

STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH

CAROLINA WATER SERVICE, INC. OF NORTH CAROLINA  
DOCKET NO. W-354, SUB 356

TESTIMONY OF GINA Y. CASSELBERRY  
ON BEHALF OF THE PUBLIC STAFF

SEPTEMBER 19, 2017

1 Q. PLEASE STATE FOR THE RECORD YOUR NAME, BUSINESS  
2 ADDRESS, AND PRESENT POSITION.

3 A. My name is Gina Y. Casselberry. My business address is 430 North  
4 Salisbury Street, Dobbs Building, Raleigh, North Carolina. I am an  
5 Advanced Utilities Engineer with the Public Staff's Water, Sewer and  
6 Communications Division.

7

8 Q. BRIEFLY STATE YOUR QUALIFICATIONS AND EXPERIENCE  
9 RELATING TO YOUR PRESENT POSITION WITH THE PUBLIC  
10 STAFF.

11 A. I graduated from Michigan Technology University receiving a Bachelor  
12 of Science Degree in Civil Engineering. Prior to joining the Public Staff,  
13 I worked for McKim and Creed Engineers, PA, as a Project Engineer  
14 designing water and sewer systems. I have been with the Public Staff's  
15 Water Division since February, 1992. I have presented  
16 recommendations in rate increase proceedings, new franchise and

1 transfer proceedings, and other matters before the Commission for the  
2 past twenty-five years.

3 **Q. WHAT ARE YOUR DUTIES IN YOUR PRESENT POSITION?**

4 A. My duties with the Public Staff are to monitor the operations of  
5 regulated water and sewer utilities with regard to service and rates.  
6 Included in these duties are field investigations to review, evaluate, and  
7 recommend changes, when needed, in the design, construction, and  
8 operations of regulated water and sewer utilities; presentation of expert  
9 testimony in formal hearings; and presentation of information, data,  
10 and recommendations to the Commission.

11

12 **Q. PLEASE DESCRIBE THE SCOPE OF YOUR INVESTIGATION IN**  
13 **THIS CASE.**

14 A. On March 31, 2017, Carolina Water Service, Inc. of North Carolina  
15 (CWSNC or Company) filed an application with the Commission to  
16 increase its rates for providing water and sewer utility service in all of  
17 its service areas in North Carolina, except Corolla Light and Monteray  
18 Shores Service Area (CL/MS) and Elk River Development (Elk River).  
19 My investigation included review of customer complaints, contact with  
20 the Division of Water Resources (DWR), Water Quality and Public  
21 Water Supply, review of company records and analysis of revenues at  
22 existing and proposed rates. I have also assisted Public Staff  
23 Accountant Sonja Johnson in reviewing expenses and plant in service.

1

2 **Q. BRIEFLY DESCRIBE THE COMPANY'S APPLICATION IN THIS**  
3 **CASE.**

4 A. On August 17, 2016, the Commission approved the merger of  
5 Bradfield Farms Water Company (Bradfield Farms), Carolina Trace  
6 Utilities, Inc. (Carolina Trace), CWS Systems, Inc. (CWSS), Elk  
7 River, and Transylvania Utilities, Inc. (Transylvania), into CWSNC,  
8 which were all subsidiaries of Utilities, Inc.. This is the first general  
9 rate case filed by CWSNC since the Commission approved the  
10 merger. CWSNC is proposing four rate divisions: CWSNC Uniform  
11 Water, CWSNC Uniform Sewer, Bradfield Farms/Fairfield Harbour  
12 Water and Bradfield Farms/Fairfield Harbor Sewer. CL/MS and Elk  
13 River have separate rates and CWSNC is not proposing a rate  
14 change for either.

15

16 CWSNC is proposing uniform water rates for the former Clearwater  
17 systems, Treasure Cove, Register Place Estates/North Hills, Glen  
18 Arbor/North Bend and Forest Hills Subdivisions; and uniform water  
19 and sewer rates for the Fairfield Mountain Valley (a.k.a. Rumbling  
20 Bald) service area, Highland Shores Subdivision, Laurel Mountain  
21 Estates, the Fairfield Sapphire Valley service area, Carolina Trace,  
22 Connestee Falls Subdivision, and the Nags Head service area  
23 (sewer only). CWSNC is proposing a base facility charge, based on

1 meter size, for metered residential water and sewer customers in all  
2 of its service areas except CL/MS and Elk River. These base facility  
3 charges would also apply to CWSNC's purchased water and sewer  
4 systems. CWSNC is also requesting to increase the meter testing  
5 fee from \$19.95 to \$20.00, the new water customer charge from  
6 \$26.93 to \$27.00, the reconnection charge from \$26.93 to \$27.00,  
7 the new sewer customer fee from \$21.95 to \$27.00 and the charge  
8 for processing NSF checks from \$24.94 to \$25.00 for all its  
9 applicable service areas except CL/MS and Elk River.

10 **Q. PLEASE DESCRIBE CWSNC's SERVICE AREAS.**

11 A. CWSNC operates 92 water utility systems and 39 sewer utility  
12 systems, some of which serve multiple subdivisions. These water  
13 and sewer utility systems are spread throughout North Carolina.  
14 CWSNC serves primarily residential customers, but it does serve a  
15 limited number of retail and commercial customers. Casselberry  
16 Exhibit Nos. 1 and 2 list the water and sewer systems operated by  
17 CWSNC. As of the twelve month period ending December 31, 2016,  
18 CWSNC served 29,883 water customers and 20,020 wastewater  
19 customers, including Elk River and CL/MS. There are also 3,636  
20 water availability customers in the Carolina Forest, Woodrun, Linville  
21 Ridge, Sapphire Valley, Connetsee Falls, and Fairfield Harbour

1 service area, and 1,224 sewer availability customers in Sapphire  
2 Valley, Connestee Falls, and Fairfield Harbour.

3 **Q. WHAT ARE CWSNC'S PRESENT AND PROPOSED RATES?**

4 A. CWSNC's present and proposed rates for water and sewer utility  
5 service are shown in Casselberry Exhibit No. 3.

7 **Q. WHAT EFFECTS WOULD THE PROPOSED RATES HAVE ON  
8 RESIDENTIAL CUSTOMERS?**

9 A. Based on the average monthly usage in gallons shown, the average  
10 residential bills for a 5/8 inch meter would increase (decrease) as  
11 follows if the rates requested by CWSNC are approved:

12 **WATER OPERATIONS**

<u>Service Area</u>	<u>Average Usage</u>	<u>Existing</u>	<u>Proposed</u>	<u>Percentage</u>
Uniform Flat Rate		\$41.60	\$50.17	20.60%
Uniform Metered Rate	3,980	\$47.87	\$57.60	20.33%
Clearwater systems	3,980	\$34.18	\$57.60	68.52%
Treasure Cove	3,980	\$22.06	\$57.60	161.11%
Forest Hill	3,980	\$43.25	\$57.60	33.18%
Fairfield Mountain	3,980	\$47.49	\$57.60	21.29%
Sapphire Valley	3,980	\$56.39	\$57.60	2.15%
Connestee Falls	3,980	\$53.88	\$57.60	6.90%
Carolina Trace	3,980	\$34.19	\$35.75	4.56%
Carolina Forest	3,980	\$35.10	\$39.65	12.96%
High Vista Estates	3,980	\$35.34	\$39.89	12.87%
Riverpointe	3,980	\$47.47	\$52.02	9.59%
Whispering Pines	3,980	\$31.28	\$35.83	14.55%
White Oak/Lee Forest	3,980	\$35.34	\$39.89	12.87%
Winston Plantation	3,980	\$35.34	\$39.89	12.87%
Winston Pointe	3,980	\$35.34	\$39.89	12.87%
Woodrun	3,980	\$35.10	\$39.65	12.96%
Yorktown	3,980	\$42.34	\$46.89	10.75%
Zemosa Acres	3,980	\$43.37	\$47.92	10.49%
Fairfield Harbour	3,980	\$20.44	\$26.97	31.95%
Bradfield Farms	3,980	\$16.05	\$26.97	68.04%

34 **SEWER OPERATIONS**

<u>Service Area</u>	<u>Average Usage</u>	<u>Existing</u>	<u>Proposed</u>	<u>Percentage</u>
Uniform Flat Rate		\$52.55	\$ 60.22	14.60%
Sapphire Valley		\$35.52	\$ 60.22	69.54%
Nags Head		\$62.65	\$ 60.22	( 3.88%)

Connestee Falls		\$49.92	\$ 59.93	20.05%
Uniform Metered Sewer	3,417	\$52.31	\$ 59.93	14.57%
White Oak Plantation/Lee				
Forest/Winston Point	3,417	\$49.47	\$ 54.42	10.01%
Kings Grant	3,417	\$46.90	\$ 51.85	10.55%
College Park	3,417	\$53.40	\$ 58.35	9.27%
Mt. Carmel	3,417	\$54.19	\$ 65.73	21.30%
Fairfield Mountain	3,417	\$86.67	\$108.37	25.04%
Carolina Trace	3,417	\$64.04	\$ 59.93	( 6.42%)
Fairfield Harbour		\$37.89	\$ 42.83	13.04%
Bradfield Farms		\$26.56	\$ 42.83	61.26%
Bulk Sewer		\$25.20	\$ 41.83	65.99%

**Q. HAVE YOU REVIEWED THE OPERATIONAL STATUS OF THE WATER AND SEWER SYSTEMS WITH THE WATER QUALITY AND PUBLIC WATER SUPPLY SECTIONS OF THE DIVISION OF WATER RESOURCES (NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY)?**

**A.** Yes. I contacted all of the regional offices. None of the regional office personnel expressed any major concerns with the systems serving CWSNC customers or identified any major issues concerning water quality.

**Q. HAS THE PUBLIC STAFF RECEIVED ANY CUSTOMER COMPLAINTS AS A RESULT OF THE CUSTOMER NOTICES IN THIS PROCEEDING?**

**A.** Yes. The Public Staff received approximately 120 email messages or letters from CWSNC customers. The service areas represented are Abington (1), Belvedere (6), Bradfield Farms (3), Carolina Trace (63), Connestee Falls (19), Fairfield Mountain (1), Mt. Carmel (2), Mt. Mitchell (2), Sapphire Valley (7), Sugar Mountain (1),

1       Treasure Cove (5), Watauga Vista (1), Woodhaven (1), and from  
2       unspecified service areas (8). All of the customers objected to the  
3       magnitude of the increase. Many complaints received were  
4       concerning the corporate structure, rate of return, the notice to  
5       customers, and rate design. The Public Staff also received numerous  
6       complaints that pertained to rate comparisons between CWSNC's  
7       current and proposed rates and the rates of municipalities in North  
8       Carolina and other states. Hearings were held across the state for  
9       customer testimony, which voiced similar complaints.

