THE OFFICE OF REGULATORY STAFF

CORRECTED

DIRECT TESTIMONY & EXHIBITS

OF

MATTHEW P. SCHELLINGER II

MARCH 12, 2018

Corrections:
1. Exhibit MPS-5, page 8 of 10, paragraph D, first line -- remove the word "not" where it appeared the second time

DOCKET NO. 2017-292-WS

Application of Carolina Water Service, Incorporated for Approval of an Increase in Its Rates for Water and Sewer Services

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DIRECT TESTIMONY AND EXHIBITS OF

MATTHEW P. SCHELLINGER II

ON BEHALF OF

THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF

DOCKET NO. 2017-292-WS

IN RE: APPLICATION OF CAROLINA WATER SERVICE, INCORPORATED FOR APPROVAL OF AN INCREASE IN ITS RATES FOR WATER AND SEWER SERVICES

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.

A. My name is Matthew P. Schellinger II. My business address is 1401 Main Street, Suite 900, Columbia, South Carolina, 29201. I am employed by the Office of Regulatory Staff ("ORS") in the Utility Rates and Services Division as a Regulatory Analyst.

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I received a Bachelor of Science Degree with a major in Accounting from the University of South Florida in 2012. I received a Master of Business Administration with a focus in Management and Strategy from Western Governors University in 2016. From 2007 to 2013, I was employed as a controller for an insurance agency. In that capacity, I performed general corporate accounting functions on a daily and monthly basis. In February 2013, I began my employment with ORS as an Auditor. In May 2016, I joined the Utility Rates and Services Division as a Regulatory Analyst. I have previously testified

before the Public Service Commission of South Carolina ("Commission" or "PSC") on natural gas, water and wastewater related matters.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to set forth the ORS staff findings relative to my review of the rate increase application ("Application") submitted by Carolina Water Service, Inc. ("CWS" or "Company"). Specifically, I will focus on the following areas:

- CWS's compliance with the PSC rules and regulations;
- ORS adjustments to Test Year and proposed revenue;
- ORS customer growth calculation;
- CWS's request to change certain non-recurring charges and tariff language;
- CWS's non-revenue water deferral account;
- The transfer of customers in the I-20 sewer service territory to the Town of Lexington;
- ORS's adjustment to purchased water expense;
- ORS's recommendation related to the Utility System Improvement Rate ("USIR");
- ORS's investigation related to the Forty Love Point sewer issues; and
- ORS's investigation of the Dancing Dolphin complaint.

Q. ARE THE FINDINGS OF YOUR REVIEW CONTAINED IN THIS TESTIMONY AND ACCOMPANYING EXHIBITS?

A. Yes, my testimony and the attached exhibits detail ORS's findings and recommendations.

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Q. PLEASE EXPLAIN HOW YOU COMPILED INFORMATION FOR YOUR TESTIMONY AND EXHIBITS.

A. I used ORS Business Office Compliance Review results, information provided by CWS in its Application, and additional information provided by CWS during our business review and facility site inspections. I also reviewed CWS's financial statements and performance bond documents submitted to the Commission.

Q. PLEASE PROVIDE AN OVERVIEW OF THE LOCATIONS, SERVICE TYPES AND CUSTOMER BASE SERVED BY CWS.

A. CWS is an investor-owned utility providing water supply/distribution services and wastewater collection/treatment services. A subsidiary of Utilities, Inc., CWS's South Carolina operations are classified by the National Association of Regulatory Utility Commissioners ("NARUC") as a Class A water and wastewater utility according to water and sewer revenues reported in its Application for the twelve (12) months ending August 31, 2017 ("Test Year"). The Commission-approved service area for CWS includes portions of Abbeville, Aiken, Anderson, Beaufort, Cherokee, Georgetown, Greenville, Greenwood, Lexington, Orangeburg, Richland, Saluda, Sumter, Williamsburg, Union, and York counties. As of the end of the Test Year, ORS determined that CWS was providing water supply/distribution services to 16,323 residential and commercial customers and wastewater collection/treatment services to 13,575 residential and commercial customers.

Q. PLEASE EXPLAIN EXHIBIT MPS-1.

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A. Exhibit MPS-1 provides a summary of the Business Office Compliance Review completed by ORS and a summary of the water supply/distribution and wastewater collection/treatment systems inspected by ORS on February 20, 22, and 23, 2018.

Water Supply/Distribution System

CWS currently provides water supply and distribution-only services to its residential and commercial customers. Water is provided to customers by CWS-operated wells or by third-party water providers. During the Test Year, CWS purchased water to distribute to its customers from governmental entities including the City of West Columbia, City of Columbia, Town of Lexington, Lexington Joint Municipal Water and Sewer Commission, Hammond Water District, Sandy Springs Water District, West Anderson Water District, Electric City Utilities, City of Rock Hill, Starr-Iva Water & Sewer District, and York County. There are one hundred and five (105) water supply and distribution-only systems with active South Carolina Department of Health and Environmental Control ("DHEC") Drinking Water Permits operated by CWS. Required operator logs were kept at all facilities inspected by ORS. As required by the Commission's regulations, general housekeeping items, including system entry points, access roads and signage, observed by ORS during the inspection were satisfactory. Potable water and irrigation consumption is metered to all customers. CWS provides fire protection service to customers in the Lake Wylie service area, the Oakwood Baptist Church, Washington Heights, and Hidden Valley Mobile Home Park located in the I-20 service area.

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Since September 2015, several Notice of Violations ("NOVs") have been issued by DHEC to CWS for Drinking Water permit violations. In accordance with S.C. Code Ann. Regs. 103-714.C, CWS filed consent orders under ND-2016-61-WS.

The following consent orders have been executed between DHEC and CWS:

- 16-050-DW – I-20 – September 23, 2016
- 16-049-DW – Rollingwood – September 23, 2016
- 16-051-DW – Charleswood – September 23, 2016
- 18-005-DW – Stonegate – February 13, 2018

Wastewater Collection/Treatment System

CWS operates a total of nineteen (19) wastewater collection and treatment systems. In addition, CWS operates ten (10) wastewater collection-only systems for which it collects wastewater from its customers and transports the wastewater to another entity for treatment and disposal. Wastewater treatment and disposal is provided to CWS collection-only customers by Beaufort-Jasper Water and Sewer Authority ("BJWSA"), Richland County, Town of Chapin, Renewable Water Resources ReWa, Georgetown County Water & Sewer District, and York County.

In accordance with S.C. Code Ann. Regs. 103-514.C, CWS filed consent orders under ND-2016-61-WS.

The following consent orders have been executed between DHEC and CWS:

- 15-043-W – Shandon Subdivision WWTF – September 24, 2015
- 15-044-W – Watergate Development – September 24, 2015
- 16-005-W – Country Oaks SD – March 11, 2016

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- 16-023-W – Administrative Order – I-20 – August 1, 2016
- 16-039-W – Friarsgate – December 22, 2016
- 17-001-W – Peachtree – March 2, 2017
- 17-060-W – Friarsgate – July 31, 2017
- 17-065-W – Foxwood – August 4, 2017

CWS paid $103,340 in penalties to DHEC since the last rate case in 2015 (Docket No. 2015-199-WS). The Company did not request rate recovery for these penalties.

Q. DOES ORS RECOMMEND ADJUSTMENTS TO THE TEST YEAR WATER AND WASTEWATER BILLING UNITS USED IN THE APPLICATION BY CWS?

A. Yes. ORS completed a comprehensive review of CWS's customer water and wastewater billing units for the Test Year. ORS adjustments address the following issues detected in the Application and Test Year:

1) Normalized water consumption;

2) Errors made in meter reading; and,

3) Understated water and sewer billing units.

Q. PLEASE EXPLAIN ORS'S RECOMMENDATION TO THE COMPANY'S REQUEST TO NORMALIZE WATER CONSUMPTION DATA.

A. During ORS's review of the Application, ORS discovered that the Company normalized water consumption data used to compute Test Year revenue and proposed revenue in Service Territory 1 and Service Territory 2. In the Application, CWS used a normalized water consumption value of 905,352,266 gallons. Instead of using the actual Test Year water consumption data for all customers, CWS calculated an average water

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consumption for each month for each rate class. In addition, CWS's Test Year and proposed revenue calculation multiplies the average water consumption by the end-of-the Test Year annualized billing units. The calculation used by CWS to normalize water consumption data is incorrect because the method the Company utilized to determine average water-per-billing-unit did not account for the thirteen (13) bills issued to a portion of the customers during the Test Year. During the ORS review, ORS discovered the Company issued thirteen (13) bills to certain classes of customers during a twelve (12) month period. CWS indicated to ORS the reason for issuing thirteen (13) bills was to more closely align customer bill dates with the dates the Company receives its invoices from third-party providers. The Company divided the total water sold during the Test Year by thirteen (13) bills to arrive at an average water-per-billing-unit measure. The Company then multiplied the average water-per-billing-unit by twelve (12). This method to normalize Test Year revenue resulted in a diluted average monthly usage and is incorrect.

ORS recommends Test Year water consumption be based on actual water sales to customers of 927,270,314 gallons, as reflected on Exhibit MPS-2.

Q. PLEASE EXPLAIN ORS'S RECOMMENDATION TO CORRECT ERRORS IN METER READING.

A. CWS customers contacted ORS in 2017 related to higher than normal monthly bills. In response to ORS's investigation, CWS identified that a meter reader, working for a subcontractor, falsified meter reads. The falsification of meter reads resulted in CWS billing customers in Service Territory 1 based on inaccurate data. In accordance with S.C.

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Code Ann. Regs. 103-733.2 and 103-733.3, CWS determined the time period for the falsified meter reads as being April 2017 through August 2017.

CWS issued corrected bills to customers in October 2017, which is outside of the Test Year. The meter reading error in Service Territory 1 reduced Test Year water consumption and CWS did not propose an adjustment or address the issue in its Application. ORS recommends an additional increase to Test Year water consumption for Service Territory 1 of 15,186,238 gallons to correct the impacts of the meter read error. This recommendation is reflected in Exhibit MPS-2.

Q. PLEASE EXPLAIN ORS'S ADJUSTMENT TO TEST YEAR AND PROPOSED WASTEWATER SERVICE BILLING UNITS.

A. During ORS's site visits in late February 2018, ORS verified a sample of premises to confirm CWS's billing record accuracy. Specifically, ORS verified if occupied premises receiving sewer service are listed as inactive in the CWS billing system; if the premise is occupied, CWS's billing units for sewer service may be inaccurate, and the Company's Test Year sewer service revenues understated.

Of the thirteen (13) inactive premises ORS inspected in the Friarsgate subdivision in Lexington County, all thirteen (13) premises were occupied and had not been billed by CWS during the Test Year. In addition, during the ORS inspection in Beaufort County, four (4) premises in the Palmetto Apartments subdivision were listed as inactive in CWS billing records and had not received a bill from the Company during the Test Year; however, three (3) premises were occupied during the ORS inspection.

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ORS recommends an adjustment to Test Year and proposed sewer service revenue to include the premises ORS determined to be active during the ORS inspection.

Upon further review of CWS billing records, ORS identified additional premises that were not billed accurately by CWS. ORS's adjustment imputes revenue for a total of forty-seven (47) sewer customers and six (6) water customers. This adjustment is reflected in Exhibit MPS-2.

Based on the ORS review, it appears the Company did not conduct thorough vacancy surveys of its sewer-only service territories to ensure the Company billed all of its customers. ORS recommends the Commission require CWS to re-institute the vacancy survey process required in Commission Order No. 2012-547.

Q. PLEASE EXPLAIN THE TEST YEAR WATER AND WASTEWATER SERVICE REVENUE AMOUNTS COMPUTED BY ORS.

A. Exhibit MPS-2 summarizes CWS's service revenues for the Test Year. ORS used CWS's current rates as approved by the Commission and proposed rates as reflected in the Application for each calculation. Exhibit MPS-2 provides a detail of the water and sewer service revenue, as adjusted by ORS, for each Service Territory 1 and 2 for water revenues, and combined Service Territory 1 and 2 for sewer revenues.

In summary, ORS calculated CWS's Test Year service revenue for residential and commercial water and wastewater operations, as adjusted, of $20,235,927. For comparison purposes, ORS calculated CWS's proposed residential and commercial water and wastewater service revenues, as adjusted, of $24,958,022. ORS did not factor customer growth into these service revenue comparisons.

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ORS proposes an adjustment of $22,313 to Test Year Miscellaneous Revenues - Other to recognize revenue received by Utilities, Inc. for the sale of CWS customer data to Home Serve PLC. In addition, ORS recommends an increase to Late Fees Revenues associated with the proposed increase in revenues. This adjustment to Miscellaneous Revenues for the Company's as proposed rates amounts to $35,576. ORS's adjustment to Miscellaneous Revenue is reflected in Exhibit MPS-3.

Q. PLEASE EXPLAIN THE ORS CUSTOMER GROWTH CALCULATION.

A. As shown in Exhibit MPS-4, the customer growth for CWS is approximately 1.5662% for water Service Territory 1, 0.4166% for water Service Territory 2, and 1.1023% for wastewater Service Territories 1 and 2.

