.91	.98	1.04	*1.10*	*1.15*	Div'd Decl'd per sh [B]■	*1.35*
	2.18	2.31	1.66	2.12	1.49	1.90	1.50	1.36	1.26	1.40	1.59	2.91	3.08	4.40	5.11	6.04	*5.50*	*5.50*	Cap'l Spending per sh	*6.25*
	8.26	9.52	10.05	10.03	10.33	11.13	11.27	11.48	11.82	12.24	12.74	13.40	14.02	15.17	18.57	19.81	*19.45*	*19.60*	Book Value per sh	*20.85*
	11.58	13.17	13.25	13.40	13.52	15.57	15.70	15.82	15.96	16.12	16.23	16.30	16.35	16.40	17.43	17.47	*17.75*	*17.85*	Common Shs Outst'g [C]	*18.00*
	27.4	22.7	21.6	19.8	21.0	17.8	21.7	20.8	19.7	18.5	19.1	25.6	28.4	22.2	29.7	30.1	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*24.0*
	1.46	1.23	1.15	1.19	1.40	1.13	1.36	1.32	1.11	.97	.96	1.34	1.43	1.20	1.58	1.56			Relative P/E Ratio	*1.30*
	3.5%	3.7%	3.7%	4.0%	4.7%	4.2%	4.0%	4.0%	3.7%	3.7%	3.3%	2.3%	2.2%	2.1%	1.6%	1.6%			Avg Ann'l Div'd Yield	*2.1%*
							102.1	110.4	114.8	117.1	126.0	132.9	130.8	138.1	134.6	141.6	*150*	*155*	Revenues ($mill)	*165*
							13.4	14.4	16.6	18.4	20.0	22.7	22.8	32.5	33.9	38.4	*41.0*	*43.0*	Net Profit ($mill)	*49.5*
							32.7%	33.9%	34.1%	35.0%	34.5%	34.0%	32.7%	2.8%	2.8%	2.8%	*21.0%*	*21.0%*	Income Tax Rate	*21.0%*
							6.1%	3.4%	1.9%	1.7%	1.9%	2.7%	3.1%	1.4%	3.4%	3.9%	*2.5%*	*2.5%*	AFUDC % to Net Profit	*2.5%*
							42.3%	41.5%	40.4%	40.5%	39.4%	37.9%	37.5%	37.8%	41.5%	44.0%	*42.5%*	*41.5%*	Long-Term Debt Ratio	*40.0%*
							56.6%	57.4%	58.7%	58.8%	59.8%	61.5%	61.8%	61.6%	58.2%	55.7%	*57.0%*	*58.0%*	Common Equity Ratio	*60.0%*
							312.5	316.5	321.4	335.8	345.4	355.4	370.7	404.1	556.7	621.5	*610*	*600*	Total Capital ($mill)	*630*
							422.2	435.2	446.5	465.4	481.9	517.8	557.2	618.5	705.7	796.6	*800*	*815*	Net Plant ($mill)	*835*
							5.2%	5.4%	5.9%	6.3%	6.6%	7.1%	6.9%	8.9%	6.7%	6.8%	*7.0%*	*7.5%*	Return on Total Cap'l	*8.5%*
							7.5%	7.8%	8.7%	9.2%	9.6%	10.3%	9.8%	12.9%	10.4%	11.0%	*12.0%*	*12.0%*	Return on Shr. Equity	*13.0%*
							7.5%	7.8%	8.7%	9.3%	9.6%	10.3%	9.9%	13.0%	10.4%	11.1%	*12.0%*	*12.5%*	Return on Com Equity	*13.0%*
							1.0%	1.4%	2.4%	3.1%	3.5%	4.3%	3.8%	7.0%	5.4%	5.8%	*6.0%*	*6.5%*	Retained to Com Eq	*6.5%*
							87%	83%	73%	67%	63%	58%	62%	46%	48%	48%	*48%*	*48%*	All Div'ds to Net Prof	*49%*

CAPITAL STRUCTURE as of 6/30/21
Total Debt $279.7 mill. **Due in 5 Yrs** $43.7 mill.
LT Debt $272.5 mill. **LT Interest** $7.5 mill.
(Total interest coverage: 7.8x)
(44% of Cap'l)

Pension Assets-12/20 $88.9 mill.
Oblig. $115.9 mill.
Pfd Stock $2.4 mill. **Pfd Div'd:** $.1 mill.

Common Stock 17,490,561 shs.
as of 7/30/20

MARKET CAP: $1.8 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2019	2020	6/30/21
Cash Assets	2.2	4.5	6.0
Other	26.9	29.6	31.2
Current Assets	29.1	34.1	37.2
Accts Payable	23.3	30.4	23.1
Debt Due	27.2	9.3	7.2
Other	14.5	17.1	50.4
Current Liab.	65.0	56.8	80.7

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	2.0%	2.0%	*2.0%*
"Cash Flow"	7.5%	10.5%	*3.5%*
Earnings	9.0%	12.5%	*5.0%*
Dividends	3.0%	5.0%	*5.5%*
Book Value	5.5%	8.0%	*2.5%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	31.2	34.9	38.7	33.3	138.1
2019	30.7	33.4	37.8	32.7	134.6
2020	31.8	35.3	39.9	34.6	141.6
2021	32.5	36.7	*43.0*	*37.8*	*150*
2022	*34.0*	*38.0*	*45.0*	*38.0*	*155*

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	.27	.52	.74	.43	1.96
2019	.39	.49	.66	.46	2.01
2020	.44	.55	.72	.47	2.18
2021	.39	.62	*.75*	*.54*	*2.30*
2022	*.47*	*.58*	*.80*	*.55*	*2.40*

Calendar	QUARTERLY DIVIDENDS PAID [B]■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.21125	.21125	.21125	.22375	.86
2018	.22375	.22375	.22375	.24	.91
2019	.24	.24	.24	.2562	.98
2020	.2562	.2562	.2562	.2725	1.04
2021	.2725	.2725	.2725		

BUSINESS: Middlesex Water Company engages in the ownership and operation of regulated water utility systems in New Jersey, Delaware, and Pennsylvania. It also operates water and wastewater systems under contract on behalf of municipal and private clients in NJ and DE. Its Middlesex System provides water services to 61,000 retail customers, primarily in Middlesex County, New Jersey. In 2020, the Middlesex System accounted for 59% of operating revenues. At 12/31/20, the company had 348 employees. Incorporated: NJ. President, CEO, and Chairman: Dennis W. Doll. Officers & directors own 2.0% of the com. stock; BlackRock Inst. Trust Co., 7.8% (4/21 proxy). Add.: 485 C Route 1 South, Suite 400, Iselin, NJ 08830. Tel.: 732-634-1500. Int.: www.middlesexwater.com.

Shares of Middlesex Water established a fresh all-time high price during the month of September. In fact, since our previous report, the stock has surged more than 20% in value and, year to date, has logged about a 30% gain. Underpinning recent investor support for the water utility, in our view, is a combination of strong second-quarter financial results (discussed below) and a broadly increasing adoption of a flight-to-safety investment approach.

We are lifting our 2021 bottom-line estimate. For the June period, Middlesex delivered revenues of $36.7 million, which was roughly on par with consensus expectations. The figure improved about 4% year over year, helped along by higher water consumption and an expanding customer base in its Delaware systems. Meanwhile, net income jumped 13% from the previous-year tally, to $0.62 per share. On balance, we are adding $0.10 to our current-year forecast, to $2.30 per share.

The company has agreed to an asset divestment. Specifically, Middlesex inked a deal to sell its wholly-owned wastewater subsidiary Tidewater Environmental Services to Artesian Wastewater Management for $6.4 million in cash. The unit services approximately 3,600 customers in the Delaware area. The transaction, which is slated for completion within the fourth quarter, is subject to approval by the Delaware Public Service Commission and other customary closing conditions.