### 11                   **Magnitude of the Rates and Other Concerns**

#### 13       Corporate Structure, Management and Rate of Return:

14       Utilities, Inc. is the parent company and sole owner of CWSNC,  
15       which consists of approximately 216 wells, 98 booster stations, 41  
16       wastewater treatment plants, 366 lift stations, 745 miles of water  
17       main, 305 miles of sewer main and other equipment such as meters,  
18       pumps, valves, blowers, diffusers, vehicles, office equipment, that  
19       are necessary to provide water and sewer service. CWSNC  
20       manages all operations and has two regional managers, seven area  
21       managers, 58 full-time operators, one part-time operator, and five  
22       field technicians. The Company manages and operates 92 water  
23       systems and 38 sewer systems in 38 counties across North Carolina

1 from Bear Paw Subdivision in Cherokee County to Corolla  
2 Light/Monteray Shores in Currituck County. CWSNC's total  
3 operating expenses are approximately \$13,350,784 for water and  
4 \$10,471,771 for sewer.

5  
6 Under North Carolina law, private utility companies are entitled to  
7 recover their reasonable and verified operational expenses and earn  
8 a rate of return on their investment. During the five month  
9 investigation in this rate case, Public Staff accountants and  
10 engineers completed an extensive audit, including a billing analysis  
11 and review of CWSNC's books, records and general ledgers, which  
12 provide the basis for our findings and recommendations to the  
13 Commission. The revenue requirement is the amount necessary to  
14 enable the Company to recover its reasonable operational expenses  
15 and earn a reasonable return on its plant investment. The rate of  
16 return is addressed in Public Staff Economist, Calvin Craig's  
17 testimony.

18  
19 Notice to Customers and Rate Design:

20 The Notice to Customers (Notice) that customers received might  
21 have been confusing, since this is the first CWSNC rate case that  
22 includes all of its newly consolidated companies. The Notice shows  
23 the existing and proposed rates of CWSNC's uniform customers for



1 "Water Utility Service" and also the rates for each consolidated  
2 service area thereafter, starting with the "Former Clearwater  
3 Systems", which, if approved by the Commission, will be moved from  
4 system specific rates to CWSNC's uniform rates. The rates for  
5 "Sewer Utility Service", which are listed starting on page 9 of the  
6 Notice, are set forth in the same manner. Bradfield Farms and  
7 Fairfield Harbour have a separate Notice and proposed rates.

8  
9 Water and sewer bills consist of two components, the base facility  
10 charge and the usage charge. In theory, the base facility charge  
11 recovers the fixed costs incurred by the Company divided by all of  
12 the customers, and the usage charge recovers the variable costs.  
13 However, most of the cost to produce water or treat sewage is fixed.  
14 Approximately 75% of the cost to provide water service is fixed, and  
15 approximately 90% of the cost to provide sewer service is fixed. In  
16 order to promote conservation and allow a reasonable level of  
17 monthly revenue, or "cash on hand", to pay fixed costs, the split  
18 between the base facility charge and the usage charge for water  
19 operations is approximately 45%:55% and 80%:20% for sewer  
20 operations, respectively. In setting rates, the Commission has to  
21 take into account all of the customers. Seasonal customers or those  
22 who are retired prefer a high usage charge because they use little  
23 water, whereas, a larger household might prefer to have a higher

1 base charge because they use a lot of water. It is the Public Staff's  
2 position that the split is appropriate for all users. Purchase water and  
3 sewer customers pay the same base facility charge as uniform  
4 customers. The usage charge for purchased water and sewer  
5 customers is the same consumption charge as the supplier.  
6

7 Comparison between Private Utilities and Municipalities:

8 It is inappropriate to compare the rates of private Commission-  
9 regulated utilities like CWSNC to municipalities or county systems for  
10 the following reasons:

11 1. Economies of Scale: The operational costs per customer are  
12 lower for customers of municipalities because of economies of  
13 scale, as there are tens of thousands of customers versus  
14 thousands of customers among whom the costs are divided.  
15 CWSNC serves approximately 30,000 water customers and  
16 20,000 sewer customers; and operates 92 water systems and 38  
17 sewer systems across 38 counties spanning from the mountains  
18 to the coast. Charlotte Water, for example, is a regional supplier  
19 of drinking water and has over 834,000 customers in one county,  
20 a much larger customer base from which to recover its fixed  
21 costs.

22 2. Water Source: The majority of CWSNC's water production is  
23 through a series of wells, utilizing ground water. The majority of

- 1 municipalities, at least in North Carolina, utilize surface water.  
2 For example, the City of Sanford has an abundant water supply  
3 from a single surface water source, the Cape Fear River. The  
4 Water Treatment Plant is located in close proximity to the  
5 headwaters of the Cape Fear River. Depending on the size of  
6 the service area, CWSNC may have dozens of wells throughout  
7 the service area. A single well might pump 20 gallons per minute  
8 (28,800 gallons per day), whereas the treatment facility in  
9 Sanford produces on average seven million gallons per day. The  
10 water source is different. The economy of scale is overwhelming.  
11 The type of treatment, equipment, personnel and operating  
12 expenses are different.
- 13 3. Regulation: Private utilities are regulated by the State of  
14 North Carolina. The general statutes allow a utility the right to  
15 recover its operational expenses and a reasonable rate of return.  
16 Municipal or county systems are not regulated by the Utilities  
17 Commission and may subsidize the operating expenses of their  
18 utility systems thorough taxation.
- 19 4. Capital projects: Private utilities fund capital projects through  
20 private investors or loans. Municipalities and county systems  
21 may qualify for low interest tax free bonds and other loans to fund  
22 capital projects.

1           5. Rate of Return: Under the general statutes, private utilities  
2           have the right to earn a rate of return on their investment and to  
3           recover their operating expenses.

4  
5                           **Service and Water Quality Complaints**

6  
7                                   Asheville Hearing

8           Twenty-one customers testified at the hearing in Asheville: Michael  
9           Sanders, Carl Burkhardt, Susan Kish, Phil Reitano, James Hemphill,  
10          Jack Zinselmeier, John Jennings, Alan Higgins, Jack Barton,  
11          Margaretta Lang, Warren Grafer, Donn Levine, Richard Adams,  
12          Vernon McMinn, James Cain, Dennis Shellenberger, Gerard  
13          Worster, Tom Haynes, Sean O'Meara, Chuck Van Rens and Betty  
14          Jackson. The subdivisions represented included Connestee Falls  
15          (4), Fairfield Mountain/Apple Valley (a.k.a. Rumbling Bald) (6), Mt.  
16          Carmel (2), Woodhaven Subdivision (4) and Mt. Mitchell Lands (5).  
17          All of the customers at the hearing complained about the magnitude  
18          of the increase. Many filed information regarding rate comparisons  
19          to municipalities, opposed the large base facility charge, noted the  
20          lack of improvements to their specific system, opposed the proposed  
21          rate of return, questioned the stock transfer to Corix, and believed  
22          that CWSNC provided no justification for the increase, which I  
23          addressed in the previous section.

1

2 Mr. Sanders, Mr. Burkhart, Ms. Kish and Mr. McMinn all testified to  
3 the number of water outages in Connestee Falls and their concern  
4 with a sewage spill that ran into Lake Atagahi.

5

6 Mr. Zinselmeier, a customer in Fairfield Mountain, testified that  
7 CWSNC was slow in repairing roads after the Company repaired a  
8 leak.

9

10 Ms. Lang, who resides in Mt. Mitchel Land, complained about the  
11 number of water outages; and further stated that the boil water  
12 advisories they received were not made in a timely manner and,  
13 many times, customers were not notified when the advisories were  
14 rescinded. Mr. Levine stated that the water pressure was inadequate  
15 at his home and that Company personnel suggested that he install a  
16 jet pump to boost the water pressure from the meter to his home.

17

18 On August 29, 2017, CWSNC filed its Report on Customer  
19 Comments from Public Hearings in Asheville and Boone, North  
20 Carolina. I have read the report and commend CWSNC for its  
21 thorough response concerning customer complaints. The Public  
22 Staff is satisfied with the Company's response and has no  
23 recommendations.

1

2

Boone Hearing

3

4

5

6

7

8

9

10

11

12

13

Charlotte Hearing

14

15

16

17

18

19

20

21

22

One customer testified at the hearing in Boone, Howell Sharee, who lives in Sugar Mountain. Mr. Sharee is a seasonal customer who spends the summer months in Sugar Mountain and a month or so in the winter. He testified concerning the magnitude of the rate increase, particularly the high base facility charge. He stated that the service was good and he did not have any water quality issues. I have previously addressed the Public Staff's position concerning rate design and the split between the base facility charge and usage charge.

Four customers testified at the hearing in Charlotte. The customers testifying were William R. Colyer, Damian Michael Werner, Isaac Cochran and Chanyne Cupil. All four customers represented Bradfield Farms and opposed the magnitude of the increase. Mr. Colyer stated that the service he received from CWSNC was excellent. Mr. Werner stated that some of his neighbors complained of sewage backups, and Ms. Cupil stated her sewage had backed up but the situation was resolved.

1 On September 11, 2017, CWSNC filed its Report on Customer  
2 Comments from Public Hearings in New Bern and Charlotte, North  
3 Carolina. I have read the report and I am satisfied with the  
4 Company's response and have no recommendations.

5

6

7

#### New Bern Hearing

8 Two customers testified at the hearing in New Bern. The customers  
9 testifying were Simon Lock and Tom Musser, representing Fairfield  
10 Harbour. Both testified as to the magnitude of the increase. Mr. Lock  
11 opposed the rate design and suggested a much lower base facility  
12 charge and higher usage charge. He also opposed the flat sewer  
13 rate and stated that the Notice to customers lacked details and did  
14 not show the proposed rates. Neither had any service complaints.