Q. PLEASE EXPLAIN EXHIBIT MPS-5.

A. Exhibit MPS-5 is a summary of CWS's current PSC approved rates, proposed rates and terms and conditions of service.

Q. DOES CWS PROPOSE TO CHANGE ANY NON-RECURRING CHARGES?

A. Yes. CWS has proposed a change to the Water Meter Installation Charge from $35 to $45. ORS has reviewed the cost justification for this increase and agrees the increase in reasonable.

Q. PLEASE EXPLAIN ORS'S POSITION ON THE COMPANY'S REQUEST TO REQUIRE RESIDENTIAL CUSTOMERS TO TEST CROSS-CONNECTIONS EVERY TWO YEARS.

A. The Company has requested to change the annual requirement to test backflow devices to a bi-annual requirement for residential customers. This change should provide

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cost savings to customers. ORS recommends the Company's request to require residential customers to test backflow devices every two years be limited to only customers with residential irrigation cross-connections. According to DHEC regulations, testing of backflow devices can be completed on a bi-annual basis for residential irrigation cross-connections. Other residential cross-connections, such as swimming pools or private wells, would still require an annual inspection.

Q. PLEASE EXPLAIN ORS'S POSITION RELATED TO THE COMPANY'S REQUEST TO CHANGE LANGUAGE IN ITS TARIFF REGARDING LIABILITY FOR INTERRUPTION OF SERVICE.

A. ORS does not oppose the Company's proposed changes to tariff language in regard to liability for interruption of service. Interruption of service is regulated by the Commission in S.C. Code Ann. Regs. 103-771 and 103-551.

Q. PLEASE EXPLAIN EXHIBIT MPS-6.

A. Exhibit MPS-6 provides a comparison of the impact of the proposed rates on CWS's highest billed customers based on Test Year water consumption for water customers, and SFE count for sewer customers as adjusted by ORS. This comparison is provided for informational purposes.

Q. PLEASE EXPLAIN ORS'S POSITION RELATED TO THE "NON-REVENUE WATER" DEFERRAL.

A. In Docket No. 2015-199-WS, Order No. 2015-876, the Commission approved the establishment of a regulatory deferral account which will be used to record unrecovered bulk water expenses from third-party providers that are categorized as "non-revenue

water." No specific definition of non-revenue water was provided in the Commission Order. Per the Commission Order, "CWS shall be permitted to seek recovery of the expenses compiled in these deferred accounts in its next rate case, and will report on its progress to reduce non-revenue water in its next rate case."

The regulatory asset established for "non-revenue water" has a balance of zero for the Test Year and no report was provided by the Company on its efforts to recognize, record, and reduce non-revenue water. ORS recommends the regulatory deferral account be closed.

Q. PLEASE EXPLAIN THE STATUS OF THE PERFORMANCE BOND FOR CWS.

A. CWS has a current performance bond for utility operations in the form of an Irrevocable Letter of Credit ("ILC") from JPMorgan Chase Bank, N.A. as surety in the amount of $350,000 for water and $350,000 for wastewater operations. ORS respectfully requests that the Commission require CWS to continue to maintain the current performance bond amount for water operations in the amount of $350,000 and for wastewater operations in the amount of $350,000 in compliance with S.C. Code Ann. § 58-5-720 (2015).

Q. ARE SEWER CUSTOMERS IN THE I-20 SERVICE TERRITORY INCLUDED IN THIS RATE CASE?

A. No. The Town of Lexington assumed the assets and operations of the I-20 Sewer System effective February 1, 2018. In the condemnation process, CWS has transferred 2,840 sewer customers to the Town of Lexington. CWS proposed, and ORS verified, adjustments to remove the I-20 Sewer System from the Company's books and records. Those adjustments include a reduction in revenue, reduction of assets and rate base, and

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removal of all operations and maintenance expenses associated with the I-20 Sewer System. These adjustments are reflected in ORS Audit Exhibit ZJP-5.

Q. WHAT IS ORS'S RECOMMENDATION RELATED TO THE FINANCIAL SERVICES AND LITIGATION COSTS ASSOCIATED WITH THE CONDEMNATION OF THE I-20 SEWER SYSTEM?

A. ORS recommends the Company not be allowed to begin amortization of any litigation and financial services costs related to the I-20 sewer system. The condemnation has not been completed and a ruling has not been issued; therefore, it is unknown if a portion of the costs may be recovered through the condemnation proceeding. In addition, litigation costs, penalties and settlements related to other lawsuits and Federal Court decisions related to the I-20 sewer system should not be recovered from ratepayers.

Q. PLEASE DESCRIBE ORS'S ADJUSTMENT TO PURCHASED WATER EXPENSE.

A. ORS recommends an adjustment of $16,095 to reduce Purchased Water expense for Service Territory 1 and 2 to limit non-revenue water expense to 10%. The ORS adjustment is reflected in ORS Audit Exhibit ZJP-5. According to data provided to ORS by CWS, the following subdivisions experienced greater than 10% non-revenue water during the Test Year:

- Hidden Lake subdivision - 39.48%
- Hill & Dale subdivision - 13.85%
- Lands End subdivision - 31.58%

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CWS has reduced non-revenue water since its last rate case; however, there are still subdivisions where the Company should address the causes of non-revenue water. ORS's recommendation to limit recovery of purchased water expense for subdivisions with greater than 10% non-revenue water insulates the ratepayer from non-revenue water impacts.

Q. WHAT IS ORS'S POSITION ON THE UTILITY SYSTEM IMPROVEMENT RATE ("USIR") AS PROPOSED BY THE COMPANY?

A. CWS has proposed to implement a USIR to provide for timely recovery costs incurred to repair, improve or replace parts of the utility's system. The Company provided an overview in its Application of how the USIR could be implemented. In summary, it appears the USIR would result in a monthly surcharge to customers to recover qualified infrastructure repairs or improvements at the Company's current Commission-approved weighted average cost of capital.

ORS recommends the USIR and other alternative regulation and ratemaking methodologies be examined by the Commission in a separate proceeding upon petition of the interested water and wastewater utility. This would allow for a thorough examination of the risks and benefits to the ratepayer, the utility and economic development. In addition, alternative ratemaking methodologies may require amendment to current statutes and regulations.

Q. PLEASE DESCRIBE ORS'S INVESTIGATION OF THE ISSUES RAISED BY INTERVENOR TESTIMONY ON BEHALF OF FORTY LOVE POINT HOMEOWNERS' ASSOCIATION.

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A. According to ORS Consumer Service records, ORS became aware of a sewer issue impacting customers in the Forty Love Point subdivision in Lexington county in October 2016. During periods of heavy rain, several homes including Mr. Dixon's home and Ms. King's home have experienced sewer odor and sewer back-ups in the collection system operated by CWS. Sewer treatment services are provided to CWS by Richland County. ORS requested CWS respond to Mr. Dixon's complaint. In November 2016, the Company hosted a meeting at the Forty Love Point pump station with DHEC and Richland County to discuss the operations of the collection system and the impact of heavy rains on the collection system. CWS initiated an engineering study to determine the causes and develop recommended solutions to the issues experienced by Mr. Dixon and Ms. King. During the period of the CWS engineering study, CWS monitored the weather and, with the permission of DHEC, initiated pump-and-haul operations during periods of heavy rain to eliminate the possibility of sewer back-ups.

In January 2017, ORS participated in a meeting with CWS, DHEC, engineers, Ms. King, and Mr. and Ms. Dixon to discuss CWS's action plan for correction of the sewer issue. As a result of that meeting, CWS conducted smoke testing in order to locate areas of inflow into the sewer collection system during high rain events and installed equipment and software to alert CWS to high levels in the system and track and chart the force main pressures from Richland County that influence the operations of the CWS collection system.

In September 2017, Ms. Dixon contacted ORS regarding a sewer back-up issue. The Company's response indicated that due to Hurricane Irma the subcontractor that

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performs the pump-and-haul operations during heavy rain events was limited to one vacuum truck. CWS indicated it continued to analyze data gathered by its equipment and was in the process of completing its engineering study.

Mr. Dixon contacted ORS on January 29, 2018, regarding a sewer odor. ORS requested CWS respond to Mr. Dixon's complaint. Per CWS's response, CWS met with Mr. and Ms. Dixon and Mr. King on February 22, 2018 and settled on a path forward that involves CWS agreeing to upgrade and install pump tanks to eliminate future sewer back-ups. The upgrade and installation is expected to be complete during the month of March.

Q. PLEASE DESCRIBE ORS'S INVESTIGATION OF THE ISSUES RAISED BY DANCING DOLPHIN, LLC, A BEAUFORT COMPANY.

A. The Commission in its Order No. 2018-77, requested ORS investigate the issues raised in the Petition to Intervene by Dancing Dolphin, LLC. In response, ORS analyzed the impact of inflow on the collection system operated by CWS in Beaufort County. To facilitate ORS's analysis, ORS examined the purchased sewer bills rendered by BJWSA to CWS during the Test Year and analyzed the total gallons treated by BJWSA in comparison to the DHEC Contributory Loading Guidelines of three hundred (300) gallons per day per Single Family Equivalent. ORS also examined the rain amounts for the monthly billing periods to determine if the BJWSA total gallons treated and billed to CWS was impacted by rain volume.

From the ORS analysis, it appears there is a correlation between rain volumes and increased total gallons treated by BJWSA. This is an indicator of a potential inflow and infiltration issue in the sewer system. Exhibit MPS-7 provides the detail to support ORS's

analysis. Based on this limited review, ORS recommends CWS complete an inflow and infiltration study and costs-benefit analysis to determine what feasible corrective actions can be taken to limit inflow and infiltration.

On February 23, 2018, ORS visited CWS's service territory in Beaufort County and reviewed the interconnection point between the CWS collection system and BJWSA. In addition, ORS inspected a portion of the sewer lines to gain a better understanding of the condition of the collection system. During the site visit, there were no missing manhole covers, uncapped sewer taps or other specific maintenance issues to indicate the cause of inflow into the sewer system.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

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ORS BUSINESS OFFICE COMPLIANCE REVIEW

Utility: Carolina Water Service, Inc.
Inspector: Matthew Schellinger
Office: Corporate: 2335 Sanders Road, Northbrook, IL
Local Office: 150 Foster Brothers Drive, West Columbia, SC
Utility Type: Water and Wastewater Utility
Date: November 2017 – February 2018
Company Representative: Michael Cartin, Bob Gilroy

#	Compliance Regulation	In Compliance	Out of Compliance	Comments
1	All records and reports available for examination in accordance with R.103-510 and R. 103-710.	X		Customers can contact CWS representatives via telephone, email, or visit local office
2	Complaint records maintained in accordance with R.103-516 and R. 103-716.	X		All customer complaints are inserted into CWS database which tracks service orders, complaint types and related resolutions.
3	Utility's rates, its rules and regulations, and its up-to-date maps and plans available for public inspection in accordance with R.103-530 and R.103-730.	X		
4	Established procedures to assure that every customer making a complaint is made aware that the utility is under the jurisdiction of the Commission and that the customer has the right to register the complaint in accordance with R.103-530 and R. 103-730.	X		
5	Deposits charged within the limits established by R.103-531 and R. 103-731.	X		Customer deposits charged in compliance with regulations
6	Timely and accurate bills being rendered to customers in accordance with R.103-532 and R.103-732.		X	Meter Reader issue caused CWS to bill multiple months of estimated bills.
7	Bill forms in accordance with R.103-532 and R.103-732.	X		Bill form is clear with adequate after-hours emergency contact information.
8	Adjustments of bills handled in accordance with R.103-533 and 103-733.	X		Invoice adjustments are compliant with R.103-533 and 103-733.