Business prospects three to five years out are solid. Our outlook for modest annual revenue and earnings expansion has not wavered. Middlesex's operations, which are largely uncorrelated to economic conditions, ought to perform decently over the pull to mid-decade.

We think the recently elevated quotation presents an opportunity for current shareholders to book some profits. Good-quality Middlesex shares are merely an Average (3) selection for relative year-ahead price performance. Moreover, the stock is trading at an extremely lofty price-to-earnings multiple. Patient subscribers should turn the page, too, as nearly all of the growth we envision out to 2024-2026 appears to already be baked into the recent price.

Nicholas P. Patrikis *October 8, 2021*

(A) Diluted earnings. Next earnings report due early November.
(B) Dividends historically paid in mid-Feb., May, Aug., and November.■ Div'd reinvestment plan available.
(C) In millions.

Company's Financial Strength	B++
Stock's Price Stability	85
Price Growth Persistence	70
Earnings Predictability	85

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Nov 22 2022

CWSNC W-354 SUB 398
Carteret Fair Value Determination
Form Application Exhibit 1A

SJW GROUP NYSE-SJW

RECENT PRICE 65.82 | P/E RATIO 28.7 (Trailing: 30.6 Median: 21.0) | RELATIVE P/E RATIO 1.52 | DIV'D YLD 2.1% | VALUE LINE

TIMELINESS 4 Lowered 8/13/21
SAFETY 3 New 4/22/11
TECHNICAL 3 Lowered 10/1/21
BETA .80 (1.00 = Market)

18-Month Target Price Range
Low-High Midpoint (% to Mid)
$52-$113 $83 (25%)

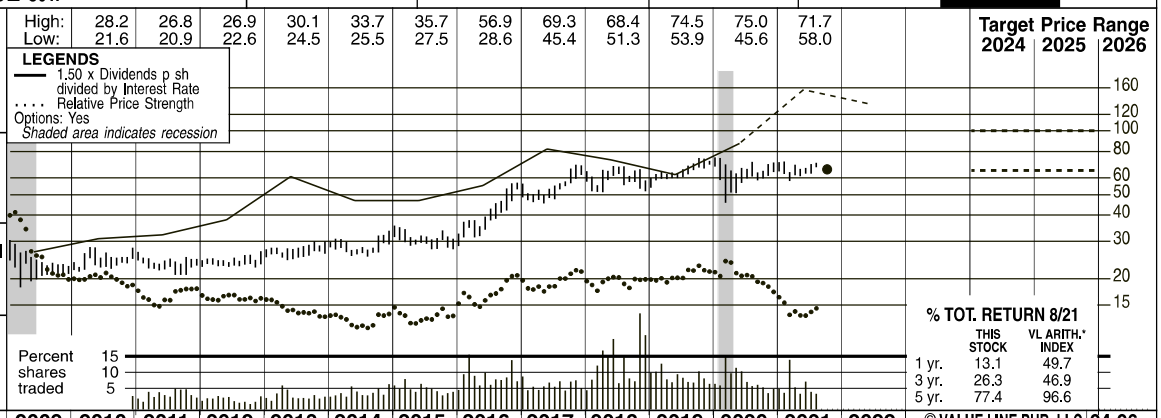
2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	100	(+50%)	13%
Low	65	(Nil)	2%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	80	87	81
to Sell	68	73	64
Hld's(000)	19850	20963	21472

	2005	2006	2007	2008	2009	2010
High:	28.2	26.8	26.9	30.1	33.7	35.7
Low:	21.6	20.9	22.6	24.5	25.5	27.5



% TOT. RETURN 8/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	13.1	49.7
3 yr.	26.3	46.9
5 yr.	77.4	96.6

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
9.86	10.35	11.25	12.12	11.68	11.62	12.85	14.01	13.73	15.76	14.97	16.61	18.97	14.00	14.78	19.77	*19.65*	*20.50*	Revenues per sh	*22.15*
2.21	2.38	2.30	2.44	2.21	2.38	2.80	2.97	2.90	4.42	3.86	4.76	5.24	3.29	3.67	5.28	*3.85*	*4.30*	"Cash Flow" per sh	*5.30*
1.12	1.19	1.04	1.08	.81	.84	1.11	1.18	1.12	2.54	1.85	2.57	2.86	1.82	1.35	2.14	*2.20*	*2.65*	Earnings per sh [A]	*3.65*
.53	.57	.61	.65	.66	.68	.69	.71	.73	.75	.78	.81	1.04	1.12	1.20	1.28	*1.36*	*1.44*	Div'd Decl'd per sh [B■]	*1.72*
2.83	3.87	6.62	3.79	3.17	5.65	3.75	5.67	4.68	5.02	5.24	6.95	7.26	5.08	6.25	7.44	*6.75*	*7.00*	Cap'l Spending per sh	*7.50*
10.72	12.48	12.90	13.99	13.66	13.75	14.20	14.71	15.92	17.75	18.83	20.61	22.57	31.31	31.27	32.12	*35.00*	*36.65*	Book Value per sh	*40.85*
18.27	18.28	18.36	18.18	18.50	18.55	18.59	18.67	20.17	20.29	20.38	20.46	20.52	28.40	28.46	28.56	*30.00*	*30.00*	Common Shs Outst'g [C]	*30.00*
19.7	23.5	33.4	26.2	28.7	29.1	21.2	20.4	24.3	11.2	16.6	15.7	18.8	32.7	47.8	30.0	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*23.0*
1.05	1.27	1.77	1.58	1.91	1.85	1.33	1.30	1.37	.59	.84	.82	.95	1.77	2.55	1.56			Relative P/E Ratio	*1.30*
2.4%	2.0%	1.7%	2.3%	2.8%	2.8%	2.9%	3.0%	2.7%	2.6%	2.5%	2.0%	1.9%	1.9%	1.9%	2.0%			Avg Ann'l Div'd Yield	*2.1%*
239.0	261.5	276.9	319.7	305.1	339.7	389.2	397.7	420.5	564.5	*590*	*615*	Revenues ($mill)	*665*
20.9	22.3	23.5	51.8	37.9	52.8	59.2	38.8	38.7	61.5	*66.0*	*80.0*	Net Profit ($mill)	*110*
41.1%	41.1%	38.7%	32.5%	38.1%	38.8%	36.7%	20.6%	25.3%	12.0%	*21.0%*	*21.5%*	Income Tax Rate	*21.0%*
--	--	--	--	--	--	--	--	2.0%	1.5%	*1.5%*	*1.5%*	AFUDC % to Net Profit	*1.5%*
56.6%	55.0%	51.1%	51.6%	49.8%	50.7%	48.2%	32.7%	59.1%	58.4%	*53.5%*	*51.0%*	Long-Term Debt Ratio	*38.0%*
43.4%	45.0%	48.9%	48.4%	50.2%	49.3%	51.8%	67.3%	40.9%	41.6%	*46.5%*	*49.0%*	Common Equity Ratio	*62.0%*
607.9	610.2	656.2	744.5	764.6	855.0	894.3	1320.7	2173.6	2204.7	*2250*	*2250*	Total Capital ($mill)	*1975*
756.2	831.6	898.7	963.0	1036.8	1146.4	1239.3	1328.8	2206.5	2334.9	*2450*	*2565*	Net Plant ($mill)	*2775*
4.9%	5.0%	5.0%	8.3%	6.3%	7.4%	7.9%	3.9%	2.5%	4.0%	*3.5%*	*4.0%*	Return on Total Cap'l	*6.0%*
7.9%	8.1%	7.3%	14.4%	9.9%	12.5%	12.8%	4.4%	4.3%	6.7%	*6.5%*	*7.0%*	Return on Shr. Equity	*9.0%*
7.9%	8.1%	7.3%	14.4%	9.9%	12.5%	12.8%	4.4%	4.3%	6.7%	*6.5%*	*7.0%*	Return on Com Equity	*9.0%*
3.1%	3.3%	2.8%	10.2%	5.7%	8.6%	8.2%	1.8%	.5%	2.7%	*2.5%*	*3.5%*	Retained to Com Eq	*4.5%*
61%	59%	62%	29%	42%	31%	36%	60%	88%	59%	*62%*	*54%*	All Div'ds to Net Prof	*47%*

CAPITAL STRUCTURE as of 6/30/21
Total Debt $1398.9 mill. **Due in 5 Yrs** $22.4 mill.
LT Debt $1372.1 mill. **LT Interest** $50.0 mill.
(LT Interest Coverage: 4.1x)
(58% of Cap'l)

Pension Assets-12/20 $278.1 mill.
Oblig. $386.1 mill.
Pfd Stock None.
Common Stock 29,804,927 shs.