15

16 As I discussed previously, the split between the base facility charge  
17 and the usage charge for water operations is approximately  
18 45%:55% and 80%:20% for sewer operations, respectively. In  
19 setting rates, the Commission has to take into account the rate  
20 impact on all of the customers. Seasonal customers or those who  
21 are retired prefer a high usage charge because they use little water,  
22 whereas, a larger household might prefer to have a higher base

1 charge because they use a lot of water. It is the Public Staff's  
2 position that the split is appropriate for all users.

3

4 In order to prevent "rate shock", CWSNC combined Fairfield Harbour  
5 and Bradfield Farms into one rate division for water and sewer  
6 service. This was intended as an "interim rate" between CWSNC's  
7 uniform rates and Fairfield Harbour's and Bradfield Farm's specific  
8 rates.

9

10 Under the existing rates, Fairfield Harbour and Bradfield Farms have  
11 system specific rates. However, CWSNC is proposing to include  
12 them under one new rate division, and therefore, there are no  
13 proposed rates for either under their prior system specific rates. The  
14 proposed new rates for monthly metered water service for residential  
15 and commercial customers are shown in Appendix A-2, page 2 of 7;  
16 and on page 4 of 7 for monthly sewer, in the Notice to Customers for  
17 the Fairfield Harbour and Bradfield Farm Service Areas.

18

19

#### Wilmington Hearing

20 Eight customers testified at the hearing in Wilmington. The  
21 customers testifying were Frances Carroll, Diana Woolley, Edward  
22 Morrell, Danny Conner, Ferrell Drewry, Earnest Chance, Thomas  
23 Mathis and Mandy Ware. The subdivisions represented included



1 Belvedere Plantation (3), and Treasure Cove/North Hills (5). In  
2 addition, Mr. Carroll filed a petition with 165 signatures from  
3 Belvedere Plantation opposing the magnitude of the rates. Mr.  
4 Randall Woodruff, Pender County Manager, testified on behalf of the  
5 Pender County Commissioners and in support of all CWSNC  
6 customers in Pender County. All of the customers who testified in  
7 Wilmington opposed the magnitude of the rate increase.

8  
9 Mr. Carroll testified about a meeting between customers and  
10 personnel from CWSNC on August 16, 2017. Representing CWSNC  
11 was President Matthew Klein and Vice President of Operations,  
12 Bryce Mendenhall. Also in attendance were County Commissioner  
13 Williams and approximately 122 customers. Mr. Carroll testified that  
14 he was not satisfied with CWSNC's answers at the meeting and  
15 raised the following issues: 1) the hardness of the water; 2) brown  
16 and black stains in the toilets; 3) water stains on shower doors and  
17 cars; 4) the need for a water softener and filtration similar to the one  
18 in Olde Point Subdivision; 5) high chlorine and HHA5's levels; 6) Gen  
19 X and CWSNC's decision not to open the valve to the Pender County  
20 water system; 7) the recent pump failure and brown water; 8) timely  
21 repairs; 9) multiple outages in the last few months; and 10)  
22 expansion of the system. By a show of hands, 28 customers agreed  
23 with Mr. Carroll's concerns. Mr. Drewry testified regarding a concern

1 with the high mineral content and the magnitude of the rates  
2 compared to other non-profit and private utility companies. Ms. Ware  
3 testified that she is concerned with water quality, especially brown  
4 water, and the number of boil advisory notices issued by CWSNC.

5  
6 Mr. Conner is a customer of Treasure Cove and had the following  
7 concerns: 1) the broken fire hydrants; 2) heavy metal content in the  
8 water; 3) no extra treatment for the water; 4) extra cost for cleaning  
9 products; 5) call center; and 6) lack of flushing for the water system

10 Mr. Chance also is a customer of Treasure Cove and his complaints  
11 included the following: 1) the notice to customers was confusing; 2)  
12 the proposed usage charge is too high; 3) CWSNC does not maintain  
13 the ditch causing floods; 4) a decorative fence on the lot needs  
14 repairing; and 5) all of the meter boxes leak.

15

16 Complaints concerning rate design, the magnitude of the rates,  
17 comparisons between CWSNC and non-profit utilities and Notice to  
18 customers have been previously addressed.

19

20 In regard to the situation at Belvedere, CWSNC informed the Public  
21 Staff about the problems they were having with well No. 2 and their  
22 decision not to activate the emergency connection with Pender  
23 County. The Public Staff agreed with their decision. Prior to the

1 hearing held on August 23, 2007, I inspected the water and sewer  
2 systems serving Belvedere. At the time of my inspection, Well No. 2  
3 was running clear.

4  
5 On August 24, 2017, I inspected the water system serving Treasure  
6 Cove. The ditch causing floods is not a ditch but a small creek which  
7 runs parallels to the well lot. The well lot was mowed with the  
8 exception of approximately two feet along the bank of the creek. It  
9 is the Public Staff's opinion that the well lot is being properly  
10 maintained.

11  
12 On September 18, 2017, CWSNC filed its Report on Customer  
13 Comments from Public Hearings in Wilmington and Raleigh, North  
14 Carolina, August 23 and 28, 2017, respectively. I have read the  
15 report and I am satisfied with the Company's response. I have no  
16 further recommendations.

17

18 Raleigh Hearing

19 Four customers testified at the hearing in Wilmington. The customers  
20 testifying were Vincent P. Roy, William Glance, Judith Bassett and  
21 Ben Farmer. The subdivisions represented included Carolina Trace,  
22 Amber Acres and Jordan Woods. All of the customers who testified  
23 in Raleigh opposed the magnitude of the rate increase.

1  
2 Mr. Roy, a utilities representative for the Carolina Trace community,  
3 testified on behalf of the 18 Property Owners Associations (POA).  
4 Mr. Roy stated that the call center was not familiar with the 18  
5 different POA's and that many times when a boil notice is required,  
6 the call center contacts the wrong POA representative. He did say  
7 that they have a good working relationship with Company personnel  
8 and that the quarterly meetings are successful in resolving issues  
9 within the community. Mr. Roy stated that he understands that the  
10 Company is moving towards uniform rates. However, Mr. Roy  
11 suggested that implementing regional rates or such as the mountains  
12 communities verses the coastal communities or groups of rates  
13 depending on their costs, would be more equitable than having one  
14 uniform rate. Mr. Roy also suggested that the base facility charge  
15 should be suspended during natural disasters such as Hurricane  
16 Matthew. Mr. Roy testified in regard to the rate of return and  
17 provided a Classic Cost-Volume Profit model for the Public Staff's  
18 review.

19  
20 Mr. Glance is also a customer of Carolina Trace and objected to the  
21 proposed rate structure because he believed that it benefits the  
22 Company's shareholders at the expense of the ratepayers.

23

1 Ms. Bassett is a customer of Amber Acres and opposed the  
2 magnitude of the increase. She did not have any service related  
3 problems.

4

5 Mr. Famer is a customer of Jordan Woods who also opposed the  
6 magnitude of the increase. He did not have any service concerns  
7 either.

8

9 The rate of return and rate design issues were addressed earlier in  
10 my testimony. However, I would like to point out that Carolina Trace  
11 is a purchased water system and the usage charge is the same as  
12 the supplier's. The base facility charge covers the fixed costs, and  
13 Carolina Trace's rate is the same as uniform customers.

14

15 On September 18, 2017, CWSNC filed its Report on Customer  
16 Comments from Public Hearings in Wilmington and Raleigh North  
17 Carolina, August 23 and 28, 2017, respectively. I have read the  
18 report and I am satisfied with the Company's response. I have no  
19 further recommendations.

20

21 **Q. BRIEFLY EXPLAIN YOUR BILLING ANALYSIS FOR PRESENT**  
22 **AND PROPOSED RATES.**

1 A. In determining end of period (EOP) customers for present rates, I  
2 compared the EOP customers from Item 26 in the Company's Form  
3 W-1 filing with the billing data for each service area, for each meter  
4 type, for the twelve months ended December 31, 2016. I also  
5 compared total consumption from Item-26 with total consumption  
6 billed for each service area, for each meter type for the twelve  
7 months ended December 31, 2016. In determining EOP customers  
8 for proposed rates, I consolidated EOP customers at present rates  
9 from the former subsidiary companies, Bradfield Farms, Carolina  
10 Trace, CWSS, and Transylvania, into the four rate divisions: uniform  
11 water, uniform sewer, Bradfield Farms/Fairfield Harbour water and  
12 Bradfield Farms/Fairfield Harbour sewer. I also consolidated  
13 consumption for the four rate divisions. My billing analysis for EOP  
14 water and sewer customers at present rates, consolidated EOP  
15 water and sewer customers at proposed rates, and consolidated  
16 consumption at proposed rates is shown in Casselberry Exhibit Nos.  
17 4, 5, 6, 7, 8 and 9.

18

19 **Q. DID YOU MAKE AN ADJUSTMENT FOR CUSTOMER GROWTH?**

20 A. No. The composite customer growth factor (CGF) for customers with  
21 meters less than 1 inch was less than 1 percent.

22

1 Q. WHAT ARE THE ANNUAL SERVICE REVENUES UNDER  
2 PRESENT AND PROPOSED RATES?

3 A. CWSNC's and Bradfield Farms/ Fairfield Harbour's (BF and FH)  
4 present and consolidated proposed service revenues for the twelve  
5 months ended December 31, 2016, are shown below:

6 SERVICE REVENUES

7 Water Utility Service:

	<u>Present</u>	<u>Proposed</u>
8 CWSNC	\$15,122,929	\$18,414,144
10 BF and FH	\$ 717,509	\$ 1,029,392

12 Sewer Utility Service:

	<u>Present</u>	<u>Proposed</u>
15 CWSNC	\$11,755,741	\$13,294,803
17 BF and FH	\$ 1,370,666	\$ 1,792,244

20 For the calculations, see Casselberry Exhibit Nos. 10, 11, 12, 13, 14,  
21 15, 16 and 17.

22  
23  
24  
25 Q. HAVE YOU RECOMMENDED ANY ADJUSTMENTS TO  
26 EXPENSES RELATED TO WATER AND SEWER OPERATIONS?