#	Compliance Regulation	In Compliance	Out of Compliance	Comments
9	Policy for customer denial or discontinuance of service in accordance with R.103-535 and 103-735.	X		
10	Notices sent to customers prior to termination in accordance with R.103-535 and 103-735.	X		
11	Notices filed with the Commission of any violation of PSC or DHEC rules which affect service provided to its customers in accordance with rule R.103-514-C and 103-714-C.		X	CWS has not notified the Commission and ORS within 14 days after the violation had been corrected.
12	Utility has adequate means (telephone, etc.) whereby each customer can contact the water and/or wastewater utility at all hours in case of emergency or unscheduled interruptions or service in accordance with R.103-530 and 103-730.	X		
13	Records maintained of any condition resulting in any interruption of service affecting its entire system or major division, including a statement of time, duration, and cause of such an interruption in accordance with R.103-514 and 103-714.	X		
14	Utility advised the Commission, in accordance with Rule 103-512 of the name, title, address and telephone number of the person who should be contacted in connection with general management duties, customer relations, engineering operations, and emergencies during non-office hours.	X		
15	Company verified the maps on file with the Commission include all the service area of the company.	X		
16	Number of customers the company has at present time.	NA	NA	CWS provides service to 16,323 active water and 13,575 active sewer customers.
17	Company has a current performance bond on file with the Commission. Combined Amount of bond: **$700,000**	X		CWS currently has a letter of credit on file with the PSC/ORS. The bond amount is $350,000 for water service and $350,000 for sewer service.
18	Company has a current annual report on file with the Office of Regulatory Staff.	X		
19	Company has paid annual Gross Receipts assessment.	X		

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ORS WATER SYSTEM INSPECTION REPORT

Inspection Overview

Date Inspected:	February 20, 2018
Inspector Name:	Matthew Schellinger, Willie Morgan
Docket Number:	2017-292-WS
Utility Name:	Carolina Water Service, Inc. – River Hills
Utility Representative:	Mac Mitchell, Steven Friel, Mike Davis
Number of Customers:	4004 customers
System Type (distribution, well, etc):	Distribution, purchased water from York County (which is purchased from City of Rock Hill)
Location of System:	River Hills, Lake Wylie, York County
Location of Utility Office:	150 Foster Brothers Drive, West Columbia, SC
Treatment Type:	None
Permit #:	4650006
Last SC DHEC Compliance Rating:	Satisfactory – October 30, 2017
Frequency checked by Licensed Operator:	Daily
Wastewater Provider:	Carolina Water Service, Inc., & septic

	System Components Inspected	Specific Type	#	Capacity	Compliance		Comments
					Yes	No	
1	Well Sites						Purchases water from York County
2	Pump Houses						N/A
3	Storage Tank	Pressurized					N/A
3a	Storage Tank	Non-Pressurized					N/A
3b	Storage Tank	Overhead					See comment below
4	Chlorinator						N/A
5	Other Chemicals in use						N/A
6	Meters				X		
7	Hydrants				X		Fire protection & flushing
8	Electrical Wiring acceptable				X		
9	Piping acceptable				X		
10	System free of leaks				X		
11	Access road adequate				X		
12	Ability for service area to expand				X		

Additional Comments: None.

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ORS WATER SYSTEM INSPECTION REPORT

Inspection Overview

Date Inspected:	February 22, 2018
Inspector Name:	Matthew Schellinger
Docket Number:	2017-292-WS
Utility Name:	Carolina Water Service, Inc. – Indian Fork/Forty Love
Utility Representative:	Mac Mitchell
Number of Customers:	212 customers
System Type (distribution, well, etc):	Well system with storage and distribution – See Below
Location of System:	Chapin area
Location of Utility Office:	150 Foster Brothers Drive, West Columbia, SC
Treatment Type:	Chlorination, corrosion inhibitor, pH adjustment – See Below
Permit #:	3250066
Last SC DHEC Compliance Rating:	Needs Improvement – November 24, 2015
Frequency checked by Licensed Operator:	Daily
Wastewater Provider:	Carolina Water Service, Inc., septic

	System Components Inspected	Specific Type	#	Capacity	Compliance		Comments
					Yes	No	
1	Well Sites	bored	6		X		2 wells have been abandoned
2	Pump Houses		1		X		
3	Storage Tank	Pressurized	4		X		See below
3a	Storage Tank	Non-Pressurized					N/A
3b	Storage Tank	Overhead					N/A
4	Chlorinator				X		
5	Other Chemicals in use				X		
6	Meters				X		
7	Hydrants				X		Flushing only
8	Electrical Wiring acceptable				X		
9	Piping acceptable				X		
10	System free of leaks				X		
11	Access road adequate				X		
12	Ability for service area to expand				X		

Additional Comments: Since the completion of the last sanitary survey, Forty Love has been converted to a purchased water system interconnected with Richland County. This removed the wells from the system and allows the service area to expand.

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ORS WATER SYSTEM INSPECTION REPORT

Inspection Overview

Date Inspected: February 22, 2018
Inspector Name: Matthew Schellinger
Docket Number: 2017-292-WS
Utility Name: Carolina Water Service, Inc. – Stonegate
Utility Representative: Mac Mitchell
Number of Customers: 137 customers
System Type (distribution, well, etc.): Well system with storage
Location of System: Chapin area
Location of Utility Office: 150 Foster Brothers Drive, West Columbia, SC
Treatment Type: Chlorination, corrosion inhibitor, pH adjustment
Permit #: 4050014
Last SC DHEC Compliance Rating: Unsatisfactory – November 2, 2017
Frequency checked by Licensed Operator: Daily
Wastewater Provider: Carolina Water Service, Inc., Septic

	System Components Inspected	Specific Type	#	Capacity	Compliance		Comments
					Yes	No	
1	Well Sites	bored	3		X		Well 3 - Offline
2	Pump Houses		1		X		
3	Storage Tank	Pressurized	1	10k gal	X		
3a	Storage Tank	Non-Pressurized					N/A
3b	Storage Tank	Overhead					N/A
4	Chlorinator				X		
5	Other Chemicals in use				X		
6	Meters				X		
7	Hydrants				X		Flushing only
8	Electrical Wiring acceptable				X		
9	Piping acceptable				X		
10	System free of leaks				X		
11	Access road adequate				X		
12	Ability for service area to expand				X		

Additional Comments: CWS is currently investigating plans to interconnect with the City of Columbia for water service.

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ORS WATER SYSTEM INSPECTION REPORT

Inspection Overview

Date Inspected:	February 22, 2018
Inspector Name:	Matthew Schellinger
Docket Number:	2017-292-WS
Utility Name:	Carolina Water Service, Inc. – Lake Village
Utility Representative:	Mac Mitchell
Number of Customers:	88 customers
System Type (distribution, well, etc):	Well and distribution
Location of System:	Leesville, SC
Location of Utility Office:	150 Foster Brothers Drive, West Columbia, SC
Treatment Type:	Chlorination, corrosion inhibitor, pH adjustment
Permit #:	3250054
Last SC DHEC Compliance Rating:	Satisfactory – October 24, 2017
Frequency checked by Licensed Operator:	Daily
Wastewater Provider:	Town of Lexington, Septic

	System Components Inspected	Specific Type	#	Capacity	Compliance		Comments
					Yes	No	
1	Well Sites		3		X		2 Abandoned – 1 Offline
2	Pump Houses		3		X		
3	Storage Tank	Pressurized	1	10K	X		
3a	Storage Tank	Non-Pressurized					N/A
3b	Storage Tank	Overhead					N/A
4	Chlorinator				X		
5	Other Chemicals in use				X		
6	Meters				X		
7	Hydrants				X		Flushing only
8	Electrical Wiring acceptable				X		
9	Piping acceptable				X		
10	System free of leaks				X		
11	Access road adequate				X		
12	Ability for service area to expand				X		

Additional Comments: Met with one customer in the subdivision. Town of Lexington appears to be reading meters and billing customers based on water consumption for sewer service.

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ORS WATER SYSTEM INSPECTION REPORT

Inspection Overview

Date Inspected:	February 20, 2018
Inspector Name:	Matthew Schellinger, Willie Morgan
Docket Number:	2017-292-WS
Utility Name:	Carolina Water Service, Inc. - Carowoods
Utility Representative:	Mac Mitchell, Steven Friel, Mike Davis
Number of Customers:	82 customers
System Type (distribution, well, etc):	Well and distribution
Location of System:	Carowoods, Rock Hill, York County
Location of Utility Office:	150 Foster Brothers Drive, West Columbia, SC
Treatment Type:	Chlorination, corrosion inhibitor, pH adjustment
Permit #:	4650035
Last SC DHEC Compliance Rating:	Satisfactory – October 23, 2017
Frequency checked by Licensed Operator:	Daily
Wastewater Provider:	Carolina Water Service, Inc.

	System Components Inspected	Specific Type	#	Capacity	Compliance		Comments
					Yes	No	
1	Well Sites		2		X		
2	Pump Houses		1		X		
3	Storage Tank	Pressurized	1	10K	X		
3a	Storage Tank	Non-Pressurized					N/A
3b	Storage Tank	Overhead					N/A
4	Chlorinator				X		
5	Other Chemicals in use				X		
6	Meters				X		
7	Hydrants				X		Flushing only
8	Electrical Wiring acceptable				X		
9	Piping acceptable				X		
10	System free of leaks				X		
11	Access road adequate				X		
12	Ability for service area to expand				X		

Additional Comments: Well house and tank in excellent condition and weatherized for winter months.

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ORS WATER SYSTEM INSPECTION REPORT

Inspection Overview

Date Inspected:	February 20, 2018
Inspector Name:	Matthew Schellinger, Willie Morgan
Docket Number:	2017-292-WS
Utility Name:	Carolina Water Service, Inc. – Foxwood
Utility Representative:	Mac Mitchell, Steven Friel, Mike Davis
Number of Customers:	217 customers
System Type (distribution, well, etc):	Distribution Only, Purchased Water
Location of System:	Chapin, SC
Location of Utility Office:	150 Foster Brothers Drive, West Columbia, SC
Treatment Type:	None
Permit #:	4650008
Last SC DHEC Compliance Rating:	Satisfactory – October 23, 2017
Frequency checked by Licensed Operator:	Daily
Wastewater Provider:	Carolina Water Service, Septic

	System Components Inspected	Specific Type	#	Capacity	Compliance		Comments
					Yes	No	
1	Well Sites						N/A
2	Pump Houses						N/A
3	Storage Tank	Pressurized					N/A
3a	Storage Tank	Non-Pressurized					N/A
3b	Storage Tank	Overhead					N/A
4	Chlorinator						No treatment by CWS
5	Other Chemicals in use						No treatment by CWS
6	Meters				X		
7	Hydrants				X		Flushing only
8	Electrical Wiring acceptable				X		
9	Piping acceptable				X		
10	System free of leaks				X		
11	Access road adequate				X		
12	Ability for service area to expand				X		

Additional Comments: None

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ORS WATER SYSTEM INSPECTION REPORT

Inspection Overview

Date Inspected:	February 20, 2018
Inspector Name:	Matthew Schellinger, Willie Morgan
Docket Number:	2017-292-WS
Utility Name:	Carolina Water Service, Inc. – Shandon
Utility Representative:	Mac Mitchell, Steven Friel, Mike Davis
Number of Customers:	67 customers
System Type (distribution, well, etc):	Well, Distribution
Location of System:	Shandon, Rock Hill, SC
Location of Utility Office:	150 Foster Brothers Drive, West Columbia, SC
Treatment Type:	Chlorination, corrosion inhibitor, pH adjustment
Permit #:	4650009
Last SC DHEC Compliance Rating:	Satisfactory – October 24, 2017
Frequency checked by Licensed Operator:	Daily
Wastewater Provider:	Carolina Water Service, Septic

	System Components Inspected	Specific Type	#	PSI	Capacity	Compliance		Comments
						Yes	No	
1	Well Sites		3			X		Tanker on site supplementing water
2	Pump Houses		1			X		
3	Storage Tank	Pressurized	1		10K Gal	X		
3a	Storage Tank	Non-Pressurized						N/A
3b	Storage Tank	Overhead						N/A
4	Chlorinator					X		
5	Other Chemicals in use					X		
6	Meters					X		
7	Hydrants					X		Flushing Only
8	Electrical Wiring acceptable					X		
9	Piping acceptable					X		
10	System free of leaks					X		
11	Access road adequate					X		
12	Ability for service area to expand					X		

Additional Comments: Tanker on site supplementing water usage.

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ORS WASTEWATER SYSTEM INSPECTION REPORT

Inspection Overview

Date Inspected:	February 20, 2018
Inspector Name:	Matthew Schellinger, Willie Morgan
Docket Number:	2017-292-WS
Utility Name:	Carolina Water Service, Inc. – River Hills
Utility Representative:	Mac Mitchell, Steven Friel, Mike Davis
Number of Customers:	3530 customers
System Type (collection, force main, lagoon, etc):	Collection, forced main
Location of System:	River Hills, Lake Wylie, York County
Location of Utility Office:	150 Foster Brothers Drive, West Columbia, SC
Treatment Type:	None – discharged to York County
Permit #:	SSS000752
Last SC DHEC Compliance Rating:	N/A
Frequency checked by WWTF Operator:	Daily
Drinking Water Provider:	Carolina Water Service, Inc. & wells

	System Components Inspected	Compliance		Comments
		Yes	No	
1	Chlorinator			None
2	Other chemicals in use			None
3	Aerators present			None
4	Plant fenced and locked	X		
5	Warning Signs Visible	X		
6	Fence in good condition	X		
7	Dikes in good condition			None
8	Odor non-existent or limited	X		
9	Grass mowed	X		
10	Duckweed/Algae acceptable			N/A
11	Grease build-up acceptable			None
12	Plant free of debris	X		Manual bar screen
13	Effluent Color acceptable			N/A
14	Lift Stations present	X		62 lift stations located throughout system.
15	Failure Warning System adequate	X		
16	Electric Wiring adequate	X		
17	System free of leaks	X		
18	System free of overflows	X		
19	Access road adequate	X		
20	Ability for service area to expand	X		

Additional Comments: None

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ORS WASTEWATER SYSTEM INSPECTION REPORT

Inspection Overview

Date Inspected:	February 20, 2018
Inspector Name:	Matthew Schellinger, Willie Morgan
Docket Number:	2017-292-WS
Utility Name:	Carolina Water Service, Inc. - Shandon
Utility Representative:	Mac Mitchell, Steven Friel, Mike Davis
Number of Customers:	38 customers
System Type (collection, force main, lagoon, etc):	Collection, package plant
Location of System:	Shandon, Rock Hill, York County
Location of Utility Office:	150 Foster Brothers Drive, West Columbia, SC
Treatment Type:	Disinfection and dechlorination
Permit #:	SC0027189
Last SC DHEC Compliance Rating:	Satisfactory – June 23, 2016
Frequency checked by WWTF Operator:	Daily
Drinking Water Provider:	Carolina Water Service, Inc.