MARKET CAP: $2.0 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2019	2020	6/30/21
Cash Assets	17.9	9.3	28.1
Accts Receivable	36.3	58.1	54.9
Other	67.8	59.9	63.9
Current Assets	122.0	127.3	146.9
Accts Payable	34.9	34.2	39.5
Debt Due	22.3	76.2	26.8
Other	177.4	240.4	208.1
Current Liab.	234.6	350.8	274.4

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	3.0%	2.0%	*5.5%*
"Cash Flow"	5.5%	2.0%	*4.5%*
Earnings	7.0%	-.5%	*13.0%*
Dividends	6.0%	10.0%	*6.0%*
Book Value	8.5%	12.5%	*4.5%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	75.0	99.1	124.9	98.7	397.7
2019	77.7	103.0	114.0	126.0	420.5
2020	115.8	147.2	165.9	135.6	564.5
2021	114.8	152.2	*175*	*148.0*	*590*
2022	*125*	*155*	*185*	*150*	*615*

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	.06	.62	.76	.38	1.82
2019	.21	.47	.33	.34	1.35
2020	.08	.69	.91	.46	2.14
2021	.09	.69	*.90*	*.52*	*2.20*
2022	*.18*	*.77*	*1.00*	*.70*	*2.65*

Calendar	QUARTERLY DIVIDENDS PAID [BD■] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.2175	.2175	.2175	.3875	1.04
2018	.28	.28	.28	.28	1.12
2019	.30	.30	.30	.30	1.20
2020	.32	.32	.32	.32	1.28
2021	.34	.34	.34		

BUSINESS: SJW Group engages in the production, purchase, storage, purification, distribution, and retail sale of water. It provides water service to approximately 231,000 connections with a total population of roughly one million people in the San Jose area and 16,000 connections that reach about 49,000 residents in the region between San Antonio and Austin, Texas. The company merged with Connecticut Water (10/19) which provides service to approx. 138,000 connections with a total population of 450,000 people. Has 361 employees. Officers and directors own 8.3% of outstanding shares (3/21 proxy). Chairman & CEO: Eric Thornburg. Incorporated: California. Address: 110 West Taylor Street, San Jose, CA 95110. Telephone: (408) 279-7800. Internet: www.sjwater.com.

SJW Group reported better-than-expected second-quarter financial results. The East and West coasts water utility generated revenues of $152 million in the June period. The figure came in marginally above our $150 million call, thanks to cumulative water rate increases and higher customer usage. More impressively, SJW posted net income of $0.69 per share, matching the previous-year tally, while handily topping consensus estimates. Operating margins are indeed on the mend, but it is worth noting that roughly $0.09 can be attributed to a one-time gain from holdback funds received from the sale of equity interests in 2017.

We are upping our current-year top- and bottom-line projections. Our 2021 revenue estimate is moving higher by $5 million, to $590 million, while our earnings-per-share forecast is being raised by $0.15, to $2.20. Over the back half of this year, SJW's operations stand to benefit from a further rebound in economic activity, resulting in increased water consumption across both residential and commercial arenas.

Share-net growth ought to accelerate next year and beyond. For 2022, we look for earnings to expand 20%, year over year, to $2.65 per share. Moreover, the company has filed a relatively new rate case with the California Public Utilities Commission seeking approval to boost revenues up to $90 million, a $435 million capital budget to invest in water delivery infrastructure and upgrades, along with nearly $20 million in memorandum account recovery. All in all, the filing, which would be effective through 2024, should allow SJW to periodically increase customer rates over the next few years, thereby supporting top- and bottom-line growth.

The stock has fallen out of favor on our Timeliness ranking scale. Shares of SJW have been downgraded one notch, to 4 (Below Average) and, thus, are slated to lag the broader market over the coming six to 12 months. Moreover, at recent levels, total return potential over the 2024-2026 time frame is unenticing. Although long-term business prospects are favorable, we advise interested subscribers to remain on the sidelines until a better entry point is available.

Nicholas P. Patrikis *October 8, 2021*

(A) Diluted earnings. Excludes nonrecurring losses: '05, $1.09; '06, $16.36; '08, $1.22; '10, $0.46. GAAP accounting as of 2013. Next earnings report due early November. Quarterly egs. may not add due to rounding.
(B) Dividends historically paid in early March, June, September, and December. ■ Div'd reinvestment plan available.
(C) In millions.
(D) Paid special dividend of $0.17 per share on 11/17.
(E) Suspended due to recent CTWS merger.

Company's Financial Strength	B+
Stock's Price Stability	80
Price Growth Persistence	80
Earnings Predictability	50

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CWSNC W-354 SUB 398
Carteret Fair Value Determination
Form Application Exhibit 1A
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YORK WATER NDQ-YORW

RECENT PRICE 44.52 | P/E RATIO 32.5 (Trailing: 35.1 Median: 28.0) | RELATIVE P/E RATIO 1.72 | DIV'D YLD 1.7% | VALUE LINE

TIMELINESS 3 Lowered 1/15/21
SAFETY 3 Lowered 7/17/15
TECHNICAL 3 Raised 10/1/21
BETA .85 (1.00 = Market)

18-Month Target Price Range
Low-High Midpoint (% to Mid)
$34-$73 $54 (20%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	50	(+10%)	5%
Low	35	(-20%)	-4%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	56	38	51
to Sell	46	56	43
Hld's(000)	5341	5518	5416