27 A. Yes, I have provided Public Staff Accountant Johnson with  
28 recommendations for purchased water and maintenance and repair  
29 expenses for water operations under uniform rates, and sludge hauling  
30 for uniform rates and BF/FH.

1

2

PURCHASED WATER

3

4

5

6

7

8

9

10

11

12

13

14

MAINTENANCE AND REPAIR EXPENSES

15

16

17

18

SLUDGE HAULING

19

20

21

22

23

Based on my review of invoices and the general ledgers, I determined purchased water in the amount of \$1,286,586. I removed \$20,844 for purchased water outside the test year. I increased purchased water by \$4,510 to account for the City of Hendersonville's new rate in High Vista Estates and Johnston County's new rates for White Oak Plantation, Lee Forest, Winston Planation and Winston Point. I also reduced purchased water by \$40,851 for water losses greater than 20 percent. I recommend \$1,286,686 for purchased water. My adjustments are shown in Casselberry Exhibit Nos 18 and 19.

I reclassified \$21,221 from maintenance and repair expenses to purchased water.

Sludge hauling can vary from year to year depending on whether or not a digester, clarifier or equalization tank is pumped out in addition to routine sludge hauling. In order to determine a representative level, I reviewed the Company's books and records for 2014, 2015 and 2016. In addition, I calculated the three-year average. For



1 systems where a change in the process had occurred, I adjusted the  
2 three-year average accordingly. I recommend \$424,765 as a  
3 representative level for sludge hauling for uniform rates and \$54,249  
4 for BF/FH. My calculations are shown in Casselberry Exhibit 20.

5

6

7 **Q. WHAT IS YOUR RECOMMENDATION CONCERNING CWSNC'S**  
8 **PROPOSAL TO CHANGE THE BASE FACILITY CHARGE FOR**  
9 **RESIDENTIAL SEWER?**

10 **A.** The Company is proposing to change the base facility charge for  
11 residential sewer customers to the same base facility charges as  
12 commercial sewer customers. The Public Staff acknowledges that  
13 in the Company's general rate case in Docket No. W-354, Sub 336,  
14 the Public Staff recommended that CWSNC maintain accurate  
15 records for all sewer customers and that, in the Company's next  
16 general rate case proceeding, residential customers with meter sizes  
17 greater than 5/8 inch be charged the same rate as commercial  
18 customers with the same meter size. In the next general rate case,  
19 Docket No. W-354, Sub 344, the Company did not have the data for  
20 residential customers with varying meter sizes, and, as a result, the  
21 Public Staff recommended one base facility charge regardless of  
22 meter size. In recognition of the significant impact the Company's  
23 proposed base facility charge would have on a relatively small

1 number of residential customers in the herein docket, the Public Staff  
2 recommends that all residential sewer customers pay the same base  
3 facility charge regardless of their meter size. Most of the residential  
4 customers with larger meters are located in the mountain systems. For  
5 example, Sapphire Valley has 128 residential customers with a 1.5  
6 inch meter and 68 residential customers with a 2 inch meter, and  
7 Fairfield Mountain has 12 residential customers with a 1 inch meter.  
8 Most likely, the larger meter was installed to increase the pressure for  
9 these mountain homes which are at significantly higher elevations than  
10 the water main, or to be used for irrigation purposes, in which case the  
11 water does not flow back to the sewer plant. It is the Public Staff's  
12 position that, in these situations, it is unreasonable to charge a  
13 residential customer a base facility charge of \$242.95 for a 1.5 inch  
14 meter or a base facility charge of \$388.72 for a 2inch meter for  
15 "residential" sewer service, especially under uniform rates. As part of  
16 the settlement agreement in this case, the Company supports this  
17 recommendation.

18  
19  
20 **Q. WHAT IS YOUR RECOMMENDATION CONCERNING THE**  
21 **PROPOSED RATES FOR TREASURE COVE?**

22 **A.** In order to reduce "rate shock" for customers in Treasure Cove, the  
23 Public Staff is recommending the same rates as customers in Fairfield

1 Harbour and Bradfield Farms.. The Company agrees with and  
2 supports the Public Staff's recommendation.

3

4 **Q. WHAT IS YOUR RECOMMENDATION CONCERNING CWSNC'S**  
5 **PROPOSED RATES?**

6 A. The Public Staff's recommended service revenues are listed below:

7

8 Service Revenues

9 Water Utility Service

10 CWSNC Uniform \$17,415,028

11

12 BF/FH \$ 950,755

13

14 Sewer Utility Service

15 CWSNC Uniform \$12,627,226

16

17 BF/HF \$ 1,733,316

18

19 My revenue calculations are shown on Casselberry Exhibit Nos. 21,  
20 22, 23, and 24. CWSNC's present, proposed and the Public Staff's  
21 recommended rates are shown on Casselberry Exhibit No. 25 and  
22 26. The effect of the rates are shown in exhibit 27.

23

24 **Q. WHAT IS YOUR RECOMMENDATION CONCERNING OTHER**  
25 **CHARGES?**

26 A. The Public Staff's does not oppose increasing CWSNC's meter testing  
27 fee from \$19.95 to \$20.00, the new water customer charge from \$26.93  
28 to \$27.00, the reconnection charge from \$26.93 to \$27.00, the new

1 sewer customer fee from \$21.95 to \$27.00, and the charge for  
2 processing NSF checks from \$24.94 to \$25.00 for all applicable  
3 service areas except the Corolla Light/Monteray Shores service area  
4 and the Elk River Development.

5

6 **Q. DO YOU HAVE ANY OTHER RECOMMENDATIONS?**

7 A. Yes. The Public Staff recommends that CWSNC consider  
8 implementing metered sewer rates for customers in its Fairfield  
9 Harbour, Bradfield Farms, and Sapphire Valley service areas in the  
10 Company's next general rate case and reserves the right to  
11 independently propose metered sewer rates for these systems. As  
12 part of the settlement agreement in this case, CWSNC supports this  
13 recommendation and agrees to undertake such consideration in  
14 conjunction with its next rate case filing.

15

16 The Public Staff opposes including "per residential or single family  
17 equivalent" in regard to the flat rate for water service. The Company  
18 has agreed to remove this language from its tariff.

19

20 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

21 A. Yes.

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 1  
Page 1 of 3

CWSNC Water

Service Area

---

Abington/InterLarken  
Bahia Bay  
Bear Paw  
Beechbrook  
Belvedere Plantation  
Bent Creek  
Brandywine Bay  
Buffalo Creek  
Chapel Hill  
College Park  
Country Club Annex  
Country Hills  
Crestview  
Crystal Mountain  
Lamplight/Danby/Wdsd Fall  
Eagle Crossing  
Eastwood Forest  
Forest Brook/Ole lamp Place  
Grandview at T-Square  
Harbor House Estates  
Heathfield  
Hestron Park  
High Meadows  
Holly Acres  
Hounds Ear  
Huntington Forest  
Kings Grant  
Larkhaven  
Lemmond Acres  
Linville Ridge  
Mason Landing  
Meadow Glen  
Misty Mountain  
Monteray  
Mt Mitchell  
Nero  
Oakdale terrace

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 1  
Page 2 of 3

CWSNC Water

Service Area

---

Olde Point  
Pinnacle Shores  
Powder Horn Mountain  
Quail Ridge  
Queen's Harbor  
Ridges at Mt Harbor  
Riverwood  
Saddlewood  
Sherwood Forest  
Sherwood Park  
Ski Mountain  
Stone Hollow  
Suburban Heights  
Sugar Mountain  
The Harbor/Point  
Vander  
Watauga Vista  
Waterglyn  
Westwood Forest  
Wildlife Bay  
Wildwood green  
Willowbrook  
Wolf Laurel  
Wood Trace  
Woodhaven Manor

Service Area

---

Clear Water Systems  
Ashley Hills/Amber Acres  
Heather Glen  
Country Crossing  
Oaks Plantation  
Randsdell Forest  
Sandy Trails  
Stewarts Ridge  
Wilders Village  
Neuse Woods

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 1  
Page 3 of 3

**CWSNC Water**

**Service Area**

---

Tuckahoe  
Jordan Woods  
Hidden Hollow  
Lindsey Point

**New Under Uniform Rates**

Treasure Cove  
Forest Hills  
Carolina Trace  
Connestee Falls  
Fairfield Sapphire Valley  
Fairfield Mountain (a.k.a. Rumbling Bald)

**Purchased Water Systems**

Carolina Forest  
High Vista  
Riverpointe  
Whispering Pines  
White Oak Plantation  
Woodrun  
Yorktown  
Zemosa Acres

**Service Area**

---

Bradfield Farms  
Fairfield Harbor  
Elk River

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 2  
Page 1 of 1

CWSNC Sewer

Service Area

Abington/Kynwood  
Ashley Hills  
Bear Paw  
Belvedere Plantation  
Bent Creek  
Brandywine Bay  
Carolina Pines  
Lamplight/Danby/Wdsd F  
Hestron Park  
Hounds Ear  
Hemby Acres/Beacon Hill  
Kings Grant - Raleigh  
Kynwood  
Nero  
Olde Point  
Queen's Harbor  
Ridges at Mt. Harbour  
Riverpointe  
Saddlewood  
Sugar Mountain  
Wolf Laurel  
Willowbrook  
Regalwood  
White Oak Estates  
White oak High School  
Child Daycare

Purchased Sewer

College Park  
Kings Grant - Charlotte  
Mt Carmel  
White Oak Planation

New Under Uniform Rates

Carolina Trace  
Connestee Falls  
Fairfield Mountain  
Nags Head  
Sapphire Valley

Service Area

Bradfield Farms  
Fairfield Harbour  
Elk River  
Corolla Light/Monteray Shores



# WATER UTILITY SERVICE

## Monthly Metered Water Service: (Residential and Commercial)

	<u>Existing</u>	<u>Proposed</u>
Base Facility Charges (zero usage)		
< 1" meter	\$ 22.40	\$ 26.95
1" meter	\$ 56.01	\$ 67.38
1-1/2" meter	\$ 112.02	\$ 134.75
2" meter	\$ 179.23	\$ 215.60
3" meter	\$ 336.06	\$ 404.25
4" meter	\$ 560.10	\$ 673.75
6" meter	\$1,120.19	\$1,347.50