	System Components Inspected	Compliance		Comments
		Yes	No	
1	Chlorinator	X		
2	Other chemicals in use	X		Phosphorus and de-chlorination treatment
3	Aerators present	X		
4	Plant fenced and locked	X		
5	Warning Signs Visible	X		
6	Fence in good condition	X		
7	Dikes in good condition			N/A
8	Odor non-existent or limited	X		
9	Grass mowed	X		
10	Duckweed/Algae acceptable			N/A
11	Grease build-up acceptable	X		
12	Plant free of debris	X		
13	Effluent Color acceptable	X		
14	Lift Stations present			None
15	Failure Warning System adequate	X		
16	Electric Wiring adequate	X		
17	System free of leaks	X		
18	System free of overflows	X		
19	Access road adequate	X		
20	Ability for service area to expand	X		

Additional Comments: CWS replaced the lagoon system with a small package plant in 2014. Lagoon is used as equalization basin if needed.

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ORS WASTEWATER SYSTEM INSPECTION REPORT

Inspection Overview

Date Inspected:	February 20, 2018
Inspector Name:	Matthew Schellinger, Willie Morgan
Docket Number:	2017-292-WS
Utility Name:	Carolina Water Service, Inc. – Carowood
Utility Representative:	Mac Mitchell, Mike Davis
Number of Customers:	55 customers
System Type (collection, force main, lagoon, etc):	Collection, package plant
Location of System:	Carowoods, Rock Hill, York County
Location of Utility Office:	150 Foster Brothers Drive, West Columbia, SC
Treatment Type:	Disinfection and dechlorination
Permit #:	SC0038113
Last SC DHEC Compliance Rating:	Satisfactory – November 30, 2016
Frequency checked by WWTF Operator:	Daily
Drinking Water Provider:	Carolina Water Service, Inc.

	System Components Inspected	Compliance		Comments
		Yes	No	
1	Chlorinator	X		Tablets
2	Other chemicals in use	X		Sodium sulfite
3	Aerators present	X		
4	Plant fenced and locked	X		
5	Warning Signs Visible	X		
6	Fence in good condition	X		
7	Dikes in good condition			N/A
8	Odor non-existent or limited	X		
9	Grass mowed	X		
10	Duckweed/Algae acceptable			N/A
11	Grease build-up acceptable	X		
12	Plant free of debris	X		
13	Effluent Color acceptable	X		
14	Lift Stations present	X		2 lift stations
15	Failure Warning System adequate	X		
16	Electric Wiring adequate	X		
17	System free of leaks	X		
18	System free of overflows	X		
19	Access road adequate	X		
20	Ability for service area to expand	X		

Additional Comments: Blowers are housed to reduce noise. Plant contains a digester.

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ORS WASTEWATER SYSTEM INSPECTION REPORT

Inspection Overview

Date Inspected:	February 20, 2018
Inspector Name:	Matthew Schellinger, Willie Morgan
Docket Number:	2017-292-WS
Utility Name:	Carolina Water Service, Inc. – Foxwood
Utility Representative:	Mac Mitchell, Mike Davis
Number of Customers:	219 customers
System Type (collection, force main, lagoon, etc):	Collection, gravity flow to activated sludge process
Location of System:	Foxwood, Fort Mill, SC
Location of Utility Office:	West Columbia, SC
Treatment Type:	Chlorination and dechlorination
Permit #:	SC0027146
Last SC DHEC Compliance Rating:	Satisfactory – June 23, 2016
Frequency checked by WWTF Operator:	Daily
Drinking Water Provider:	Carolina Water Service

	System Components Inspected	Compliance		Comments
		Yes	No	
1	Chlorinator	X		Tablets
2	Other chemicals in use	X		Sodium thiosulfate
3	Aerators present	X		Aerated Lagoon
4	Plant fenced and locked	X		
5	Warning Signs Visible	X		
6	Fence in good condition	X		
7	Dikes in good condition			N/A
8	Odor non-existent or limited	X		
9	Grass mowed	X		
10	Duckweed/Algae acceptable			N/A
11	Grease build-up acceptable	X		
12	Plant free of debris	X		Manual bar screen
13	Effluent Color acceptable	X		Clear and good flow
14	Lift Stations present			N/A
15	Failure Warning System adequate	X		
16	Electric Wiring adequate	X		
17	System free of leaks	X		
18	System free of overflows	X		
19	Access road adequate	X		
20	Ability for service area to expand	X		

Additional Comments: None

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ORS WASTEWATER SYSTEM INSPECTION REPORT

Inspection Overview

Date Inspected:	February 22, 2018
Inspector Name:	Matthew Schellinger, Willie Morgan
Docket Number:	2017-292-WS
Utility Name:	Carolina Water Service, Inc. – Friarsgate
Utility Representative:	Mac Mitchell
Number of Customers:	3093 customers
System Type (collection, force main, lagoon, etc):	Collection, /gravity flow
Location of System:	Irmo area
Location of Utility Office:	150 Foster Brothers Drive, West Columbia, SC
Treatment Type:	Biological Treatment using 2 plants – 1.20 MGD WWTF
Permit #:	SC0036137
Last SC DHEC Compliance Rating:	Unsatisfactory – June 20 – July 6, 2016
Frequency checked by WWTF Operator:	Daily
Drinking Water Provider:	City of Columbia

	System Components Inspected	Compliance		Comments
		Yes	No	
1	Chlorinator			N/A - UV Disinfection installed
2	Other chemicals in use			N/A
3	Aerators present	X		
4	Plant fenced and locked	X		
5	Warning Signs Visible	X		
6	Fence in good condition	X		
7	Dikes in good condition	X		
8	Odor non-existent or limited	X		
9	Grass mowed	X		
10	Duckweed/Algae acceptable	X		
11	Grease build-up acceptable	X		
12	Plant free of debris	X		
13	Effluent Color acceptable	X		
14	Lift Stations present	X		
15	Failure Warning System adequate	X		
16	Electric Wiring adequate	X		
17	System free of leaks	X		
18	System free of overflows	X		
19	Access road adequate	X		
20	Ability for service area to expand	X		

Additional Comments: Effluent discharges via pumping system through a force main to the discharge point in the Saluda River. 300 KW generator onsite to provide backup power. Temporary equalization basin set up, relining of original equalization basin still in progress as of the site visit.

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ORS WASTEWATER SYSTEM INSPECTION REPORT

Inspection Overview

Date Inspected:	February 22, 2018
Inspector Name:	Matthew Schellinger
Docket Number:	2017-292-WS
Utility Name:	Carolina Water Service, Inc. – Stonegate
Utility Representative:	Mac Mitchell
Number of Customers:	137 customers
System Type (collection, force main, lagoon, etc):	Collection, forced main
Location of System:	Chapin area
Location of Utility Office:	150 Foster Brothers Drive, West Columbia, SC
Treatment Type:	None – discharge to Richland County
Permit #:	SSS000753
Last SC DHEC Compliance Rating:	No information provided
Frequency checked by WWTF Operator:	No information provided
Drinking Water Provider:	Carolina Water Service, Inc.

	System Components Inspected	Compliance		Comments
		Yes	No	
1	Chlorinator			None
2	Other chemicals in use			None
3	Aerators present			None
4	Plant fenced and locked	X		
5	Warning Signs Visible	X		
6	Fence in good condition	X		
7	Dikes in good condition			N/A
8	Odor non-existent or limited	X		
9	Grass mowed	X		
10	Duckweed/Algae acceptable			None
11	Grease build-up acceptable			None
12	Plant free of debris	X		
13	Effluent Color acceptable			N/A
14	Lift Stations present	X		
15	Failure Warning System adequate	X		
16	Electric Wiring adequate	X		
17	System free of leaks	X		
18	System free of overflows	X		
19	Access road adequate	X		
20	Ability for service area to expand	**X**		

Additional Comments: None

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ORS WASTEWATER SYSTEM INSPECTION REPORT

Inspection Overview

Date Inspected:	February 22, 2018
Inspector Name:	Matthew Schellinger
Docket Number:	2017-292-WS
Utility Name:	Carolina Water Service, Inc. – Forty Love
Utility Representative:	Mac Mitchell
Number of Customers:	135 customers
System Type (collection, force main, lagoon, etc):	Collection, forced main
Location of System:	Chapin area
Location of Utility Office:	150 Foster Brothers Drive, West Columbia, SC
Treatment Type:	None – discharge to Richland County
Permit #:	SSS000754
Last SC DHEC Compliance Rating:	No information provided
Frequency checked by WWTF Operator:	No information provided
Drinking Water Provider:	Carolina Water Service, Inc.

	System Components Inspected	Compliance		Comments
		Yes	No	
1	Chlorinator			None
2	Other chemicals in use			None
3	Aerators present			None
4	Plant fenced and locked	X		
5	Warning Signs Visible	X		
6	Fence in good condition	X		
7	Dikes in good condition			N/A
8	Odor non-existent or limited	X		
9	Grass mowed	X		
10	Duckweed/Algae acceptable			None
11	Grease build-up acceptable			None
12	Plant free of debris	X		
13	Effluent Color acceptable			N/A
14	Lift Stations present	X		
15	Failure Warning System adequate	X		
16	Electric Wiring adequate	X		
17	System free of leaks	X		
18	System free of overflows	X		
19	Access road adequate	X		
20	Ability for service area to expand	X		

Additional Comments: None

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ORS WASTEWATER SYSTEM INSPECTION REPORT

Inspection Overview

Date Inspected:	February 23, 2018
Inspector Name:	Matthew Schellinger, Willie Morgan
Docket Number:	2017-292-WS
Utility Name:	Carolina Water Service, Inc. – Palmetto Apartments
Utility Representative:	Mac Mitchell
Number of Customers:	50 customers
System Type (collection, force main, lagoon, etc):	Collection – BJWSA Treats
Location of System:	Beaufort County
Location of Utility Office:	150 Foster Brothers Drive, West Columbia, SC
Treatment Type:	None – discharge to BJWSA
Permit #:	SSS000820
Last SC DHEC Compliance Rating:	No information provided
Frequency checked by WWTF Operator:	No information provided
Drinking Water Provider:	Carolina Water Service, Inc.

	System Components Inspected	Compliance		Comments
		Yes	No	
1	Chlorinator			None
2	Other chemicals in use			None
3	Aerators present			None
4	Plant fenced and locked	X		
5	Warning Signs Visible	X		
6	Fence in good condition	X		
7	Dikes in good condition			N/A
8	Odor non-existent or limited	X		
9	Grass mowed	X		
10	Duckweed/Algae acceptable			None
11	Grease build-up acceptable			None
12	Plant free of debris	X		
13	Effluent Color acceptable			N/A
14	Lift Stations present			N/A
15	Failure Warning System adequate	X		
16	Electric Wiring adequate	X		
17	System free of leaks	X		
18	System free of overflows	X		
19	Access road adequate	X		
20	Ability for service area to expand	X		

Additional Comments: None

Office of Regulatory Staff
Revenue Impact Analysis
Carolina Water Service, Inc.
Docket No. 2017-292-WS

ORS Calculated Revenue Summary - CWS (Service Territory #1 and Service Territory #2)				
A	B	C	D	E
Operating Revenue	**ORS Calculated Test Year Revenue**	**Additional Revenue at Proposed Rates**	**ORS Calculated Revenue at Proposed Rates**	**% Increase**
Service Territory 1 - Well Water	$840,119	$125,357	$965,476	14.92%
Service Territory 1 - Purchased Water	$4,958,863	$1,250,695	$6,209,558	25.22%
Service Territory 1 - Water - Misc. Revenue	$116,768	$5,679	$122,447	4.86%
Total Service Territory 1 Water	**$5,915,750**	**$1,381,731**	**$7,297,481**	**23.36%**
Service Territory 2 - Well Water	$3,447,209	$624,893	$4,072,102	18.13%
Service Territory 2 - Purchased Water	$1,550,886	$393,476	$1,944,362	25.37%
Service Territory 2 - Water - Misc. Revenue	$117,867	$8,203	$126,070	6.96%
Total Service Territory 2 Water	**$5,115,962**	**$1,026,572**	**$6,142,534**	**20.07%**
Service Territory 1 & 2 - Sewer	$8,941,655	$2,292,098	$11,233,753	25.63%
Service Territory 1 & 2 - Sewer - Misc. Revenue	$262,560	$21,694	$284,254	8.26%
Total Service Revenue Sewer	**$9,204,215**	**$2,313,792**	**$11,518,007**	**25.14%**
Total Water and Sewer Service Revenues	**$20,235,927**	**$4,722,095**	**$24,958,022**	**23.34%**