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
High:	18.0	18.1	18.5	22.0	24.3	26.7	39.8	39.9	36.1	47.3	51.3	53.8								
Low:	12.8	15.8	16.8	17.6	18.8	19.7	23.8	31.7	27.5	30.3	34.6	40.7								
Revenues per sh	2.58	2.56	2.79	2.89	2.95	3.07	3.18	3.21	3.27	3.58	3.68	3.70	3.77	3.74	3.96	4.12	*4.25*	*4.50*	Revenues per sh	*5.10*
"Cash Flow" per sh	.79	.77	.86	.88	.95	1.07	1.09	1.12	1.19	1.36	1.45	1.42	1.53	1.58	1.70	1.90	*1.95*	*2.10*	"Cash Flow" per sh	*2.45*
Earnings per sh A	.56	.58	.57	.57	.64	.71	.71	.72	.75	.89	.97	.92	1.01	1.04	1.11	1.27	*1.35*	*1.40*	Earnings per sh A	*1.65*
Div'd Decl'd per sh B	.42	.45	.48	.49	.51	.52	.53	.54	.55	.57	.60	.63	.65	.67	.70	.73	*.78*	*.83*	Div'd Decl'd per sh B	*1.00*
Cap'l Spending per sh	1.69	1.85	1.69	2.17	1.18	.83	.74	.94	.76	1.10	1.11	1.03	1.95	--	.16	.09	*1.35*	*1.45*	Cap'l Spending per sh	*1.85*
Book Value per sh	4.85	5.84	5.97	6.14	6.92	7.19	7.45	7.73	7.98	8.15	8.51	8.88	9.28	9.75	10.31	10.97	*11.55*	*12.00*	Book Value per sh	*12.90*
Common Shs Outst'g C	10.40	11.20	11.27	11.37	12.56	12.69	12.79	12.92	12.98	12.83	12.81	12.85	12.87	12.94	13.02	13.06	*13.00*	*12.90*	Common Shs Outst'g C	*12.80*
Avg Ann'l P/E Ratio	26.3	31.2	30.3	24.6	21.9	20.7	23.9	24.4	26.3	23.1	23.5	32.8	34.6	30.3	33.8	35.7	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*25.0*
Relative P/E Ratio	1.40	1.68	1.61	1.48	1.46	1.32	1.50	1.55	1.48	1.22	1.18	1.72	1.74	1.64	1.80	1.83			Relative P/E Ratio	*1.40*
Avg Ann'l Div'd Yield	2.9%	2.5%	2.8%	3.5%	3.6%	3.5%	3.1%	3.1%	2.8%	2.8%	2.6%	2.1%	1.9%	2.1%	1.9%	1.6%			Avg Ann'l Div'd Yield	*2.4%*
Revenues ($mill)							40.6	41.4	42.4	45.9	47.1	47.6	48.6	48.4	51.6	53.9	*55.0*	*57.0*	Revenues ($mill)	*65.0*
Net Profit ($mill)							9.1	9.3	9.7	11.5	12.5	11.8	13.0	13.4	14.4	16.6	*17.5*	*18.0*	Net Profit ($mill)	*21.0*
Income Tax Rate							35.3%	37.6%	37.6%	29.8%	27.5%	31.3%	25.9%	15.7%	13.5%	10.8%	*21.0%*	*21.0%*	Income Tax Rate	*21.0%*
AFUDC % to Net Profit							1.1%	1.1%	.8%	1.8%	1.6%	1.9%	6.7%	1.7%	2.5%	3.2%	*1.5%*	*1.5%*	AFUDC % to Net Profit	*1.5%*
Long-Term Debt Ratio							47.1%	46.0%	45.1%	44.8%	44.4%	42.6%	43.0%	42.5%	41.3%	46.3%	*44.5%*	*42.5%*	Long-Term Debt Ratio	*37.5%*
Common Equity Ratio							52.9%	54.0%	54.9%	55.2%	55.6%	57.4%	57.0%	57.5%	58.7%	53.7%	*55.5%*	*57.5%*	Common Equity Ratio	*62.5%*
Total Capital ($mill)							180.2	184.8	188.4	189.4	196.3	198.7	209.5	219.5	228.7	266.8	*270*	*270*	Total Capital ($mill)	*265*
Net Plant ($mill)							233.0	240.3	244.2	253.2	261.4	270.9	288.8	299.2	313.2	343.6	*355*	*370*	Net Plant ($mill)	*405*
Return on Total Cap'l							6.4%	6.4%	6.5%	7.4%	7.6%	7.2%	7.5%	7.3%	7.4%	7.1%	*7.5%*	*7.5%*	Return on Total Cap'l	*9.0%*
Return on Shr. Equity							9.5%	9.3%	9.3%	11.0%	11.5%	10.4%	10.9%	10.6%	10.7%	11.6%	*11.5%*	*11.5%*	Return on Shr. Equity	*13.0%*
Return on Com Equity							9.5%	9.3%	9.3%	11.0%	11.5%	10.4%	10.9%	10.6%	10.7%	11.6%	*11.5%*	*11.5%*	Return on Com Equity	*13.0%*
Retained to Com Eq							2.5%	2.4%	2.4%	3.9%	4.4%	3.4%	4.0%	3.8%	4.0%	5.0%	*5.0%*	*4.5%*	Retained to Com Eq	*5.0%*
All Div'ds to Net Prof							73%	74%	74%	64%	62%	67%	63%	64%	62%	57%	*58%*	*59%*	All Div'ds to Net Prof	*61%*

CAPITAL STRUCTURE as of 6/30/21
Total Debt $127.0 mill. **Due in 5 Yrs** $42.5 mill.
LT Debt $127.0 mill. **LT Interest** $5.5 mill.
(46% of Cap'l)
Pension Assets12/20 $56.3 mill.
Oblig. $54.1 mill.

Pfd Stock None

Common Stock 13,090,055 shs.

MARKET CAP: $575 million (Small Cap)

CURRENT POSITION ($MILL.)	2019	2020	6/30/21
Cash Assets	--	5.0	--
Accounts Receivable	4.4	5.2	4.2
Inventory (Avg. Cost)	1.0	1.0	1.0
Other	4.0	5.1	5.7
Current Assets	9.4	16.3	10.9
Accts Payable	3.4	6.5	8.4
Debt Due	6.5	--	--
Other	5.3	5.5	5.5
Current Liab.	15.2	12.0	13.9

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	3.0%	2.5%	*4.5%*
"Cash Flow"	6.0%	5.5%	*6.0%*
Earnings	6.0%	5.5%	*6.5%*
Dividends	3.5%	4.0%	*6.0%*
Book Value	4.5%	4.5%	*4.0%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	11.6	12.0	12.7	12.1	48.4
2019	11.8	13.0	13.7	13.1	51.6
2020	12.9	13.3	14.3	13.4	53.9
2021	13.1	13.8	*14.5*	*13.6*	*55.0*
2022	*13.7*	*14.3*	*15.0*	*14.0*	*57.0*

Calendar	EARNINGS PER SHARE A Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2018	.20	.26	.29	.29	1.04
2019	.22	.28	.35	.26	1.11
2020	.31	.32	.36	.28	1.27
2021	.28	.35	*.37*	*.35*	*1.35*
2022	*.30*	*.36*	*.38*	*.36*	*1.40*

Calendar	QUARTERLY DIVIDENDS PAID B Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.1602	.1602	.1602	.1666	.647
2018	.1666	.1666	.1666	.1733	.673
2019	.1733	.1733	.1733	.1802	.70
2020	.1802	.1802	.1802	.1874	.73
2021	.1874	.1874	.1874		

BUSINESS: The York Water Company is the oldest investor-owned regulated water utility in the United States. It has operated continuously since 1816. As of December 31, 2020, the company's average daily availability was 35.6 million gallons and its service territory had an estimated population of 202,000. Has more than 72,600 customers. Residential customers accounted for 66% of 2020 revenues; commercial and industrial (26%); other (8%). It also provides sewer billing services. Incorporated: PA. York had 108 full-time employees at 12/31/20. President/Chief Executive Officer: J.T. Hand. Officers/directors own 1.3% of the common stock (3/21 proxy). Address: 130 East Market Street, York, Pennsylvania 17401. Telephone: (717) 845-3601. Internet: www.yorkwater.com.

York Water delivered good share-profit growth in the June interim. As expected, the regulated water utility posted net income of $0.35 per share for the second quarter, representing sequential and annual improvements of 25% and 9%, respectively. The bottom-line advance was aided partly by lower income taxes stemming from wider deductions under IRS tangible property rules. Meanwhile, revenues of $13.8 million rose nicely compared to the previous-year tally, thanks to a growing customer base and increased billings/collections. For this year, revenues of $55 million (up $0.5 million from our previous estimate) are likely on tap. At the same time, we are leaving unchanged our 2021 EPS call, at $1.35. Looking at 2022, our model suggests that revenues will improve by $2 million, to $57 million, and earnings ought to jump a nickel, to $1.40 per share.

The stock price has bounced around over the past three months. In fact, the equity was trading near all-time high territory in early September before sliding back into the mid-$40-per-share vicinity. Year to date, the stock is largely flat, despite some uncharacteristically choppy price movements.

Long term, we think York Water is well positioned for sustainable, albeit modest top- and bottom-line growth. Our relatively rosy thesis has a few legs to stand on, including prospects for a healthier economic backdrop (higher water consumption), further expansion in its customer base, as well as the likelihood for additional rate hikes (granted periodically by state regulators to help York replenish and maintain a strong capital spending budget). To this point, robust investment in clean water infrastructure and delivery and pumping system upgrades is probably in the cards.