	<u>Existing</u>	<u>Proposed</u>
Usage Charge, per 1,000 gallons		
Treated Water	\$ 6.40	\$ 7.70
Untreated Water (Brandywine Bay Irrigation Water)	\$ 4.11	\$ 4.11

## Purchased Water for Resale

<u>Service Area</u>	<u>Bulk Provider</u>	<u>Usage Charge per 1,000 gallons</u>	
Carolina Forest	Montgomery County	\$ 3.19	\$ 3.19
High Vista Estates	City of Hendersonville	\$ 3.25	\$ 3.25
Riverpointe	CLTWater	\$ 6.30	\$ 6.30
Whispering Pines	Town of Southern Pines	\$ 2.23	\$ 2.23
White Oak Plantation/ Lee Forest	Johnston County	\$ 3.25	\$ 3.25
Winston Plantation	Johnston County	\$ 3.25	\$ 3.25
Winston Pointe	Johnston County	\$ 3.25	\$ 3.25
Woodrun	Montgomery County	\$ 3.19	\$ 3.19
Yorktown	City of Winston-Salem	\$ 5.01	\$ 5.01
Zemosa Acres	City of Concord	\$ 5.27	\$ 5.27

<u>Monthly Flat Rate Water Service:</u> (per residence or single family equivalent)	\$ 41.60	\$ 50.17
--	----------	----------

## Availability Rates (semi-annual):

Applicable only to property owners in Carolina Forest and Woodrun Subdivisions in Montgomery County	\$ 24.64	\$ 24.64
--	----------	----------

## Availability Rates (Monthly):

Applicable only to property owners in Linville Ridge Subdivision	\$ 12.32	\$ 12.32
---	----------	----------

**FORMER CLEARWATER SYSTEMS:** Amber Acres, Amber Acres North, Amber Ridge, Ashley Hills North, Bishop Pointe, Carriage Manor, Country Crossing, Covington Cross, Heather Glen, Hidden Hollow, Jordan Woods, Lindsey Point, Neuse Woods, Oakes Plantation, Randsdell Forest, Rutledge Landing, Sandy Trails, Stewart's Ridge, Tuckahoe, and Wilder's Village Subdivisions

## Monthly Metered Water Rates:

	<u>Existing</u>	<u>Proposed</u>
Base Charge, zero usage		
5/8" meter	\$ 16.27	
1" meter	\$ 40.67	
1-1/2" meter	\$ 81.34	
2" meter	\$ 130.14	
3" meter	\$ 244.07	

	<u>Existing</u>	<u>Proposed</u>
4" meter	\$ 406.76	
6" meter	\$ 813.37	
Usage Charge, per 1,000 gallons	\$ 4.50	

Monthly Metered Water Service: (Residential and Commercial)

	<u>Existing</u>	<u>Proposed</u>
Base Facility Charges (zero usage)		
< 1"meter		\$ 26.95
1" meter		\$ 67.38
1-1/2" meter		\$ 134.75
2" meter		\$ 215.60
3" meter		\$ 404.25
4" meter		\$ 673.75
6" meter		\$1,347.50
Usage Charge, per 1,000 gallons Treated Water		\$ 7.70

Monthly Flat Water Rates

(per residence of single family equivalent)	\$ 37.18	\$ 50.17
---	----------	----------

Management Fee

Covington Cross Subdivision (Phases 1 & 2)	\$ 100.00	\$ 100.00
--	-----------	-----------

TREASURE COVE, REGISTER PLACE ESTATES, NORTH HILLS, AND GLEN ARBOR/NORTH BEND SUBDIVISIONS

Monthly Metered Water Rates:

	<u>Existing</u>	<u>Proposed</u>
Base Charge, zero usage	\$ 14.50	
Usage Charge, per 1,000 gallons	\$ 1.90	

Monthly Metered Water Service: (Residential and Commercial)

Base Facility Charges (zero usage)		
< 1"meter		\$ 26.95
1" meter		\$ 67.38
1-1/2" meter		\$ 134.75
2" meter		\$ 215.60
3" meter		\$ 404.25
4" meter		\$ 673.75
6" meter		\$1,347.50
Usage Charge, per 1,000 gallons Treated Water		\$ 7.70

FOREST HILLS SUBDIVISION

Monthly Metered Water Service:

	<u>Existing</u>	<u>Proposed</u>
Base Facility Charges (zero usage)		
Residential	\$ 22.43	
Commercial and Other:		
5/8" meter	\$ 22.43	
3/4" meter	\$ 33.66	

	<u>Existing</u>	<u>Proposed</u>
1" meter	\$ 56.08	
1-1/2" meter	\$ 112.16	
2" meter	\$ 179.46	
3" meter	\$ 336.49	
4" meter	\$ 560.81	
6" meter	\$1,121.63	
Usage Charge, per 1,000 gallons	\$ 5.23	

Monthly Metered Water Service: (Residential and Commercial)

	<u>Existing</u>	<u>Proposed</u>
Base Facility Charges (zero usage)		
< 1"meter		\$ 26.95
1" meter		\$ 67.38
1-1/2" meter		\$ 134.75
2" meter		\$ 215.60
3" meter		\$ 404.25
4" meter		\$ 673.75
6" meter		\$1,347.50
Usage Charge, per 1,000 gallons Treated Water		\$ 7.70

FAIRFIELD MOUNTAIN/APPLE VALLEY (a.k.a. RUMBLING BALD) SERVICE AREA, HIGHLAND SHORES  
SUBDIVISION AND LAUREL MOUNTAIN ESTATES

Monthly Metered Water Service:

	<u>Existing</u>	<u>Proposed</u>
Base Facility Charges (zero usage)		
Residential	\$ 19.23	
Commercial and Other:		
5/8" meter	\$ 19.23	
3/4" meter	\$ 28.84	
1" meter	\$ 48.07	
1-1/2" meter	\$ 96.14	
2" meter	\$ 153.83	
3" meter	\$ 288.42	
4" meter	\$ 480.70	
6" meter	\$ 961.40	
Usage Charge, per 1,000 gallons	\$ 7.10	

Monthly Metered Water Service: (Residential and Commercial)

	<u>Existing</u>	<u>Proposed</u>
Base Facility Charges (zero usage)		
< 1"meter		\$ 26.95
1" meter		\$ 67.38
1-1/2" meter		\$ 134.75
2" meter		\$ 215.60
3" meter		\$ 404.25
4" meter		\$ 673.75
6" meter		\$1,347.50
Usage Charge, per 1,000 gallons Treated Water		\$ 7.70

**FAIRFIELD SAPPHIRE VALLEY SERVICE AREA**

**Monthly Metered Water Service:**

	<u>Existing</u>	<u>Proposed</u>
Base Facility Charges (zero usage)		
Residential	\$ 19.89	
Commercial and Other:		
5/8" meter	\$ 19.89	
3/4" meter	\$ 29.84	
1" meter	\$ 49.73	
1-1/2" meter	\$ 99.45	
2" meter	\$ 159.13	
3" meter	\$ 298.37	
4" meter	\$ 497.20	
6" meter	\$ 994.41	
Usage Charge, per 1,000 gallons	\$ 9.17	

**Monthly Metered Water Service: (Residential and Commercial)**

	<u>Existing</u>	<u>Proposed</u>
Base Facility Charges (zero usage)		
< 1" meter		\$ 26.95
1" meter		\$ 67.38
1-1/2" meter		\$ 134.75
2" meter		\$ 215.60
3" meter		\$ 404.25
4" meter		\$ 673.75
6" meter		\$1,347.50
Usage Charge, per 1,000 gallons Treated Water		\$ 7.70
<u>Monthly Water Availability Rate:</u>	\$ 9.07	\$ 9.07

**CAROLINA TRACE DEVELOPMENT**

**Monthly Metered Water Rates:**

	<u>Existing</u>	<u>Proposed</u>
Base Charge, zero usage	\$ 14.05 (minimum)	
Usage Charge, per 1,000 gallons	\$ 5.06	

**Monthly Metered Water Service: (Residential and Commercial)**

Base Facility Charges (zero usage)		
< 1" meter		\$ 26.95
1" meter		\$ 67.38
1-1/2" meter		\$ 134.75
2" meter		\$ 215.60
3" meter		\$ 404.25
4" meter		\$ 673.75
6" meter		\$1,347.50
Purchased Water for Resale, per 1,000 gallons		\$ 2.21

**CONNESTEE FALLS SUBDIVISION**

**Monthly Metered Water Rates:**

	<u>Existing</u>	<u>Proposed</u>
Base Charge, zero usage		
5/8" X 3/4" meter	\$ 27.41	
1" meter	\$ 68.51	
2" meter	\$ 219.22	
Usage Charge, per 1,000 gallons	\$ 6.65	

**Monthly Metered Water Service: (Residential and Commercial)**

Base Facility Charges (zero usage)		
< 1" meter		\$ 26.95
1" meter		\$ 67.38
1-1/2" meter		\$ 134.75
2" meter		\$ 215.60
3" meter		\$ 404.25
4" meter		\$ 673.75
6" meter		\$1,347.50
Usage Charge, per 1,000 gallons Treated Water		\$ 7.70

<b><u>Monthly Availability Rate:</u></b>	\$ 4.79	\$ 4.79
--	---------	---------

**SEWER UTILITY SERVICE**

**Monthly Metered Sewer Service:**

Base Facility Charges		
Residential (zero usage)	<u>Existing</u> \$ 42.40	<u>Proposed</u>
Commercial (zero usage)		
<1" meter	\$ 42.40	
1" meter	\$ 106.00	
1-1/2" meter	\$ 211.99	
2" meter	\$ 339.18	
3" meter	\$ 635.97	
4" meter	\$1,059.95	
6" meter	\$2,119.90	
Base Facility Charge: Residential and commercial (zero usage)		
<1" meter		\$ 48.59
1" meter		\$ 121.48
1-1/2" meter		\$ 242.95
2" meter		\$ 388.72
3" meter		\$ 728.85
4" meter		\$1,214.75
6" meter		\$2,429.50
Usage charge, per 1,000 gallons	\$ 2.90	\$ 3.32

**Monthly Metered Purchased Sewer Service:**

Collection charge (Residential and Commercial/SFE)	\$ 33.92	\$ 38.87
Usage charge, per 1,000 gallons based on purchased water		