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Office of Regulatory Staff
Revenue Impact Analysis
Carolina Water Service, Inc.
Docket No. 2017-292-WS

ORS Pro-Forma Test Year Revenue at Current Rates - Service Territory 1

A	B	C	D	E	F	G
	Customer Classification	**Consumption in Gallons [1]**	**Usage Charge per 1,000 gallons**	**Annualized Service Units [1]**	**Base Facility Charge (BFC)**	**Test Year Revenues (C*D/1000) + (E*F)**
WATER						
	400PWCOM - 1" Purchase Water Commercial	850,740	$6.67	72	$38.10	$8,418
	400PWCOM - 1.5" Purchase Water Commercial	18,100	$6.67	12	$76.21	$1,035
	400PWCOM - 2" Purchase Water Commercial	7,066,100	$6.67	108	$121.93	$60,299
	400PWCOM - 3" Purchase Water Commercial	1,242,100	$6.67	12	$228.63	$11,028
	400PWCOM - 3/4" Purchase Water Commercial	0	$6.67	12	$14.64	$176
	400PWCOM - 5/8" Purchase Water Commercial	2,086,560	$6.67	288	$14.64	$18,134
	400PWCRH - 1" Purchase Water Commercial - Riverhills	5,629,128	$6.67	432	$38.10	$54,005
	400PWCRH - 1.5" Purchase Water Commercial - Riverhills	10,957,130	$6.67	312	$76.21	$96,862
	400PWCRH - 2" Purchase Water Commercial - Riverhills	25,221,428	$6.67	432	$121.93	$220,901
	400PWCRH - 3" Purchase Water Commercial - Riverhills	3,736,632	$6.67	72	$228.63	$41,385
	400PWCRH - 3/4" Purchase Water Commercial - Riverhills	5,096,240	$6.67	120	$14.64	$35,749
	400PWCRH - 4" Purchase Water Commercial - Riverhills	1,891,870	$6.67	24	$381.16	$21,767
	400PWCRH - 5/8" Purchase Water Commercial - Riverhills	7,774,151	$6.67	1,272	$14.64	$70,476
	400PWCRH - 8" Purchase Water Commercial - Riverhills	586,181	$6.67	12	$1,171.21	$17,964
	400PWRES - 1" Purchase Water Residential	4,206,540	$6.67	1,068	$14.64	$43,693
	400PWRES - 1.5" Purchase Water Residential	1,523,275	$6.67	660	$14.64	$19,823
	400PWRES - 2" Purchase Water Residential	7,775,242	$6.67	1,812	$14.64	$78,389
	400PWRES - 3/4" Purchase Water Residential	122,040	$6.67	12	$14.64	$990
	400PWRES - 4" Purchase Water Residential	220,000	$6.67	192	$14.64	$4,278
	400PWRES - 5/8" Purchase Water Residential [1]	182,773,923	$6.67	36,216	$14.64	$1,749,304
	400PWRRH - Purchase Water Res - RH (All Meter Sizes)	245,189,151	$6.67	52,512	$14.64	$2,404,187
	400WCOM - 1" Commercial	10,180	$5.69	12	$38.10	$515
	400WCOM - 5/8" Commercial	760,332	$5.69	72	$14.64	$5,380
	400WRES - Water Residential (All Meter Sizes)	85,535,594	$5.69	18,624	$14.64	$759,353
	402WRES - Water Residential (All Meter Sizes)	7,940,489	$5.69	2,028	$14.64	$74,871
	Water Service Total	**608,213,126**		**116,388**		**$5,798,982**
	Miscellaneous Revenues - Late Fees					$23,933
	New Customer Charges					$29,911
	Miscellaneous Service Revenue					-$112
	NSF Check & Reconnect Fee					$42,150
	Miscellaneous Revenues - Other [3]					$20,886
	Total Miscellaneous Revenues [2]					**$116,768**
	Total Operating Revenues					**$5,915,750**

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Office of Regulatory Staff
Revenue Impact Analysis
Carolina Water Service, Inc.
Docket No. 2017-292-WS

ORS Calculated Proposed Revenue at Company Proposed Rates - Service Territory 1

A	B	C	D	E	F	G	H	I
	Customer Classification	**Consumption in Gallons [1]**	**Usage Charge per 1,000 gallons**	**Annualized Service Units [1]**	**Base Facility Charge (BFC)**	**Proposed Revenue**	**Increase Amount**	**% Increase**
WATER								
	400PWCOM - 1" Purchase Water Commercial	850,740	$8.66	72	$43.77	$10,519	$2,101	24.96%
	400PWCOM - 1.5" Purchase Water Commercial	18,100	$8.66	12	$87.54	$1,207	$172	16.62%
	400PWCOM - 2" Purchase Water Commercial	7,066,100	$8.66	108	$140.06	$76,319	$16,020	26.57%
	400PWCOM - 3" Purchase Water Commercial	1,242,100	$8.66	12	$262.63	$13,908	$2,880	26.12%
	400PWCOM - 3/4" Purchase Water Commercial	0	$8.66	12	$16.82	$202	$26	14.77%
	400PWCOM - 5/8" Purchase Water Commercial	2,086,560	$8.66	288	$16.82	$22,914	$4,780	26.36%
	400PWCRH - 1" Purchase Water Commercial - Riverhills	5,629,128	$8.66	432	$43.77	$67,657	$13,652	25.28%
	400PWCRH - 1.5" Purchase Water Commercial - Riverhills	10,957,130	$8.66	312	$87.54	$122,201	$25,339	26.16%
	400PWCRH - 2" Purchase Water Commercial - Riverhills	25,221,428	$8.66	432	$140.06	$278,923	$58,022	26.27%
	400PWCRH - 3" Purchase Water Commercial - Riverhills	3,736,632	$8.66	72	$262.63	$51,269	$9,884	23.88%
	400PWCRH - 3/4" Purchase Water Commercial - Riverhills	5,096,240	$8.66	120	$16.82	$46,152	$10,403	29.10%
	400PWCRH - 4" Purchase Water Commercial - Riverhills	1,891,870	$8.66	24	$437.84	$26,892	$5,125	23.54%
	400PWCRH - 5/8" Purchase Water Commercial - Riverhills	7,774,151	$8.66	1,272	$16.82	$88,719	$18,243	25.89%
	400PWCRH - 8" Purchase Water Commercial - Riverhills	586,181	$8.66	12	$1,345.36	$21,221	$3,257	18.13%
	400PWRES - 1" Purchase Water Residential	4,206,540	$8.66	1,068	$16.82	$54,392	$10,699	24.49%
	400PWRES - 1.5" Purchase Water Residential	1,523,275	$8.66	660	$16.82	$24,293	$4,470	22.55%
	400PWRES - 2" Purchase Water Residential	7,775,242	$8.66	1,812	$16.82	$97,811	$19,422	24.78%
	400PWRES - 3/4" Purchase Water Residential	122,040	$8.66	12	$16.82	$1,259	$269	27.17%
	400PWRES - 4" Purchase Water Residential	220,000	$8.66	192	$16.82	$5,135	$857	20.03%
	400PWRES - 5/8" Purchase Water Residential [1]	182,773,923	$8.66	36,216	$16.82	$2,191,975	$442,671	25.31%
	400PWRRH - Purchase Water Res - RH (All Meter Sizes)	245,189,151	$8.66	52,512	$16.82	$3,006,590	$602,403	25.06%
	400WCOM - 1" Commercial	10,180	$6.54	12	$43.77	$592	$77	14.95%
	400WCOM - 5/8" Commercial	760,332	$6.54	72	$16.82	$6,184	$804	14.94%
	400WRES - Water Residential (All Meter Sizes)	85,535,594	$6.54	18,624	$16.82	$872,658	$113,305	14.92%
	402WRES - Water Residential (All Meter Sizes)	7,940,489	$6.54	2,028	$16.82	$86,042	$11,171	14.92%
	Water Service Total	**608,213,126**		**116,388**		**$7,175,034**	**$1,376,052**	**23.73%**
	Miscellaneous Revenues - Late Fees [4]					$29,612	$5,679	23.73%
	New Customer Charges					$29,911	$0	0.00%
	Miscellaneous Service Revenue					-$112	$0	0.00%
	NSF Check & Reconnect Fee					$42,150	$0	0.00%
	Miscellaneous Revenues - Other [3]					$20,886	$0	0.00%
	Total Miscellaneous Revenues [2]					**$122,447**	**$5,679**	**4.86%**
	Total Operating Revenues					**$7,297,481**	**$1,381,731**	**23.36%**

Calculation Methodology:

(1) Consumption based on actual Test Year Billings, addition of 15,186,238 for falsified meter readings. Units based on Annualized end of Test Year Customer Count. Growth factor not included for comparison purposes.
(2) Customer Deposits and Interest on Deposits are not included in any of the above computations.
(3) "Miscellaneous Revenues - Other" has been increased to account for Home Serve revenues received by CWS, apportioned by customer count for each service territory.
(4) "Miscellaneous Revenues - Late Fees" are increased due to late payment fee increases resulting from the proposed rates requested by CWS.

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Office of Regulatory Staff
Revenue Impact Analysis
Carolina Water Service, Inc.
Docket No. 2017-292-WS

ORS Pro-Forma Test Year Revenue at Current Rates - Service Territory 2

A	B	C	D	E	F	G
	Customer Classification	**Consumption in Gallons [1]**	**Usage Charge per 1,000 gallons**	**Annualized Service Units [1]**	**Base Facility Charge (BFC)**	**Test Year Revenue (C*D/1000) + (E*F)**
WATER						
	401WCOM - 5/8" Commercial Water Service	93,790	$8.88	36	$24.72	$1,723
	401WCOM - 1" Commercial Water Service	29,250	$8.88	12	$68.81	$1,085
	401WCOM - 1.5" Commercial Water Service	240,600	$8.88	24	$126.45	$5,171
	401WCOM - 3" Commercial Water Service	38,100	$8.88	12	$431.52	$5,517
	401WRES - Water Residential (All Meter Sizes)	223,957,601	$8.88	55,452	$24.72	$3,359,517
	401PWRFW - Foxwood Purchased Water	10,155,689	$9.41	2,520	$24.72	$157,859
	401WRPUR - 1" Water Distribution and Purchased Water Charge	897,105	$9.41	48	$24.72	$9,628
	401WRPUR - 2" Water Distribution and Purchased Water Charge	8,976,895	$9.41	216	$24.72	$89,812
	401WRPUR - 3/4" Water Distribution and Purchased Water Charge	382,431	$9.41	12	$24.72	$3,895
	401WRPUR - 5/8" Water Distribution and Purchased Water Charge	84,189,851	$9.41	20,124	$24.72	$1,289,692
	403WRES - Water Residential (All Meter Sizes)	5,282,114	$8.88	1,104	$24.72	$74,196
	Water Service Total	**334,243,426**		**79,560**		**$4,998,095**
	Miscellaneous Revenues - Late Fees					$40,260
	New Customer Charges					$25,390
	Miscellaneous Service Revenue					$0
	NSF Check & Reconnect Fee					$47,310
	Miscellaneous Revenues - Other [3]					$4,907
	Total Miscellaneous Revenues [2]					**$117,867**
	Total Operating Revenues					**$5,115,962**

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Office of Regulatory Staff
Revenue Impact Analysis
Carolina Water Service, Inc.
Docket No. 2017-292-WS

ORS Calculated Proposed Revenue at Company Proposed Rates - Service Territory 2

A	B	C	D	E	F	G	H	I
	Customer Classification	**Consumption in Gallons [1]**	**Usage Charge per 1,000 gallons**	**Annualized Service Units [1]**	**Base Facility Charge (BFC)**	**Proposed Revenue**	**Increase Amount**	**% Increase**
WATER								
	401WCOM - 5/8" Commercial Water Service	93,790	$10.49	36	$29.20	$2,035	$312	18.11%
	401WCOM - 1" Commercial Water Service	29,250	$10.49	12	$81.28	$1,282	$197	18.16%
	401WCOM - 1.5" Commercial Water Service	240,600	$10.49	24	$149.36	$6,109	$938	18.14%
	401WCOM - 3" Commercial Water Service	38,100	$10.49	12	$509.70	$6,516	$999	18.11%
	401WRES - Water Residential (All Meter Sizes)	223,957,601	$10.49	55,452	$29.20	$3,968,514	$608,997	18.13%
	401PWRFW - Foxwood Purchased Water	10,155,689	$12.19	2,520	$29.20	$197,382	$39,523	25.04%
	401WRPUR - 1" Water Distribution and Purchased Water Charge	897,105	$12.19	48	$29.20	$12,337	$2,709	28.14%
	401WRPUR - 2" Water Distribution and Purchased Water Charge	8,976,895	$12.19	216	$29.20	$115,736	$25,924	28.86%
	401WRPUR - 3/4" Water Distribution and Purchased Water Charge	382,431	$12.19	12	$29.20	$5,012	$1,117	28.68%
	401WRPUR - 5/8" Water Distribution and Purchased Water Charge	84,189,851	$12.19	20,124	$29.20	$1,613,895	$324,203	25.14%
	403WRES - Water Residential (All Meter Sizes)	5,282,114	$10.49	1,104	$29.20	$87,646	$13,450	18.13%
	Water Service Total	**334,243,426**		**79,560**		**$6,016,464**	**$1,018,369**	**20.38%**
	Miscellaneous Revenues - Late Fees [4]					$48,463	$8,203	20.38%
	New Customer Charges					$25,390	$0	0.00%
	Miscellaneous Service Revenue					$0	$0	-
	NSF Check & Reconnect Fee					$47,310	$0	0.00%
	Miscellaneous Revenues - Other [3]					$4,907	$0	0.00%
	Total Miscellaneous Revenues [2]					**$126,070**	**$8,203**	**6.96%**
	Total Operating Revenues					**$6,142,534**	**$1,026,572**	**20.07%**

Calculation Methodology:

(1) Consumption and Units reflected as reported during test year. Growth factor not included for comparison purposes.
(2) Customer Deposits and Interest on Deposits are not included in any of the above computations.
(3) "Miscellaneous Revenues - Other" has been increased to account for Home Serve revenues received by CWS, apportioned by customer count for each service territory.
(4) "Miscellaneous Revenues - Late Fees" are increased due to late payment fee increases resulting from the proposed rates requested by CWS.