But investment appeal is limited at this juncture. Based on our Timeliness ranking scale, shares of York Water are merely an Average (3) selection for relative year-ahead price performance. In addition, at the recent quotation, total return potential over the three- to five-year pull is nothing to write home about. Overall, we recommend subscribers turn the page, for now.

Nicholas P. Patrikis *October 8, 2021*

(A) Diluted earnings. Next earnings report due early November.
(B) Dividends historically paid in late February, June, September, and December.
(C) In millions, adjusted for split.

Company's Financial Strength	B+
Stock's Price Stability	80
Price Growth Persistence	75
Earnings Predictability	100

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Water Service Fee Schedule FY 22

September 21, 2021- June 30, 2022

3/4" Meter

Basic Charge (No Usage) Flat Fee	$40.25 / mo. Covers 1st 1,000
gals.Volume Charge	$10.10 per 1,000 gals

1" Meter

Basic Charge (No Usage) Flat Fee	$55.60 / mo. Covers 1st 1,000
gals.Volume Charge	$10.10 per. 1,000 gals

2" Meter

Basic Charge (No Usage) Flat Fee	$160.90 / mo. Covers 1st 15,000
gals.Volume Charge	$10.10 per 1,000 gals

4" Meter

Basic Charge (No Usage) Flat Fee	$497.25 / mo. Covers 1st 53,000
gals.Volume Charge	$10.10 per 1,000 gals

Merrimon System (3/4" Meter)

Basic Charge (No Usage) Flat Fee	$23.40 / mo. Covers 1st 1,000
gals.Volume Charge	$10.10 per 1,000 gals

Town of Beaufort (Eastman's Creek)

Basic Charge (No Usage) Flat Fee	$40.25 / mo. Covers 1st 1,000
gals.Volume Charge	$10.10 per 1,000 gals

Fire Hydrant Usage

Hookup & Service Charge: $109.70/Monthly

Mobilization to hydrant site and employee on site during tank fill.
$200.00 Deposit
$12.80 per 1,000 gallons.

Hydrant & Hydrant Meter Tampering	$250.00 1st offense
	$500.00 2nd offense (and Legal Action)
Damage Fee – Fire Hydrant	$2,500.00

Fire Line – Sprinkler Fee

Size	Monthly fee
2"	$40.25
4"	$47.55
6"	$109.70
8"	$153.55

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Tap Fees

Meter Size	Tap Fee**
3/4 "	$1,000.00
1"	$1,150.00
2"	Cost + 10%
4"	Cost + 10 %

****Additional $900.00 Tap Fee for any meter requiring road bore work**

Any meter 2 inch or larger will be engineered by Mc David & Associates and County will charge cost of materials and installation, engineering fees and additional 10%.

Security Deposits

Property Owner	$100.00
Renter/Lease holder	$200.00

Damage and Tampering Fees

Tampering Fee - Meters	$100.00
2nd Offense (and Legal Action)	$500.00
Damage Fee – Meters	$135.00
Damage Fee – MXU Remote Unit	$135.00

Other Fees

Non-Sufficient Check Fee	$25.00
Bank Inspections	$30.00
Late Charges	10% of balance
Service Fee*	$30.00

*At the time of reconnection the deposit on account must be equal to the deposit amount required for new accounts as of that date.

*All accounts subject to disconnection that have not been paid by 5:00 pm on the day prior to disconnections will be charged the service fee.

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Water Service
Fee Schedule
FY 2020-2021

3/4" Meter
Basic Charge (No Usage) Flat Fee — $27.50 / mo. Covers 1st 1,000 gals.
Volume Charge — $6.90 per 1,000 gals

1" Meter
Basic Charge (No Usage) Flat Fee — $38.00 / mo. Covers 1st 1,000 gals.
Volume Charge — $6.90 per. 1,000 gals

2" Meter
Basic Charge (No Usage) Flat Fee — $110.00 / mo. Covers 1st 15,000 gals.
Volume Charge — $6.90 per 1,000 gals

4" Meter
Basic Charge (No Usage) Flat Fee — $340.00 / mo. Covers 1st 53,000 gals.
Volume Charge — $6.90 per 1,000 gals

Merrimon System (3/4" Meter)
Basic Charge (No Usage) Flat Fee — $16.00 / mo. Covers 1st 1,000 gals.
Volume Charge — $6.90 per 1,000 gals

Town of Beaufort (Eastman's Creek)
Basic Charge (No Usage) Flat Fee — $27.50 / mo. Covers 1st 1,000 gals.
Volume Charge — $6.90 per 1,000 gals

Fire Hydrant Usage

Hookup & Service Charge: $75.00/Monthly
Mobilization to hydrant site and employee on site during tank fill.
$200.00 Deposit
$8.75 per 1,000 gallons.

Hydrant & Hydrant Meter Tampering $250.00 1st offense
$500.00 2nd offense (and Legal Action)
Damage Fee – Fire Hydrant $2,500.00

Fire Line – Sprinkler Fee

Size	Monthly fee
2"	$27.50
4"	$32.50
6"	$75.00
8"	$105.00

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Tap Fees

Meter Size	Tap Fee**
3/4 "	$1,000.00
1"	$1,150.00
2"	Cost + 10%
4"	Cost + 10 %

****Additional $900.00 Tap Fee for any meter requiring road bore work**

Any meter 2 inch or larger will be engineered by Mc David & Associates and County will charge cost of materials and installation, engineering fees and additional 10%.

Security Deposits

Property Owner	$100.00
Renter/Lease holder	$200.00

Damage and Tampering Fees

Tampering Fee - Meters	$100.00
2nd Offense (and Legal Action)	$500.00
Damage Fee – Meters	$135.00
Damage Fee – MXU Remote Unit	$135.00

Other Fees

Non-Sufficient Check Fee	$25.00
Bank Inspections	$30.00
Late Charges	10% of balance
Service Fee*	$30.00

*At the time of reconnection the deposit on account must be equal to the deposit amount required for new accounts as of that date.

*All accounts subject to disconnection that have not been paid by 5:00 pm on the day prior to disconnections will be charged the service fee.

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Water Service Fee Schedule
FY 22
July 1, 2021-August 31, 2021

3/4" Meter

Basic Charge (No Usage) Flat Fee	$53.65 / mo. Covers 1st 1,000
gals.Volume Charge	$13.45 per 1,000 gals

1" Meter

Basic Charge (No Usage) Flat Fee	$74.10 / mo. Covers 1st 1,000
gals.Volume Charge	$13.45 per. 1,000 gals

2" Meter

Basic Charge (No Usage) Flat Fee	$214.50 / mo. Covers 1st 15,000
gals.Volume Charge	$13.45 per 1,000 gals

4" Meter

Basic Charge (No Usage) Flat Fee	$663.00 / mo. Covers 1st 53,000
gals.Volume Charge	$13.45 per 1,000 gals

Merrimon System (3/4" Meter)

Basic Charge (No Usage) Flat Fee	31.20 / mo. Covers 1st 1,000 gals.
Volume Charge	$13.45 per 1,000 gals

Town of Beaufort (Eastman's Creek)

Basic Charge (No Usage) Flat Fee	$53.65 / mo. Covers 1st 1,000
gals.Volume Charge	$13.45 per 1,000 gals

Fire Hydrant Usage

Hookup & Service Charge: $146.25/Monthly

Mobilization to hydrant site and employee on site during tank fill.
$200.00 Deposit
$17.05 per 1,000 gallons.

Hydrant & Hydrant Meter Tampering	$250.00 1st offense
	$500.00 2nd offense (and Legal Action)
Damage Fee – Fire Hydrant	$2,500.00

Fire Line – Sprinkler Fee

Size	**Monthly fee**
2"	$53.65
4"	$63.40
6"	$146.25
8"	$204.75

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Tap Fees

Meter Size	Tap Fee**
3/4 "	$1,000.00
1"	$1,150.00
2"	Cost + 10%
4"	Cost + 10 %

****Additional $900.00 Tap Fee for any meter requiring road bore work**

Any meter 2 inch or larger will be engineered by Mc David & Associates and County will charge cost of materials and installation, engineering fees and additional 10%.