<u>Service Area</u>	<u>Bulk Provider</u>	<u>Existing</u>	<u>Proposed</u>
White Oak Plantation/ Lee Forest/Winston Point	Johnston County	\$ 4.55	\$ 4.55
Kings Grant	Two Rivers Utilities	\$ 3.80	\$ 3.80
College Park	Town of Dallas	\$ 5.70	\$ 5.70
<u>Monthly Flat Rate Sewer Service:</u>		\$ 52.55	\$ 60.22

Multi-residential customers who are served by a  
Master meter shall be charged the flat rate per unit

MT. Carmel Subdivision Service Area:

Monthly Base Facility Charge	\$ 6.77	\$ 6.77
Monthly Collection Charge (Residential and commercial/SFE)	\$ 27.33	\$ 38.87
Usage Charge/1,000 gallons (Based on metered water usage)	\$ 5.88	\$ 5.88

Regalwood and White Oak Estates Subdivision Service Area:

Monthly Flat Rate Sewer Service:

	<u>Existing</u>	<u>Proposed</u>
Residential Service	\$ 52.55	\$ 60.22
White Oak High School	\$1,630.74	\$1,868.71
Child Castle Daycare	\$ 202.85	\$ 232.45
Pantry	\$ 107.74	\$ 123.46

FAIRFIELD MOUNTAIN/APPLE VALLEY (a.k.a. RUMBLING BALD) SERVICE AREA, HIGHLAND SHORES  
SUBDIVISION AND LAUREL MOUNTAIN ESTATES

Monthly Sewer Rates:

<u>Residential</u>	<u>Existing</u>	<u>Proposed</u>
Collection charge/dwelling unit	\$ 17.17	\$ 38.87
Treatment charge/dwelling unit	\$ 69.50	\$ 69.50
Total monthly flat rate/dwelling charge	\$ 86.67	\$ 108.37
<u>Commercial and Other</u>		
Minimum monthly collection and treatment charge	\$ 86.67	\$ 108.37
Monthly collection and treatment charge for Customers who do not take water service (per single family equivalent)	\$ 86.67	\$ 108.37
<u>Treatment charge per dwelling unit</u>		
Small (less than 2,500 gallons per month)	\$ 78.50	\$ 78.50
Medium (2,500 to 10,000 gallons per month)	\$ 139.50	\$ 139.50
Large (over 10,000 gallons per month)	\$ 219.50	\$ 219.50
Collection Charge (per 1,000 gallons)	\$ 12.16	\$ 13.93

**FAIRFIELD SAPPHIRE VALLEY SERVICE AREA**

**Monthly Sewer Rates:**

	<u>Existing</u>	<u>Proposed</u>
Residential		
Flat Rate, per dwelling unit	\$ 35.52	
Commercial and other		
Minimum rate	\$ 35.52	
Customers who do not take water service (per single family equivalent)	\$ 35.52	
Base Facility Charges (based on meter size with zero usage)		
	<u>Existing</u>	<u>Proposed</u>
5/8" meter	\$ 15.62	
3/4" meter	\$ 23.43	
1" meter	\$ 39.04	
1-1/2" meter	\$ 78.08	
2" meter	\$ 124.92	
3" meter	\$ 234.23	
4" meter	\$ 390.39	
6" meter	\$ 780.78	

**Monthly Metered Sewer Service:**

Base Facility Charges: Residential and Commercial (zero usage)		
<1" meter		\$ 48.59
1" meter		\$ 121.48
1-1/2" meter		\$ 242.95
2" meter		\$ 388.72
3" meter		\$ 728.85
4" meter		\$1,214.75
6" meter		\$2,429.50
Usage charge, per 1,000 gallons	\$ 7.88	\$ 3.32
<b><u>Monthly Flat Rate Sewer Service:</u></b>		\$ 60.22
Multi-residential customers who are served by a Master meter shall be charged the flat rate per unit		

**NAGS HEAD SERVICE AREA:**

**Monthly Metered Sewer Service: (Commercial)**

Base Facility Charges (based on meter size with zero usage)		
	<u>Existing</u>	<u>Proposed</u>
<1" meter	\$ 18.48	
1" meter	\$ 46.10	
1-1/2" meter	\$ 92.19	
2" meter	\$ 147.51	
3" meter	\$ 276.58	
4" meter	\$ 460.96	
6" meter	\$ 921.93	
Usage charge, per 1,000 gallons	\$ 9.31	
Minimum Monthly Charge	\$ 62.65	

	<u>Existing</u>	<u>Proposed</u>
<u>Monthly Flat Rate Sewer Service:</u>	\$ 62.65	

Monthly Metered Sewer Service:

Base Facility Charges: Residential and Commercial (zero usage)

	<u>Existing</u>	<u>Proposed</u>
<1" meter		\$ 48.59
1" meter		\$ 121.48
1-1/2" meter		\$ 242.95
2" meter		\$ 388.72
3" meter		\$ 728.85
4" meter		\$1,214.75
6" meter		\$2,429.50

Usage charge, per 1,000 gallons		\$ 3.32
---------------------------------	--	---------

<u>Monthly Flat Rate Sewer Service:</u>		\$ 60.22
---	--	----------

Multi-residential customers who are served by a  
Master meter shall be charged the flat rate per unit

CAROLINA TRACE DEVELOPMENT

Monthly Metered Sewer Rates:

	<u>Existing</u>	<u>Proposed</u>
Base Charge, zero usage	\$ 35.41 (minimum)	
Usage Charge, per 1,000 gallons	\$ 8.38	

Monthly Metered Sewer Service:

Base Facility Charges: Residential and Commercial (zero usage)

	<u>Existing</u>	<u>Proposed</u>
<1" meter		\$ 48.59
1" meter		\$ 121.48
1-1/2" meter		\$ 242.95
2" meter		\$ 388.72
3" meter		\$ 728.85
4" meter		\$1,214.75
6" meter		\$2,429.50

Usage charge, per 1,000 gallons		\$ 3.32
---------------------------------	--	---------

CONNESTEE FALLS SUBDIVISION

Monthly Flat Rate	\$ 45.11
-------------------	----------

Monthly Metered Service

Base Charge, zero usage

5/8" x3/4" meter	\$ 26.86
1" meter	\$ 67.15
2" meter	\$ 219.22

Usage Charge, per 1,000 gallons	\$ 6.75
---------------------------------	---------

Monthly Metered Sewer Service:

Base Facility Charges: Residential and Commercial (zero usage)

	<u>Existing</u>	<u>Proposed</u>
<1" meter		\$ 48.59



	<u>Existing</u>	<u>Proposed</u>
1" meter		\$ 121.48
1-1/2" meter		\$ 242.95
2" meter		\$ 388.72
3" meter		\$ 728.85
4" meter		\$1,214.75
6" meter		\$2,429.50
Usage charge, per 1,000 gallons		\$ 3.32
<u>Monthly Flat Rate Sewer Service:</u>		\$ 60.22
Multi-residential customers who are served by a Master meter shall be charged the flat rate per unit		

#### WATER UTILITY SERVICE

#### FAIRFIELD HARBOUR SERVICE AREA

##### Monthly Metered Water Service

	<u>Existing</u>	<u>Proposed</u>
Base Facility Charges (zero usage)		
Residential	\$ 9.73	
Commercial and Other:		
5/8" meter	\$ 9.73	
3/4" meter	\$ 14.60	
1" meter	\$ 24.29	
1-1/2" meter	\$ 48.58	
2" meter	\$ 77.74	
3" meter	\$ 145.99	
4" meter	\$ 243.31	
6" meter	\$ 486.62	
Usage Charge, per 1,000 gallons	\$ 2.69	
Monthly Water Availability Rate	\$ 3.28	\$ 3.28

#### BRADFIELD FARMS SUBDIVISION

Base charge, zero usage	\$ 8.29
Usage charge, per 1,000 gallons	\$ 1.95

##### Monthly Metered Water Service: (Residential and Commercial)

	<u>Existing</u>	<u>Proposed</u>
Base Facility Charges (zero usage)		
< 1" meter		\$ 12.84
1" meter		\$ 32.10
1-1/2" meter		
\$ 64.20		\$ 102.72
2" meter		
Usage Charge, per 1,000 gallons	<u>Existing</u>	<u>Proposed</u>
Treated Water		\$ 3.55

**SEWER UTILITY SERVICE**

**FAIRFIELD HARBOUR SERVICE AREA**

**Monthly Sewer Rates:**

Residential	<u>Existing</u>	<u>Proposed</u>
Flat Rate, per dwelling unit	\$ 37.89	
Commercial and other		
Monthly Flat Rate (Customers who do not take water service)	\$ 37.89	
Monthly Metered Rates (based on meter size with zero usage)		
	<u>Existing</u>	<u>Proposed</u>
5/8" meter	\$ 10.17	
3/4" meter	\$ 15.26	
1" meter	\$ 25.43	
1-1/2" meter	\$ 50.85	
2" meter	\$ 81.36	
3" meter	\$ 152.56	
4" meter	\$ 254.26	
6" meter	\$ 508.52	
Usage charge, per 1,000 gallons	\$ 5.63	
Monthly Sewer Availability Rate	\$ 2.64	\$ 2.64
<b><u>BRADFIELD FARMS SUBDIVISION</u></b>		
Residential Customer Monthly Flat Rate	\$ 26.56	
<b><u>SILVERTON and WOODLAND FARMS SUBDIVISION</u></b>		
Monthly Bulk Flat Rate, per customer	\$ 25.20	
<b><u>HAWTHORN AT THE GREEN APARTMENTS</u></b>		
Monthly Bulk Flat Rate, per REU	\$ 25.20	

**Monthly Sewer Rates:**

Residential	<u>Existing</u>	<u>Proposed</u>
Flat Rate, per dwelling unit		\$ 42.83
Bulk Flat Rate, per REU		\$ 41.83
Commercial and other		
Monthly Flat Rate (Customers who do not take water service)		\$ 42.83
Monthly Metered Rates (based on meter size with zero usage)		
	<u>Existing</u>	<u>Proposed</u>
<1" meter		\$ 11.50
1-1/2" meter		\$ 57.50
2" meter		\$ 92.00
Usage Charge, per 1,000 gallons		\$ 6.36