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Office of Regulatory Staff
Revenue Impact Analysis
Carolina Water Service, Inc.
Docket No. 2017-292-WS

ORS Pro-Forma Test Year Revenue at Current Rates - Service Territory 1 & 2

A	B	C	D	E
	Customer Classification	**Annualized Service Units [1]**	**Base Facility Charge (BFC)**	**Test Year Revenues**
SEWER				
	400WWCOM - WW Commercial (All Meter Sizes)	2,628	$57.58	$151,320
	400WWCRH - Commercial WW Treatment - RH (All Meter Sizes)	16,836	$52.93	$891,129
	400WWRCP - Residential WW Service (All Meter Sizes)	4,920	$52.93	$260,416
	400WWRES - WW Residential (All Meter Sizes)	72,540	$57.58	$4,176,853
	400WWRBJ - Residential WW Service (All Meter Sizes)	1,068	$52.93	$56,529
	400WWRRH - Residential WW Treatment - YC (All Meter Sizes)	47,076	$52.93	$2,491,733
	400WWRTC - Town of Chapin Purchase WW Res (All Meter Sizes)	1,068	$52.93	$56,529
	400WWTRL - WW Trailer Residential (All Meter Sizes)	36	$42.01	$1,512
	400WWTRT - Van Arsdale WW Treatment (All Meter Sizes) [5]	0	$26.66	$0
	400WWCCP - Commercial Wastewater Service (Richland County)	24	$52.93	$1,270
	400WWRHT - Riverhills WW Treatment (All Meter Sizes)	108	$52.93	$5,716
	401WWRES - Residential WW Service (All Meter Sizes)	4,272	$57.58	$245,982
	401WWCOM - Commercial WW Treatment - (All Meter Sizes)	192	$57.58	$11,055
	403WWRES - Residential WW Service (All Meter Sizes)	6,864	$57.58	$395,229
	403WWMOB - Mobile Home Wastewater Service	1,860	$42.01	$78,139
	403WWVLG - Wastewater Residential Collection Charge	3,948	$29.95	$118,243
	Sewer Service Total	**163,440**		**$8,941,655**
	Miscellaneous Revenues - Late Fees			$84,632
	New Customer Charges			$41,897
	Miscellaneous Service Revenue			$115,560
	NSF Check & Reconnect Fee			$10,080
	Miscellaneous Revenues - Other [3]			$10,391
	Total Miscellaneous Revenues [2]			**$262,560**
	Total Operating Revenues			**$9,204,215**

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Office of Regulatory Staff
Revenue Impact Analysis
Carolina Water Service, Inc.
Docket No. 2017-292-WS

ORS Calculated Revenue at Company Proposed Rates - Service Territory 1 and 2

A	B	C	D	E	F	G
	Customer Classification	**Annualized Service Units [1]**	**Base Facility Charge (BFC)**	**Proposed Revenue**	**Increase Amount**	**% Increase**
SEWER						
	400WWCOM - WW Commercial (All Meter Sizes)	2,628	$69.76	$183,329	$32,009	21%
	400WWCRH - Commercial WW Treatment - RH (All Meter Sizes)	16,836	$69.76	$1,174,479	$283,350	32%
	400WWRCP - Residential WW Service (All Meter Sizes)	4,920	$69.76	$343,219	$82,803	32%
	400WWRES - WW Residential (All Meter Sizes)	72,540	$69.76	$5,060,390	$883,537	21%
	400WWRBJ - Residential WW Service (All Meter Sizes)	1,068	$69.76	$74,504	$17,975	32%
	400WWRRH - Residential WW Treatment - YC (All Meter Sizes)	47,076	$69.76	$3,284,022	$792,289	32%
	400WWRTC - Town of Chapin Purchase WW Res (All Meter Sizes)	1,068	$69.76	$74,504	$17,975	32%
	400WWTRL - WW Trailer Residential (All Meter Sizes)	36	$50.92	$1,833	$321	21%
	400WWTRT - Van Arsdale WW Treatment (All Meter Sizes) [5]	0	$32.31	$0	$0	0%
	400WWCCP - Commercial Wastewater Service (Richland County)	24	$69.76	$1,674	$404	32%
	400WWRHT - Riverhills WW Treatment (All Meter Sizes)	108	$69.76	$7,534	$1,818	32%
	401WWRES - Residential WW Service (All Meter Sizes)	4,272	$69.76	$298,015	$52,033	21%
	401WWCOM - Commercial WW Treatment - (All Meter Sizes)	192	$69.76	$13,394	$2,339	21%
	403WWRES - Residential WW Service (All Meter Sizes)	6,864	$69.76	$478,833	$83,604	21%
	403WWMOB - Mobile Home Wastewater Service	1,860	$50.92	$94,711	$16,572	21%
	403WWVLG - Wastewater Residential Collection Charge	3,948	$36.30	$143,312	$25,069	21%
	Sewer Service Total	**163,440**		**$11,233,753**	**$2,292,098**	**26%**
	Miscellaneous Revenues - Late Fees [4]			$106,326	$21,694	26%
	New Customer Charges			$41,897	$0	0%
	Miscellaneous Service Revenue			$115,560	$0	0%
	NSF Check & Reconnect Fee			$10,080	$0	0%
	Miscellaneous Revenue - Other [3]			$10,391	$0	0%
	Total Miscellaneous Revenues [2]			**$284,254**	**$21,694**	**8%**
	Total Operating Revenues			**$11,518,007**	**$2,313,792**	**25%**

Calculation Methodology:

(1) Consumption and Units reflected as reported during test year. Growth factor not included for comparison purposes.
(2) Customer Deposits and Interest on Deposits are not included in any of the above computations.
(3) "Miscellaneous Revenues - Other" has been increased to account for Home Serve revenues received by CWS, apportioned by customer count for each service territory.
(4) "Miscellaneous Revenues - Late Fees" are increased due to late payment fee increases resulting from the proposed rates requested by CWS.
(5) Van Arsdale community will now be serviced by Lexington County after the transfer of the I-20 Sewer System.

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Office of Regulatory Staff
Miscellaneous Revenue
Carolina Water Service, Inc.
Docket No. 2017-292-WS

Per Books					
	ST1	ST2	ST1&2	Total	
	W	W	S		
Miscellaneous Revenues - Late Fees	$ 23,933	$ 40,260	$ 84,632	$ 148,825	
New Customer Charges	$ 29,911	$ 25,390	$ 41,897	$ 97,198	
Miscellaneous Service Revenue	$ (112)	$ -	$ 115,560	$ 115,448	
NSF Check & Reconnect Fee	$ 42,150	$ 47,310	$ 10,080	$ 99,540	
Miscellaneous Revenues - Other	$ 13,651	$ (40)	$ 260	$ 13,871	
Total Miscellaneous Revenues	**$ 109,533**	**$ 112,920**	**$ 252,429**	**$ 474,882**	
Pro Forma					
	ST1	ST2	ST1&2	Total	Adjustment
	W	W	S		
Miscellaneous Revenues - Late Fees	$ 23,933	$ 40,260	$ 84,632	$ 148,825	$ -
New Customer Charges	$ 29,911	$ 25,390	$ 41,897	$ 97,198	$ -
Miscellaneous Service Revenue	$ (112)	$ -	$ 115,560	$ 115,448	$ -
NSF Check & Reconnect Fee	$ 42,150	$ 47,310	$ 10,080	$ 99,540	$ -
Miscellaneous Revenues - Other	$ 20,886	$ 4,907	$ 10,391	$ 36,184	$ 22,313
Total Miscellaneous Revenues	**$ 116,767**	**$ 117,866**	**$ 262,559**	**$ 497,195**	**$ 22,313**
After Proposed					
	ST1	ST2	ST1&2	Total	Adjustment
	W	W	S		
Miscellaneous Revenues - Late Fees	$ 29,612	$ 48,463	$ 106,326	$ 184,401	$ 35,576
New Customer Charges	$ 29,911	$ 25,390	$ 41,897	$ 97,198	$ -
Miscellaneous Service Revenue	$ (112)	$ -	$ 115,560	$ 115,448	$ -
NSF Check & Reconnect Fee	$ 42,150	$ 47,310	$ 10,080	$ 99,540	$ -
Miscellaneous Revenues - Other	$ 20,886	$ 4,907	$ 10,391	$ 36,184	$ -
Total Miscellaneous Revenues	**$ 122,447**	**$ 126,069**	**$ 284,254**	**$ 532,771**	**$ 35,576**

Source: ORS Rates Request #4 - Misc. Revenue Response
Source: ORS AIR 1.50 - Home Serve - $22,313 allocated to W/WW Service Territory 1 and 2

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EXHIBIT MPS-4

Office of Regulatory Staff
Customer Growth
Carolina Water Service, Inc.
Docket No. 2017-292-WS

Customer Growth Date	Service Territory 1 Water # of Customers	Service Territory 2 Water # of Customers	Service Territory 1 & 2 Sewer # of Customers	Consolidated # of Customers
8/31/2016	9,396	6,573	13,279	29,248
8/31/2017	9,695	6,628	13,575	29,898
Average	9,546	6,601	13,427	29,573
Growth Factor	1.5662%	0.4166%	1.1023%	1.0990%

Source: ORS Rates Request#8 - Cust. Growth Tabs
Source: ORS Rates Request#7 - I-20 Sewer Customer Counts

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Office of Regulatory Staff

Exhibit MPS-5

Schedule of Proposed Rates and Charges

Carolina Water Service, Inc.

Docket No. 2017-292-WS

WATER

Service Territory 1

Monthly Charges - Water Supply Customers Only

Where water is supplied by wells owned and operated by the Utility, the following rates apply:

	Current	Proposed
Residential		
Base Facilities Charge per single-family house, condominium, mobile home, or apartment unit	$ 14.64 per unit	$ 16.82 per unit
Residential Commodity Charge	$ 5.69 per 1,000 gal. or 134 cft.	$ 6.54 per 1,000 gal. or 134 cft.
Commercial		
Base Facilities Charge by meter size		
5/8" meter *	$ 14.64 per unit	$ 16.82 per unit
3/4" meter	$ 14.64 per unit	$ 16.82 per unit
1" meter	$ 38.10 per unit	$ 43.77 per unit
1.5" meter	$ 76.21 per unit	$ 87.54 per unit
2" meter	$ 121.93 per unit	$ 140.06 per unit
3" meter	$ 228.63 per unit	$ 262.63 per unit
4" meter	$ 381.16 per unit	$ 437.84 per unit
8" meter	$1,171.21 per unit	$1,345.36 per unit
Commercial Commodity Charge	$ 5.69 per 1,000 gal or 134 cft.	$ 6.54 per 1,000 gal. or 134 cft.

Monthly Charges - Water Distribution Customers Only

Where water is purchased from a governmental body or agency or other entity for distribution and resale by the Utility, the following rates apply:

Residential		
Base Facilities Charge per single-family house, condominium, mobile home, or apartment unit	$14.64 per unit	$16.82 per unit
Residential Commodity Charge	$ 6.67 per 1,000 gal. or 134 cft.	$ 8.66 per 1,000 gal. or 134 cft.

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Office of Regulatory Staff

Exhibit MPS-5

Schedule of Proposed Rates and Charges

Carolina Water Service, Inc.

Docket No. 2017-292-WS

	Current	Proposed
Commercial		
Base Facilities Charge by meter size		
5/8" meter *	$ 14.64 per unit	$ 16.82 per unit
3/4" meter	$ 14.64 per unit	$ 16.82 per unit
1" meter	$ 38.10 per unit	$ 43.77 per unit
1.5" meter	$ 76.21 per unit	$ 87.54 per unit
2" meter	$ 121.93 per unit	$ 140.06 per unit
3" meter	$ 228.63 per unit	$ 262.63 per unit
4" meter	$ 381.16 per unit	$ 437.84 per unit
8" meter	$1,171.21 per unit	$1,345.36 per unit
Commercial Commodity Charge		
	$6.67 per 1,000 gal. or 134 cft.	$8.66 per 1,000 gal. or 134 cft/

***A "Fire Line" customer will be billed a monthly base facilities charge of a 5/8" meter or at the rate of any other meter size used as a detector.**

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Office of Regulatory Staff

Exhibit MPS-5

Schedule of Proposed Rates and Charges

Carolina Water Service, Inc.