Security Deposits

Property Owner	$100.00
Renter/Lease holder	$200.00

Damage and Tampering Fees

Tampering Fee - Meters	$100.00
2nd Offense (and Legal Action)	$500.00
Damage Fee – Meters	$135.00
Damage Fee – MXU Remote Unit	$135.00

Other Fees

Non-Sufficient Check Fee	$25.00
Bank Inspections	$30.00
Late Charges	10% of balance
Service Fee*	$30.00

*At the time of reconnection the deposit on account must be equal to the deposit amount required for new accounts as of that date.

*All accounts subject to disconnection that have not been paid by 5:00 pm on the day prior to disconnections will be charged the service fee.

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North Carolina Department of Human Resources
Eastern Regional Office • 404 Saint Andrews Drive • Greenville, N. C. 27834

James G. Martin, Governor

David T. Flaherty, Secretary

December 2, 1987

Mr. Tyndall Lewis, P.E.
McDavid Associates, Inc.
P. O. Box 1776
Goldsboro, NC 27533

RE: Well Site Investigations - Sites 1 and 2, North River Community, and Site 3, Merrimon Community, Carteret County

Dear Mr. Lewis:

This letter will confirm our investigation of three (3) proposed well sites to serve the referenced Carteret County water systems. The well sites investigated are identified as:

Well Site No. 1 -- Davis Property located on N.C. S.R. 1163 W01 (NRMC)
Well Site No. 2 -- Joel Davis Property located on N.C. S.R. 1300 W02 (NRMC)
Well Site No. 3 -- Reels Property located on N.C. S.R. 1317 W01 (MERRIMON)

The three well sites, further identified on plot plan surveys on file in this office, are approved as the location of public water supply wells from a sanitary standpoint to serve the Carteret County systems of water supply with the following provisos:

1. That Carteret County shall own all property within 100 feet of the wells.

2. That the well sites be restricted and that no source of pollution be introduced within 100 feet of the wells.

3. That the final site grading of each site will provide surface water drainage away from the well and preclude any standing water on the well site.

4. That the existing drainage canal traversing Well Site No. 2 be relocated to a point not closer than 100 feet to the well.

You are reminded that prior to construction a well construction permit is required from the North Carolina Department of Natural Resources and Community Development.

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If this office can be of further service, please feel free to contact us at 919/756-1343.

Very truly yours,

James B. Higdon
Environmental Engineer
Public Water Supply Branch
Environmental Health Section

bcb

cc: W. E. Venrick
M. P. Bell
Ken Windley
Jay Swain
NRCD

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Nov 22 2022

McDAVID ASSOCIATES, INC.
ENGINEERS • PLANNERS • LAND SURVEYORS
HOME OFFICE • 120 NORTH MAIN STREET / P.O. DRAWER 49, FARMVILLE, N.C. 27828 (919) 753-2139
109 EAST WALNUT / P.O. BOX 1776, GOLDSBORO, N.C. 27533 • 716 SOUTH MAIN / P.O. BOX 738, KENANSVILLE, N.C. 28349
GOLDSBORO PH. (919) 736-7630 • KENANSVILLE PH. (919) 296-1400

February 10, 1987

Mr. Jim Higdon
Division of Health Services
404 St. Andrews Street
Greenville, North Carolina 27834

SUBJECT: Well Site Approvals
Sites 1 & 2 - North River Community
Site 3 - Merrimon Community
Carteret County, N. C.

Dear Mr. Higdon:

Please provide well site approvals for the following sites:

1. Proposed Well Lot No. 1, Davis Site, located on NCSR 1163 (survey attached).
2. Proposed Well Lot No. 2, Joel Davis Site, located on NCSR 1300 (survey attached).
3. Proposed Well Lot No. 3, Reels Site, located on NCSR 1317 (survey attached).

A location map is attached for your convenience. Site Number 1 is cut-over timberland. Sites 2 and 3 are wooded.

If you have any questions concerning this, please do not hesitate to contact me.

Sincerely,

F. Tyndall Lewis

F. Tyndall Lewis, P.E.
Goldsboro Office

FTL:bu
Attachments
cc: Ken Windley

REGISTRATION
ALABAMA
FLORIDA
GEORGIA
KENTUCKY
MARYLAND
MISSISSIPPI
NORTH CAROLINA
NEW JERSEY
SOUTH CAROLINA
TENNESSEE
VIRGINIA
W. VIRGINIA

ASSOCIATED PERSONNEL • ALBERT V. LEWIS, JR., P.E., R.L.S. • FRANK TYNDALL LEWIS, P.E. • CHARLES A. JOYNER, JR., P.E.
RONNIE M. THOMPSON, P.E., R.L.S. • M. FLOYD ADAMS, P.E. • WILLARD F. JEFFERSON, R.L.S.

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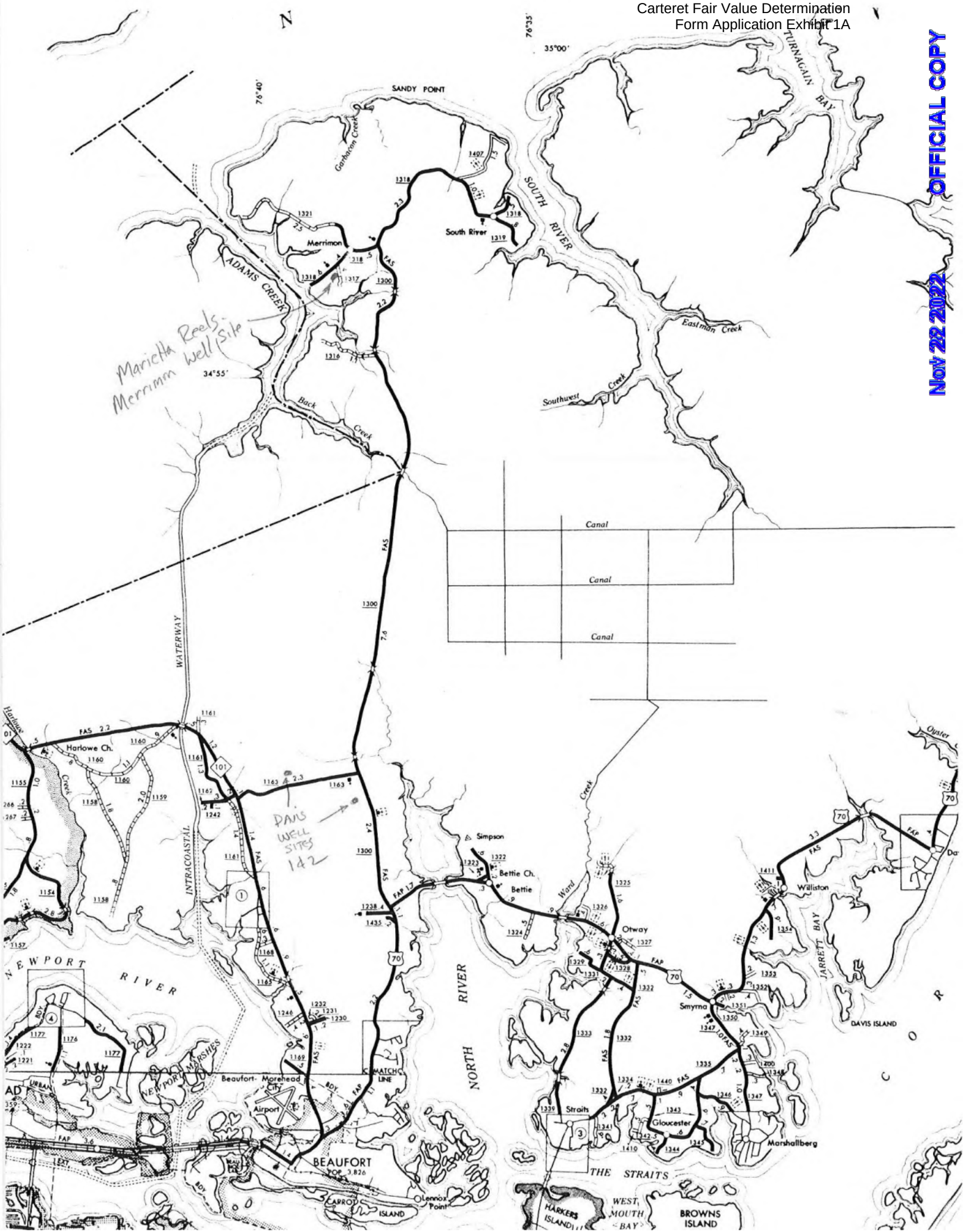

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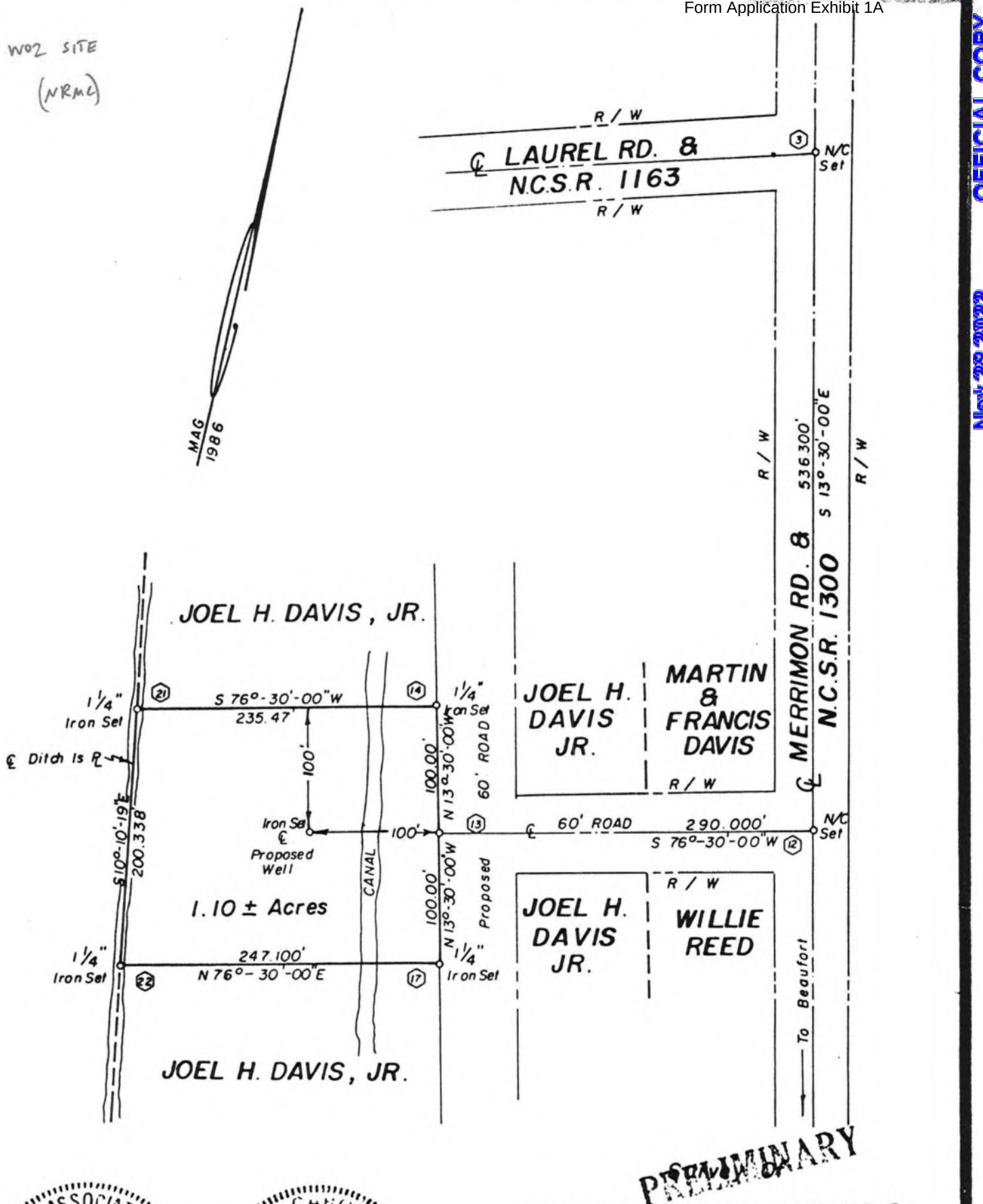

PRELIMINARY

PROPOSED WELL LOT NO. 2

CARTERET COUNTY WATER SYSTEM

"The Joel Davis Site"

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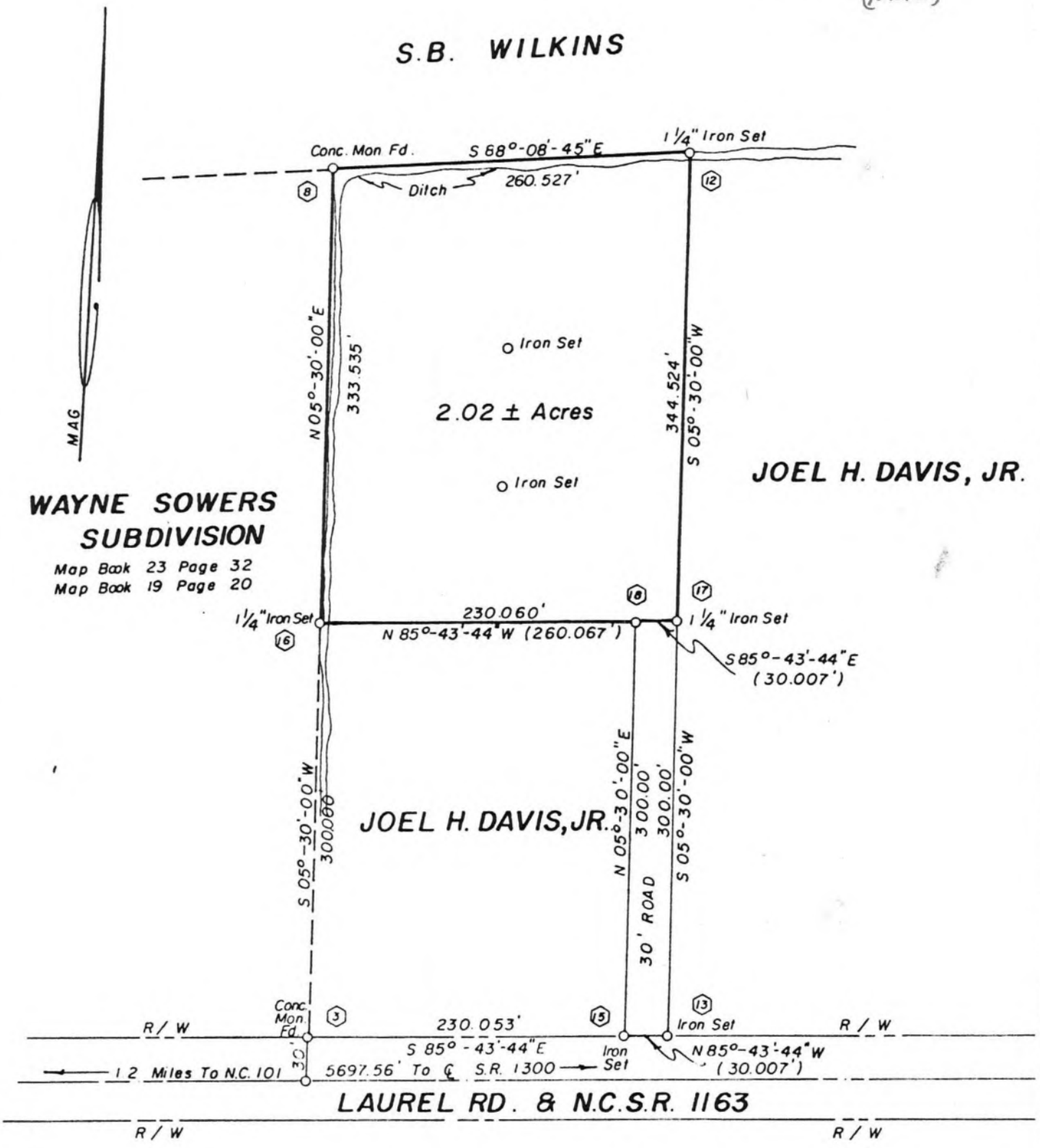
W01 SITE (NRMC)



McDAVID ASSOCIATES, INC. CORPORATE SEAL 1972 FARMVILLE N. C.