Docket No. 2017-292-WS

Service Territory 2

Monthly Charges - Water Supply Customers

Where water is supplied by wells owned and operated by the Utility, the following rates apply:

	Current	Proposed
Residential		
Base Facilities Charge per single-family house, condominium, mobile home or apartment unit:	$24.72 per unit	$29.20 per unit
Residential Commodity Charge	$ 8.88 per 1,000 gal. or 134 cft.	$10.49 per 1,000 gal. or 134 cft.
Commercial		
Base Facilities Charge by meter size		
5/8" meter*	$ 24.72 per unit	$ 29.20 per unit
1" meter	$ 68.81 per unit	$ 81.28 per unit
1.5" meter	$ 126.45 per unit	$149.36 per unit
3" meter	$ 431.52 per unit	$509.70 per unit
Commercial Commodity Charge	$ 8.88 per 1,000 gal. or 134 cft.	$10.49 per 1,000 gal. or 134 cft.

Monthly Charges - Water Distribution Customers Only

Where water is purchased from a governmental body or agency or other entity for distribution and resale by the Utility, the following rates apply:

Residential		
Base Facilities Charge per single-family house, condominium, mobile home or apartment unit:	$ 24.72 per unit	$ 29.20 per unit
Residential Commodity Charge	$ 9.41 per 1,000 gal. or 134 cft.	$ 12.19 per 1,000 gal. or 134 cft.
Commercial		
Base Facilities Charge by meter size:		
5/8" meter *	$ 24.72 per unit	$ 29.20 per unit
1" meter	$ 68.81 per unit	$ 81.28 per unit
1.5" meter	$ 126.45 per unit	$149.36 per unit
3" meter	$ 431.52 per unit	$509.70 per unit
Commercial Commodity Charge	$ 9.41 per 1,000 gal. or 134 cft.	$ 12.19 per 1,000 gal. or 134 cft.

***A "Fire Line" customer will be billed a monthly base facilities charge of a 5/8" meter or at the rate of any other meter size used as a detector.**

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Office of Regulatory Staff
Schedule of Proposed Rates and Charges
Carolina Water Service, Inc.
Docket No. 2017-292-WS
WATER SERVICE
TERMS AND CONDITIONS
AND
NON-RECURRING CHARGES

1. Terms and Conditions

A. Where the Utility is required by regulatory authority with jurisdiction over the Utility to interconnect to the water supply system of a government body or agency or other entity and tap/connection/impact fees are imposed by that entity, such tap/connection/impact fees will also be charged to the Utility's affected customers on a pro rata basis, without markup.

B. Commercial customers are those not included in the residential category above and include, but are not limited to, hotels, stores, restaurants, offices, industry, etc.

C. The Utility will, for the convenience of the owner, bill a tenant in a multi-unit building, consisting of four or more residential units (or in such other circumstances as the law may allow from time to time), which is served by a master water meter or a single water connection. However, in such cases all arrearages must be satisfied before service will be provided to a new tenant or before interrupted service will be restored. Failure of an owner to pay for services rendered to a tenant in these circumstances may result in service interruptions.

D. When, because of the method of water line installation utilized by the developer or owner, it is impractical to meter each unit separately, service will be provided through a single meter, and consumption of all units will be averaged; a bill will be calculated based on that average and the result multiplied by the number of units served by a single meter.

E. Billing Cycle

Recurring charges will be billed monthly in arrears. Nonrecurring charges will be billed and collected in advance of service being provided.

F. Extension of Utility Service Lines and Mains

The Utility shall have no obligation at its expense to extend its utility service lines or mains in order to permit any customer to connect to its water system. However, anyone or entity which is willing to pay all costs associated with extending an appropriately sized and constructed main or utility service line from his/her/its premises to any appropriate connection point, and pay the appropriate fees and charges as set forth in this rate schedule, and comply with the guidelines and standards hereof, shall not be denied service unless water supply is unavailable or unless the South Carolina Department of Health and Environmental Control or other government entity has for any reason restricted the Utility from adding additional customers to the serving water system. In no event will the Utility be required to construct additional water supply capacity to serve any customer or entity without an agreement acceptable to the Utility first having been reached for the payment of all costs associated with adding water supply capacity to the affected water system.

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G. Cross-Connection Inspection

Any customer installing, permitting to be installed, or maintain any cross connection between the Utilities water system and any other non-public water system, sewer, or a line from any container of liquids or other substances, must install an approved back-flow prevention device in accordance with 24A S.C. Code Ann. Regs. R.61-58.7.F.2, as may be amended for time to time. Such a customer shall have such cross connection inspected by a licensed certified tester and provide to Utility a copy of written inspection report indicating the back-flow device is functioning properly and testing results submitted by the tester in accordance with 24A S.C. Code Ann. Regs. R.61-58.7.F.2, as may be amended from time to time. Said report and results must be provided by the customer to the Utility no later June 30th of each year for required commercial customers and no later than June 30th of every other year for required residential customers. Should a customer subject to these requirements fail to timely provide such report and results, Utility may arrange for inspection and testing by a licensed certified tester and add the charges incurred by the Utility in that regard to the customer's next bill. If after inspection and testing by the Utility's certified tester, the back-flow device fails to function properly, the customer will be notified and given a 30 day period in which to have the back-flow device repaired or replaced with a subsequent follow-up inspection by a licensed certified tester indicating the back-flow device is functioning properly. Failure to submit a report indicating the back-flow device is functioning properly will result in discontinuation of water service to said customer until such time as a passing inspection report is received by Utility.

H. A Single Family Equivalent (SFE) shall be determined by using the South Carolina Department of Health and Environmental Control Guidelines for Unit Contributory Loadings for Domestic Wastewater Treatment Facilities -- 6 S.C. Code Ann. Regs. 61-67 Appendix A, as may be amended from time to time. Where applicable, such guidelines shall be used for determination of the appropriate monthly service and tap fee. The Company shall have the right to request and receive water usage records from the water provider to its customers. In addition, the Company shall have the right to conduct an inspection of the customer's premises. If it is determined that actual flows or loadings are greater than the design flows or loadings, then the Company shall recalculate the customer's equivalency rating based on actual flows or loadings and thereafter bill for its services in accordance with such recalculated loadings.

I. The liability of the Company, its agents and employees for damages arising out of interruption of service or the failure to furnish service, whether caused by acts or omission, shall be limited to those remedies provided in the Public Service Commission's rules and regulations governing water utilities.

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2. <u>Non-Recurring Charges</u>

A. Water Service Connection (New connections only) - $300 per SFE

B. Plant Impact Fee (New connections only) - $400 per SFE

The Plant Capacity Fee reflects the portion of plant capacity which will be used to provide service to the new customers as authorized by Commission Rule R. 103-702.13. The plant capacity fee represents the Utility's investment previously made (or planned to be made) in constructing water production, treatment and/or distribution facilities that are essential to provide adequate water service to the new customer's property.

C. Water Meter Installation - 5/8 inches x 3/4 inches meter $45.00

All 5/8 inch x 3/4 inch water meters shall meet the Utility's standards and shall be installed by the Utility. A one-time meter fee of $45 shall be due upon installation for those locations where no 5/8 inch x 3/4 inch meter has been provided by a developer to the Utility.

For the installation of all other meters, the customer shall be billed for the Utility's actual cost of installation. All such meters shall meet the Utility's standards and be installed by the Utility unless the Utility directs otherwise.

D. Customer Account Charge – (New customers only) $30.00

A one-time fee to defray the costs of initiating service.

E. Reconnection Charges: In addition to any other charges that may be due, in those cases where a customer's service has been disconnected for any reason as set forth in Commission Rule R.103-732.5, a reconnection fee shall be due in the amount of $40.00 and shall be due prior to the Utility reconnecting service.

F. Tampering Charge: In the event the Utility's equipment, water mains, water lines, meters, curb stops, service lines, valves or other facilities have been damaged or tampered with by a customer, the Utility may charge the customer responsible for the damage the actual cost of repairing the Utility's equipment, not to exceed $250. The tampering charge shall be paid in full prior to the Utility re-establishing service or continuing the provision of service.

Office of Regulatory Staff
Schedule of Proposed Rates and Charges
Carolina Water Service, Inc.
Docket No. 2017-292-WS
SEWER

Service Territory 1 and 2
(Former customers of Carolina Water Service, Inc., Utilities Services of SC, Inc. and United Utility Companies, Inc.)

Monthly Charges – Sewer Collection & Treatment Only

Where sewage collection and treatment are provided through facilities owned and operated by the Utility, the following rates apply:

	Current	Proposed
Residential - charge per single-family house, condominium, villa, or apartment unit:	$57.58 per unit	$69.76 per unit
Mobile Homes:	$42.01 per unit	$50.92 per unit
Commercial	$57.58 per SFE*	$69.76 per SFE*

Commercial customers are those not included in the residential category above and include, but are not limited to, hotels, stores, restaurants, offices, industry, etc.

Monthly charge – Sewer Collection Only

When sewage is collected by the Utility and transferred to a government body or agency, or other entity for treatment, the Utility's rates are as follows:

Residential – per single-family house, condominium, or apartment unit	$52.93 per unit	$69.76 per unit
Commercial	$52.93 per SFE*	$69.76 per SFE*
The Village Sewer Collection	$29.95 per SFE*	$36.30 per SFE*

***** Single Family Equivalent (SFE) shall be determined by using the South Carolina Department of Health and Environmental Control Guidelines for Unit Contributory Loadings for Domestic Wastewater Treatment Facilities -- 25 S.C. Code Ann. Regs. 61-67 Appendix A, as may be amended from time to time. Where applicable, such guidelines shall be used for determination of the appropriate monthly service and tap fee.

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Office of Regulatory Staff
Schedule of Proposed Rates and Charges
Carolina Water Service, Inc.
Docket No. 2017-292-WS

SEWER SERVICE
TERMS AND CONDITIONS
AND
NON-RECURRING CHARGES

1. Terms and Conditions

A. Where the Utility is required under the terms of a 201/208 Plan, or by other regulatory authority with jurisdiction over the Utility, to interconnect to the sewage treatment system of a government body or agency or other entity and tap/connection/impact fees are imposed by that entity, such tap/connection/impact fees will be charged to the Utility's affected customers on a pro rata basis, without markup.

B. The Utility will, for the convenience of the owner, bill a tenant in a multi-unit building, consisting of four or more residential units (or in such other circumstances as the law may allow from time to time), which is served by a master sewer meter or a single sewer connection. However, in such cases all arrearages must be satisfied before service will be provided to a new tenant or before interrupted service will be restored. Failure of an owner to pay for services rendered to a tenant in these circumstances may result in service interruptions.

C. Billing Cycle

Recurring charges will be billed monthly in arrears. Non-recurring charges will be billed and collected in advance of service being provided.

remove the word "not"

D. Toxic and Pretreatment Effluent Guidelines

The utility will not accept or treat any substance or material that has ~~not~~ been defined by the United States Environmental Protection Agency ("EPA") or the South Carolina Department of Health and Environmental Control ("DHEC") as a toxic pollutant, hazardous waste, or hazardous substance, including pollutants falling within the provisions of 40 CFR 129.4 and 401.15. Additionally, pollutants or pollutant properties subject to 40 CFR 403.5 and 403.6 are to be processed according to pretreatment standards applicable to such pollutants or pollutant properties, and such standards constitute the Utility's minimum pretreatment standards. Any person or entity introducing such prohibited or untreated materials into the Company's sewer system may have service interrupted without notice until such discharges cease, and shall be liable to the Utility for all damages and costs, including reasonable attorney's fees, incurred by the Utility as a result thereof.

E. Extension of Utility Service Lines and Mains

The Utility shall have no obligation at its expense to extend its utility service lines or mains in order to permit any customer to discharge acceptable wastewater into one of its sewer systems. However, anyone or entity which is willing to pay all costs associated with extending an appropriately sized and constructed main or utility service line from his/her/its premises to any appropriate connection point, and pay the appropriate fees and charges as set forth in this rate schedule, and comply with the guidelines and standards hereof, shall not be denied service unless sewer capacity is unavailable or unless the South Carolina Department of Health and Environmental Control or other government entity has

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for any reason restricted the Utility from adding additional customers to the serving sewer system.

In no event will the Utility be required to construct additional sewer treatment capacity to serve any customer or entity without an agreement acceptable to the Utility first having been reached for the payment of all costs associated with adding wastewater treatment capacity to the affected sewer system.

F. A Single Family Equivalent ("SFE") shall be determined by 6 S.C. Code Ann. Regs. 61-67 Appendix A, as may be amended from time to time. Where applicable, such guidelines shall be used for determination of the appropriate monthly service, plant impact fee and tap fee. The Company shall have the right to request and receive water usage records from the water provider to its customers. In addition, the Company shall have the right to conduct an inspection of the customer's premises. If it is determined that actual flows or loadings are greater than the design flows or loadings, then the Company shall recalculate the customer's equivalency rating based on actual flows or loadings and thereafter bill for its services in accordance with such recalculated loadings.

G. The liability of the Company, its agents and employees for damages arising out of interruption of service or the failure to furnish service, whether caused by acts or omission, shall be limited to those remedies provided in the Public Service Commission's rules and regulations governing wastewater utilities.

2. **Solids Interceptor Tanks**

For all customers receiving sewage collection service through an approved solids interceptor tank, the following additional charges shall apply:

A. Pumping Charge
At such time as the Utility determines through its inspection that excessive solids have accumulated in the interceptor tank, the Utility will arrange for the pumping tank and will include $150.00 as a separate item in the next regular billing to the customer.

B. Pump Repair or Replacement Charge
If a separate pump is required to transport the customer's sewage from solids interceptor tank to the Utility's sewage collection system, the Utility will arrange to have this pump repaired or replaced as required and will include the cost of such repair or replacement as a separate item in the next regular billing to the customer and may be paid for over a one-year period.

C. Visual Inspection Port
In order for a customer who uses a solids interceptor tank to receive sewage service from the Utility or to continue to receive such service, the customer shall install at the customer's expense a visual inspection port which will allow for observation of the contents of the solids interceptor tank and extraction of test samples therefrom. Failure to provide such

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visual inspection port after timely notice of not less than thirty (30) days shall be just cause for interruption of service until a visual inspection port has been installed.

3. <u>Non-recurring Charges</u>

A. Sewer Service Connection (New connections only) $300 per SFE

B. Plant Capacity Fee (New connections only) $400 per SFE

The Plant Capacity Fee shall be computed by using South Carolina DHEC "Guide Lines for Unit Contributory Loadings to Wastewater Treatment Facilities" (1972) to determine the single family equivalency rating. The plant capacity fee represents the Utility's investment previously made (or planned to be made) in constructing treatment and/or collection system facilities that are essential to provide adequate treatment and disposal of the wastewater generated by the development of the new property.

The nonrecurring charges listed above are minimum charges and apply even if the equivalency rating of non-residential customer is less than one (1). If the equivalency rating of a non-residential customer is greater than one (1), then the proper charge may be obtained by multiplying the equivalency rating by the appropriate fee. These charges apply and are due at the time new service is applied for, or at the time connection to the sewer system is requested.

C. Notification Fee

A fee of $15.00 shall be charged to each customer per notice to whom the Utility mails the notice as required by Commission Rule R. 103-535.1 prior to service being discontinued. This fee assesses a portion of the clerical and mailing costs of such notices to the customers creating the cost.

D. Customer Account Charge - (New customers only) $30.00

A one-time fee to defray the costs of initiating service. This charge will be waived if the customer is also a water customer.

E. Reconnection Charges: In addition to any other charges that may be due, in those cases where a customer's service has been disconnected for any reason as set forth in Commission Rule R. 103-532.4 a reconnection fee in the amount of $500.00 shall be due at the time the customer reconnects service. Where an elder valve has been previously installed, a reconnection fee of $40.00 shall be charged.

F. Tampering Charge: In the event the Utility's equipment, sewage pipes, meters, curb stops, service lines, elder valves or other facilities have been damaged or tampered with by a customer, the Utility may charge the customer responsible for the damage the actual cost of repairing the Utility's equipment, not to exceed $250. The tampering charge shall be paid in full prior to the Utility re-establishing service or continuing the provision of service.

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Office of Regulatory Staff
High Bill Analysis - Water
Carolina Water Service, Inc.
Docket No. 2017-292-WS

Service Territory #1 Residential Water Customers

Rate description	Annual Water Consumption	Test Year Total	Average Monthly Bill	After Proposed Increase - Annual Total	Average Monthly Bill	Monthly Difference	% Increase
Residential I - Purchased	701,660	$ 4,855.75	$ 404.65	$ 6,280.22	$ 523.35	$ 118.71	29.34%
Residential I - Purchased	560,540	$ 3,914.48	$ 326.21	$ 5,057.71	$ 421.48	$ 95.27	29.21%
Residential I - Purchased	488,900	$ 3,436.64	$ 286.39	$ 4,437.10	$ 369.76	$ 83.37	29.11%
Residential I - Purchased	454,600	$ 3,207.86	$ 267.32	$ 4,139.96	$ 345.00	$ 77.67	29.06%
Residential I - Purchased	436,690	$ 3,088.40	$ 257.37	$ 3,984.81	$ 332.07	$ 74.70	29.02%
Residential I - Purchased	399,130	$ 2,837.88	$ 236.49	$ 3,659.43	$ 304.95	$ 68.46	28.95%
Residential I - Purchased	393,270	$ 2,798.79	$ 233.23	$ 3,608.67	$ 300.72	$ 67.49	28.94%
Residential I - Purchased	375,920	$ 2,683.07	$ 223.59	$ 3,458.36	$ 288.20	$ 64.61	28.90%
Residential I - Purchased	360,110	$ 2,577.61	$ 214.80	$ 3,321.40	$ 276.78	$ 61.98	28.86%
Residential I - Purchased	349,950	$ 2,509.85	$ 209.15	$ 3,233.39	$ 269.45	$ 60.30	28.83%

Service Territory #1 Commercial Water Customers

Rate description	Annual Water Consumption	Test Year Total	Average Monthly Bill	After Proposed Increase	Average Monthly Bill	Monthly Difference	% Increase
Commercial I - Purchased 3	4,358,230	$ 29,245.08	$ 2,437.09	$ 37,956.76	$ 3,163.06	$ 725.97	29.79%
Commercial I - Purchased 2	3,261,000	$ 23,214.02	$ 1,934.50	$ 29,930.47	$ 2,494.21	$ 559.70	28.93%
Commercial I - Purchased 2	3,228,458	$ 22,996.97	$ 1,916.41	$ 29,648.57	$ 2,470.71	$ 554.30	28.92%
Commercial I - Purchased 2	2,404,100	$ 17,498.50	$ 1,458.21	$ 22,507.23	$ 1,875.60	$ 417.39	28.62%
Commercial I - Purchased 8	586,181	$ 17,964.32	$ 1,497.03	$ 21,222.35	$ 1,768.53	$ 271.50	18.14%
Commercial I - Purchased 3	1,975,820	$ 15,922.32	$ 1,326.86	$ 20,267.86	$ 1,688.99	$ 362.13	27.29%
Commercial I - Purchased 4	1,556,360	$ 14,954.89	$ 1,246.24	$ 18,736.64	$ 1,561.39	$ 315.15	25.29%
Commercial I - Purchased 2	1,768,200	$ 13,257.04	$ 1,104.75	$ 16,998.48	$ 1,416.54	$ 311.79	28.22%
Commercial I - Purchased 2	1,559,900	$ 11,867.68	$ 988.97	$ 15,194.00	$ 1,266.17	$ 277.19	28.03%
Commercial I - Purchased 3	1,242,100	$ 11,028.41	$ 919.03	$ 13,911.71	$ 1,159.31	$ 240.28	26.14%

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Office of Regulatory Staff
High Bill Analysis - Water
Carolina Water Service, Inc.
Docket No. 2017-292-WS

Service Territory #2 Residential Water Customers

Rate description	Annual Water Consumption	Test Year Total	Average Monthly Bill	After Proposed Increase	Average Monthly Bill	Monthly Difference	% Increase
Residential II - Well	1,133,317	$ 10,356.90	$ 863.08	$ 12,237.64	$ 1,019.80	$ 156.73	18.16%
Residential II - Purchased	1,052,700	$ 10,202.60	$ 850.22	$ 13,186.40	$ 1,098.87	$ 248.65	29.25%
Residential II - Purchased	1,039,400	$ 10,077.45	$ 839.79	$ 13,024.23	$ 1,085.35	$ 245.57	29.24%
Residential II - Purchased	956,300	$ 9,295.47	$ 774.62	$ 12,010.95	$ 1,000.91	$ 226.29	29.21%
Residential II - Purchased	938,400	$ 9,127.04	$ 760.59	$ 11,792.69	$ 982.72	$ 222.14	29.21%
Residential II - Well	890,780	$ 8,203.95	$ 683.66	$ 9,693.69	$ 807.81	$ 124.14	18.16%
Residential II - Purchased	804,145	$ 7,863.70	$ 655.31	$ 10,155.66	$ 846.31	$ 191.00	29.15%
Residential II - Purchased	706,500	$ 6,944.86	$ 578.74	$ 8,965.04	$ 747.09	$ 168.35	29.09%
Residential II - Purchased	586,700	$ 5,817.54	$ 484.79	$ 7,504.27	$ 625.36	$ 140.56	28.99%
Residential II - Purchased	533,847	$ 5,320.19	$ 443.35	$ 6,859.81	$ 571.65	$ 128.30	28.94%

Service Territory #2 Commercial Water Customers

Rate description	Annual Water Consumption	Test Year Total	Average Monthly Bill	After Proposed Increase	Average Monthly Bill	Monthly Difference	% Increase
Commercial II - 3"	38,100	$ 5,516.50	$ 459.71	$ 6,516.08	$ 543.01	$ 83.30	18.12%
Commercial II - 1.5"	240,600	$ 3,653.13	$ 304.43	$ 4,315.96	$ 359.66	$ 55.24	18.14%
Commercial II - 1.5"	-	$ 1,517.38	$ 126.45	$ 1,792.33	$ 149.36	$ 22.91	18.12%
Commercial II - 5/8"	80,000	$ 1,303.52	$ 108.63	$ 1,539.88	$ 128.32	$ 19.70	18.13%
Commercial II - 1"	29,250	$ 1,085.42	$ 90.45	$ 1,282.13	$ 106.84	$ 16.39	18.12%

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Office of Regulatory Staff
High Bill Analysis - Water
Carolina Water Service, Inc.
Docket No. 2017-292-WS

Service Territory #1 and 2 Sewer Customers

Rate description	SFE Count	Test Year Total	Average Monthly Bill	After Proposed Increase	Average Monthly Bill	Monthly Difference	% Increase
400WWCOM	200	$ 138,192.00	$11,516.00	$ 167,424.00	$13,952.00	$ 2,436.00	21.15%
403WWVLG	108	$ 38,815.20	$ 3,234.60	$ 47,044.80	$ 3,920.40	$ 685.80	21.20%
400WWRES	80	$ 55,276.80	$ 4,606.40	$ 66,969.60	$ 5,580.80	$ 974.40	21.15%
400WWRES	72	$ 49,749.12	$ 4,145.76	$ 60,272.64	$ 5,022.72	$ 876.96	21.15%
403WWRES	32	$ 22,110.72	$ 1,842.56	$ 26,787.84	$ 2,232.32	$ 389.76	21.15%
400WWCOM	28	$ 19,346.88	$ 1,612.24	$ 23,439.36	$ 1,953.28	$ 341.04	21.15%
403WWRES	24	$ 16,583.04	$ 1,381.92	$ 20,090.88	$ 1,674.24	$ 292.32	21.15%
400WWCOM	24	$ 16,583.04	$ 1,381.92	$ 20,090.88	$ 1,674.24	$ 292.32	21.15%
400WWRBJ	23	$ 14,608.68	$ 1,217.39	$ 19,253.76	$ 1,604.48	$ 387.09	31.80%
400WWCOM	17	$ 11,746.32	$ 978.86	$ 14,231.04	$ 1,185.92	$ 207.06	21.15%

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EXHIBIT MPS-7

Office of Regulatory Staff

Palmetto Apartments Inflow and Infiltration Analysis

Carolina Water Service, Inc.

Docket No. 2017-292-WS

	Subdivision	Units	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17
A	Palmetto Apts	Residential	89.00	90.17	88.00	89.00	92.37	88.93	86.80	88.20	88.40	87.00	88.53	88.60
B	Monthly Rainfall - Beaufort SC	Inches	**6.39**	**14.73**	**0.09**	**3.60**	**4.98**	**0.84**	**1.01**	**3.79**	**5.96**	**6.94**	**5.40**	**8.18**
C	BJWSA Bill	Gallons	539,919	560,181	453,810	402,281	418,238	313,143	313,143	474,943	464,528	677,954	467,022	518,799
D	Billing Period	Days	33.00	30.00	31.00	30.00	30.00	32.00	28.00	31.00	30.00	31.00	30.00	31.00
E	Average Customer Usage	Avg Gal/SFE/Day	183.83	207.09	166.35	150.67	150.93	110.03	128.84	173.70	175.16	251.37	175.84	188.89
F	Contributory Loading Guidelines	Gal/SFE/Day	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00

DHEC Contributory Loading Guidelines Chapter 61-67 Appendix A requires wastewater facilities to be built with capacity to handle 300 Gallons per Single Family
The difference between Rows E and F above show the system is not sending waste to BJWSA out of line with the DHEC requirements for wastewater systems.

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