NORTH CAROLINA REGISTERED SEAL L-1405 LAND SURVEYOR WILLARD E. JEFFERSON

Survey Of

PROPOSED WELL LOT NO. 1

CARTERET COUNTY WATER SYSTEM

PRELIMINARY

"The Davis Site"

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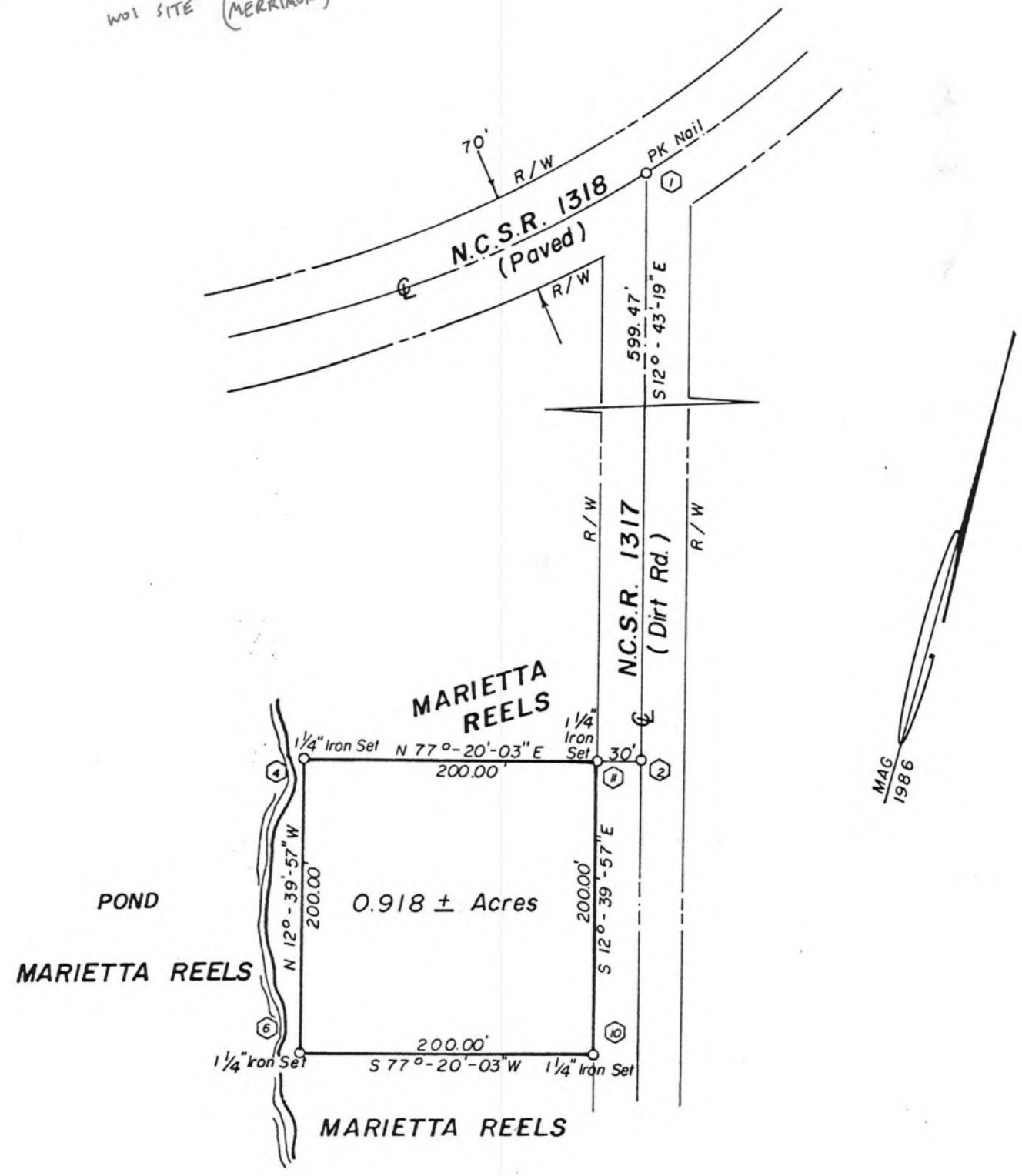
Nov 22 2022

WOI SITE (MERRIMON)



McDAVID ASSOCIATES, INC.
CORPORATE SEAL 1972

NORTH CAROLINA
REGISTERED SEAL L-1405 LAND SURVEYOR

Survey Of

PROPOSED WELL LOT NO. 3

CARTERET COUNTY WATER SYSTEM

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Nov 22 2022

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
Division of Environmental Health
Public Water Supply Section

Michael F. Easley, Governor
William G. Ross Jr., Secretary
Michael A. Kelly, Acting Director
Jessica G. Miles, Section Chief

NCDENR

September 15, 2003

MARY ANN HINSHAW
Courthouse Square
Beaufort,NC 28516

Re: **Authorization to Construct**
CARTERET COUNTYNO 43/PH 2
NORTH RIVER WATER SYSTEM
CARTERET County 0416197

Dear Applicant:

This letter is to confirm that a complete Engineer's Report and a Water System Management Plan have been received, and that engineering plans and specifications have been approved by the Department for **CARTERET COUNTYNO 43/PH 2, DEH Serial No. 0301288.**

The Authorization to Construct is valid for 24 months from the date of this letter. Authorization to Construct may be extended if the Rules Governing Public Water Supplies and site conditions have not changed. The Authorization to Construct and the engineering plans and specifications approval letter, shall be posted at the primary entrance of the job site before and during construction.

Approval must be secured from the Department before any construction or installation if:

- Deviation from the approved engineering plans and specifications is necessary; or
- There are changes in site conditions affecting capacity, hydraulic conditions, operating units, the function of water treatment processes, the quality of water to be delivered, or conditions imposed by the Department in any approval letters.

Upon completion of the construction or modification and in accordance with Rule .0303, the applicant shall submit a certification statement directly to Heinrich Ou of this office. This statement must be signed and sealed by a registered professional engineer stating that construction was completed in accordance with approved engineering plans and specifications, including any provisions stipulated in the Department's engineering plan and specification approval letter. Prior to Final Approval, the applicant shall submit a signed certification stating that the requirements in 15A NCAC 18C .0307 (d) and (e) have been satisfied and if applicable, a completed application for an Operating Permit and fee. Once the certification statements and operating permit application and fee, if applicable, are received and determined adequate, the Department will grant Final Approval in accordance with Rule .0309 (a). Therefore, no construction, alteration, or expansion of a water system shall be placed into service until Final Approval has been issued by the Department.

If we can be of further assistance, please call (919) 733-2321.

Sincerely,

Jessica G. Miles

Jessica G. Miles, P.E., Chief
Public Water Supply Section