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 4  
Page 1 of 5

Billing Analysis for End of Period Customers at Present Rates

CWSNC Water

Service Area	Total										5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Total	Total	C Forest	Woodrun	Linville	Conn F	Sapp V
	5/8 R	3/4 R	1 R	1.5 R	2 R	3 R	4 R	6 R	Flat R	RES								Comm.	EOP	availb	availb	availb	availb	availb
Abington/InterLarken	596									596	1							1	597					
Bahia Bay	117									117								0	117					
Bear Paw	336	3								339	5	1						6	345					
Beechbrook	37									37								0	37					
Belvedere Plantation	1173		2							1175	4	2		7	4			17	1192					
Bent Creek	306									306	1							1	307					
Brandywine Bay	838		2		1					841	10	3	1					14	855					
Buffalo Creek	274									274								0	274					
Chapel Hill	96									96								0	96					
College Park	79									79								0	79					
Country Club Annex	24									24								0	24					
Country Hills	67									67								0	67					
Crestview	38									38								0	38					
Crystal Mountain	49									49								0	49					
Lamplight/Danby/Wdsd Fall	1276		3							1279	3	2	1	1				7	1286					
Eagle Crossing	78									78								0	78					
Eastwood Forest	131									131	1							1	132					
Forest Brook/Ole lamp Place	125	1								126		1						1	127					
Grandview at T-Square	74									74	1							1	75					
Harbor House Estates	62									62								0	62					
Heathfield	63									63		1						1	64					
Hestron Park										0	1		2	7				10	10					
High Meadows	274									274	3			1				4	278					
Holly Acres	53									53		1						1	54					
Hounds Ear	417		6	1						424	8	2		3				13	437					
Huntington Forest	56									56								0	56					

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 4  
Page 2 of 5

Billing Analysis for End of Period Customers at Present Rates

CWSNC Water

Service Area	Total																	Total	Total	C Forest	Woodrun	Linville	Conn F	Sapp V
	5/8 R	3/4 R	1 R	1.5 R	2 R	3 R	4 R	6 R	Flat R	RES	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Comm.	EOP	avalib	avalib	avalib	avalib	avalib
Kings Grant	177		1							178	1							1	179					
Larkhaven	149	16								165								0	165					
Lemmond Acres	32									32	1							1	33					
Meadow Glen	33									33								0	33					
Misty Mountain	141									141								0	141					
Monteray	27									27								0	27					
Mt Mitchell	205								16	221	2		2	1				5	226					
Nero	125									125								0	125					
Oakdale terrace	43									43								0	43					
Olde Point	192		3							195	1			1				2	197					
Pinnacle Shores	154									154	9							9	163					
Powder Horn Mountain	230									230	1	1						2	232					
Quail Ridge	168		2							170	1							1	171					
Queen's Harbor	115									115	1					1		2	117					
Ridges at Mt Harbor									63	63	1			1				2	65					
Riverwood	188		1							189			1	2				3	192					
Saddlewood	124									124								0	124					
Sherwood Forest	250									250	6		1	1				8	258					
Sherwood Park	96									96			1					1	97					
Ski Mountain	242									242								0	242					
Stone Hollow	223									223	1							1	224					
Suburban Heights	25									25								0	25					
Sugar Mountain	1297		1							1298	58	4	3	22	1			88	1386					
The Harbor/Point	1480		2	1						1483	15	3	1	3			2	24	1507					
Vander	251									251	1			3				4	255					
Watauga Vista	139									139								0	139					
Waterglyn	41									41								0	41					
Westwood Forest	119									119								0	119					

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 4  
Page 3 of 5

### Billing Analysis for End of Period Customers at Present Rates

CWSNC Water

Service Area	5/8 R	3/4 R	1 R	1.5 R	2 R	3 R	4 R	6 R	Flat R	RES	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Total Comm.	Total EOP	C Forest availb	Woodrun availb	Linville availb	Conn F availb	Sapp V availb
Wildlife Bay	80									80	1							1	81					
Wildwood green	225									225	1							1	226					
Willowbrook	166									166		1						1	167					
Wolf Laurel	636									636	5	14		3				22	658					
Wood Trace	45									45								0	45					
Woodhaven Manor	77		1							78								0	78					
Mason Landing	11									11	1			1				2	13					
Linville Ridge									337	337	1	1		4	1			7	344			63		
Uniform	14145	20	24	2	1	0	0	0	416	14608	146	37	13	61	6	1	2	266	14874	0	0	63		
SkyLeaf Buildings	44									44								0	44					
Total Uniform	14189	20	24	2	1	0	0	0	416	14652	146	37	13	61	6	1	2	266	14918	0	0	63		

Service Area	5/8 R	3/4 R	1 R	1.5 R	2 R	3 R	4 R	6 R	Flat R	RES	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Total Comm.	Total EOP	C Forest availb	Woodrun availb	Linville availb	Conn F availb	Sapp V availb
Clear Water System																								
Ashley Hills/Amber Acres	1321									1321	4							4	1325					
Heather Glen	104									104								0	104					
Country Crossing	56									56								0	56					
Oaks Plantation	25									25								0	25					
Randsdell Forest	46									46								0	46					
Sandy Trails	114									114								0	114					
Stewarts Ridge	47									47								0	47					
Wilders Village	42									42								0	42					
Neuse Woods									99	99								0	99					
Tuckahoe	87									87								0	87					

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 4  
Page 4 of 5

Billing Analysis for End of Period Customers at Present Rates

CWSNC Water	Total										Total	Total	C Forest	Woodrun	Linville	Conn F	Sapp V							
Service Area	5/8 R	3/4 R	1 R	1.5 R	2 R	3 R	4 R	6 R	Flat R	RES	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Comm.	EOP	avalib	avalib	avalib	avalib	avalib
Jordan Woods	34									34								0	34					
Hidden Hollow	47									47								0	47					
Lindsey Point	30									30								0	30					
Total Clearwater	1953	0	0	0	0	0	0	0	0	99	2052	4	0	0	0	0	0	4	2056					
New Under Uniform Rates																								
Treasure Cove	284		1		1					286								0	286					
Forest Hills	119									119	1	2	3					6	125					
Carolina Trace	1573		1		2					1576	24	2	1	3				30	1606					
Conneestee Falls	1356									1356	16			3				19	1375				524	
Fairfield Sapphire Valley	1533	4	5	32	17					1591	38	2	7	8	1			56	1647					748
Fairfield Mt/Apple Valley	1001	17	12							1030	46	4	4	4				58	1088					
Elk River	2	257	31							290	28	1		4				33	323					
Purchased Water Systems																								
Carolina Forest	197		1							198	4	1	1					6	204	734				
High Vista	234		1							235	1			2				3	238					
Riverpointe	190									190	5							5	195					
Whispering Pines	1519		15							1534	28	5	5	1		1		40	1574					
White Oak Plantation	507									507			1					1	508					
Woodrun	463									463	4	1						5	468		693			
Yorktown	107									107								0	107					
Zemosa Acres	239		2							241		1						1	242					
Total	9324	278	69	32	20	0	0	0	0	9723	195	19	22	25	1	1	0	263	9986	734	693	0	524	748
Grant Total	25466	298	93	34	21	0	0	0	515	26427	345	56	35	86	7	2	2	533	26960	734	693	63	524	748

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 4  
Page 5 of 5

Billing Analysis for End of Period Customers at Present Rates

Service Area	Total																	Total	Total	availb	availb	availb	availb	availb	
	5/8 R	3/4 R	1 R	1.5 R	2 R	3 R	4 R	6 R	Flat R	RES	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Comm.	EOP						
Bradfield Farms	952	94	5							1051								0	1051						
Fairfield Harbor	1840	2	2							1844	22	1	2	3				28	1872	874					
Total	2792	96	7	0	0	0	0	0	0	2895	22	1	2	3	0	0	0	28	2923	874					

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 5  
Page 1 of 4

Billing Analysis for Consolidated End of Period Customers at Proposed Rates

CWSNC Water

Service Area	Total																	Total	Total	C Forest	Woodrun	Linville	Conn F	Sapph. V
	5/8 R	3/4 R	1 R	1.5 R	2 R	3 R	4 R	6 R	Flat R	RES	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Comm.	EOP	avalib	avalib	avalib	avalib	avalib
Abingdon/InterLarken	596									596	1							1	597					
Bahia Bay	117									117								0	117					
Bear Paw	336	3								339	5	1						6	345					
Beechbrook	37									37								0	37					
Belvedere Plantation	1173		2							1175	4	2		7	4			17	1192					
Bent Creek	306									306	1							1	307					
Brandywine Bay	838		2		1					841	10	3	1					14	855					
Buffalo Creek	274									274								0	274					
Chapel Hill	96									96								0	96					
College Park	79									79								0	79					
Country Club Annex	24									24								0	24					
Country Hills	67									67								0	67					
Crestview	38									38								0	38					
Crystal Mountain	49									49								0	49					
Lamplight/Danby/Wdsd Fall	1276		3							1279	3	2	1	1				7	1286					
Eagle Crossing	78									78								0	78					
Eastwood Forest	131									131	1							1	132					
Forest Brook/Ole lamp Place	125	1								126		1						1	127					
Grandview at T-Square	74									74	1							1	75					
Harbor House Estates	62									62								0	62					
Heathfield	63									63		1						1	64					
Hestron Park										0	1		2	7				10	10					
High Meadows	274									274	3			1				4	278					
Holly Acres	53									53		1						1	54					
Hounds Ear	417		6	1						424	8	2		3				13	437					
Huntington Forest	56									56								0	56					
Kings Grant	177		1							178	1							1	179					
Larkhaven	149	16								165								0	165					
Lemmond Acres	32									32	1							1	33					



Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 5  
Page 2 of 4

Billing Analysis for Consolidated End of Period Customers at Proposed Rates

CWSNC Water

Service Area	Total																	Total	Total	C Forest	Woodrun	Linville	Conn F	Sapph. V
	5/8 R	3/4 R	1 R	1.5 R	2 R	3 R	4 R	6 R	Flat R	RES	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Comm.	EOP	availb	availb	availb	availb	availb
Meadow Glen	33									33								0	33					
Misty Mountain	141									141								0	141					
Monteray	27									27								0	27					
Mt Mitchell	205								16	221	2		2	1				5	226					
Nero	125									125								0	125					
Oakdale terrace	43									43								0	43					
Olde Point	192		3							195	1			1				2	197					
Pinnacle Shores	154									154	9							9	163					
Powder Horn Mountain	230									230	1	1						2	232					
Quail Ridge	168		2							170	1							1	171					
Queen's Harbor	115									115	1					1		2	117					
Ridges at Mt Harbor									63	63	1			1				2	65					
Riverwood	188		1							189			1	2				3	192					
Saddlewood	124									124								0	124					
Sherwood Forest	250									250	6		1	1				8	258					
Sherwood Park	96									96			1					1	97					
Ski Mountain	242									242								0	242					
Stone Hollow	223									223	1							1	224					
Suburban Heights	25									25								0	25					
Sugar Mountain	1297		1							1298	58	4	3	22	1			88	1386					
The Harbor/Point	1480		2	1						1483	15	3	1	3			2	24	1507					
Vander	251									251	1			3				4	255					
Watauga Vista	139									139								0	139					
Waterglyn	41									41								0	41					
Westwood Forest	119									119								0	119					
Wildlife Bay	80									80	1							1	81					
Wildwood green	225									225	1							1	226					
Willowbrook	166									166		1						1	167					
Wolf Laurel	636									636	5	14		3				22	658					

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 5  
Page 3 of 4

Billing Analysis for Consolidated End of Period Customers at Proposed Rates

CWSNC Water

Service Area	Total																	Total	Total	C Forest	Woodrun	Linville	Conn F	Sapph. V
	5/8 R	3/4 R	1 R	1.5 R	2 R	3 R	4 R	6 R	Flat R	RES	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Comm.	EOP	availb	availb	availb	availb	availb
Wood Trace	45									45								0	45					
Woodhaven Manor	77		1							78								0	78					
Mason Landing	11									11	1			1				2	13					
Linville Ridge									337	337	1	1		4	1			7	344			63		
SkyFeat	44									44								0	44					
Ashley Hills/Amber Acres	1321									1321	4							4	1325					
Heather Glen	104									104								0	104					
Country Crossing	56									56								0	56					
Oaks Plantation	25									25								0	25					
Randsdell Forest	46									46								0	46					
Sandy Trails	114									114								0	114					
Stewarts Ridge	47									47								0	47					
Wilders Village	42									42								0	42					
Neuse Woods									99	99								0	99					
Tuckahoe	87									87								0	87					
Jordan Woods	34									34								0	34					
Hidden Hollow	47									47								0	47					
Lindsey Point	30									30								0	30					

New Under Uniform Rates

Total Uniform Values																										
Treasure Cove	284		1		1					286								0	286							
Forest Hills	119									119	1	2	3					6	125							
Conneestee Falls	1356									1356	16			3				19	1375					524		
Fairfield Sapphire Valley	1533	4	5	32	17					1591	38	2	7	8	1			56	1647						748	
Fairfield Mt/Apple Valley	1001	17	12							1030	46	4	4	4				58	1088							
Total Uniform	20435	41	42	34	19	0	0	0	515	21085	251	45	27	76	7	1	2	409	21495	0	0	63	524		748	
Elk River	2	257	31								28	1		4				33	33							

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 5  
Page 4 of 4

Billing Analysis for Consolidated End of Period Customers at Proposed Rates

CWSNC Water

Total																			Total	Total	C Forest	Woodrun	Linville	Conn F	Sapph. V
Service Area	5/8 R	3/4 R	1 R	1.5 R	2 R	3 R	4 R	6 R	Fiat R	RES	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Comm.	EOP	avalib	avalib	avalib	avalib	avalib	
Purchased Water Systems																									
Carolina Trace	1573		1		2					1578	24	2	1	3				30	1606						
Carolina Forest	197		1							198	4	1	1					6	204	734					
High Vista	234		1							235	1			2				3	238						
Riverpointe	190									190	5							5	195						
Whispering Pines	1519		15							1534	28	5	5	1		1		40	1574						
White Oak Plantation	507									507			1					1	508						
Woodrun	463									463	4	1						5	468		693				
Yorktown	107									107								0	107						
Zemosa Acres	239		2							241		1						1	242						

Service Area	Total										Total							Total						
	5/8 R	3/4 R	1 R	1.5 R	2 R	3 R	4 R	6 R	Fiat R	RES	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Comm.	EOP	avalib	avalib	avalib	avalib	avalib
Bradfield Farms	952	94	5							1051								0						
Fairfield Harbor	1840	2	2							1844	22	1	2	3				28		874				
Total	2792	96	7	0	0	0	0	0	0	2895	22	1	2	3	0	0	0	28	2923	874				

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 6  
Page 1 of 2

Billing Analysis for End of Period Customers at Present Rates

CWSNC Sewer

Service Area	5/8 R	1 R	1.5 R	2 R	3 R	Flat R	Total Res.	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Flat Comm	Total Comm	Total EOP	Availability Conestee	Availability Sapphire
Abington/kynwood	596					110	706	1								1	707		
Ashley Hills	1,157					27	1,184									0	1,184		
Bear Paw	65						65	3								3	68		
Belvedere Plantation	690	2				1	693	1			4	3				8	701		
Bent Creek	306						306									0	306		
Brandywine Bay	748	2		1		47	798	4							2	6	804		
Carolina Pines						362	362	1								1	363		
Lamplight/Danby/Wdsd F	1,273	3				8	1,284	326		1	2					329	1,613		
Hestron Park	177	4				1	182	7	1	2	10					20	202		
Hounds Ear							-									0	-		
Huntwick transferred							-									0	-		
Hemby Acres/Beacon Hill						719	719									0	719		
Kings Grant - Charlotte							-									0	-		
Kings Grant - Raleigh						116	116									0	116		
Kynwood							-									0	-		
Nero	125						125									0	125		
Olde Point	120	3					123				1					1	124		
Queen's Harbor	114						114	1					1			2	116		
Ridges at Mt. Harbour							-	1			1				39	41	41		
Riverpointe	189						189	1								1	190		
Saddlewood	18						18									0	18		
Sugar Mountain	977	1				16	994	36	3	2	19	1				61	1,055		
Wolf Laurel	54						54				2					2	56		
Willowbrook	166						166									0	166		
Total	6,775	15	-	1	-	1,407	8,198	382	4	5	39	4	1	-	41	476	8,674	-	-
Multiple Dwelling Units						169	169									0	169		
SkyLeaf Building	44						44									0	44		
Total Uniform Sewer	6,819	15	-	1	-	1,576	8,411	382	4	5	39	4	1	-	41	476	8,887	-	-

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 6  
Page 2 of 2

Billing Analysis for End of Period Customers at Present Rates

CWSNC Sewer

Service Area	5/8 R	1 R	1.5 R	2 R	3 R	Flat R	Total Res.	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Flat Comm	Total Comm	Total EOP	Availability Connestee	Availability Sapphire
Regalwood						357	357									0	357		
White Oak Estates						688	688									0	688		
White oak High School						1	1									0	1		
Child Daycare						1	1									0	1		
																0	-		
Carolina Trace	1540	1		2			1,543	15	2	1	1					19	1,562		
Connestee Falls	984					5	989	7			1					8	997	259	
Sapphire Valley	652	2	128	68			850	18	2	4	6	1				31	881		89
Nags Head						657	657	11	7	4	7			2		31	688		
White Oak Planation	417						417									0	417		
College Park	49					1	50									0	50		
Kings Grant Charlotte	177	1					178									0	178		
Mt Carmel	387						387									0	387		
Fairfield Mountain	398	12					410									0	410		
Elk River	1	1					2	102	21	2						125	127		
CLMS	775	91	0	0	0		866	71	18	3	3	1				96	962		
<b>Total</b>	<b>12,199</b>	<b>123</b>	<b>128</b>	<b>71</b>	<b>-</b>	<b>3,286</b>	<b>15,807</b>	<b>606</b>	<b>54</b>	<b>19</b>	<b>57</b>	<b>6</b>	<b>1</b>	<b>2</b>	<b>41</b>	<b>786</b>	<b>16,593</b>	<b>259</b>	<b>89</b>

Kings Grant - Charlotte was reclassified from uniform to purchased sewer

Kings Grant - Raleigh was added to uniform rates

Fairfield Mountain treatment for commercial customers : small 7, medium 11, large 3

Service Area	5/8 R	1 R	1.5 R	2 R	3 R	Bulk S	Total Res.	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Apts.	Total Comm	Total EOP	Availib Harbour
Bradfield Farms	1044	2				156	1,202								379	379	3162	
Fairfield Harbour	1829	1					1,830	13		2	1					16	1,846	876
<b>Total</b>	<b>2873</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>156</b>	<b>3,032</b>	<b>13</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>379</b>	<b>395</b>	<b>3,427</b>	<b>876</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 7  
Page 1 of 2

Billing Analysis for End of Period Customers Consolidated at Proposed Rates

CWSNC Sewer

Service Area	5/8 R	1 R	1.5 R	2 R	3 R	Flat R	Total Res.	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Flat Comm	Total Comm	Total EOP	Availability Connetsee	Availability Sapphire
Abington/kynwood	596					110	706	1								1	707		
Ashley Hills	1,157					27	1,184									0	1,184		
Bear Paw	65						65	3								3	68		
Belvedere Plantation	690	2				1	693	1			4	3				8	701		
Bent Creek	306						306									0	306		
Brandywine Bay	748	2		1		47	798	4							2	6	804		
Carolina Pines						362	362	1								1	363		
Lamplight/Danby/Wdsd F	1,273	3				8	1,284	326		1	2					329	1,613		
Hestron Park	177	4				1	182	7	1	2	10					20	202		
Hounds Ear							-									0	-		
Huntwick transferred							-									0	-		
Hemby Acres/Beacon Hill						719	719									0	719		
Kings Grant - Charlotte							-									0	-		
Kings Grant - Raleigh						116	116									0	116		
Kynwood							-									0	-		
Nero	125						125									0	125		
Olde Point	120	3					123				1					1	124		
Queen's Harbor	114						114	1					1			2	116		
Ridges at Mt. Harbour							-	1			1				39	41	41		
Riverpointe	189						189	1								1	190		
Saddlewood	18						18									0	18		
Sugar Mountain	977	1				16	994	36	3	2	19	1				61	1,055		
Wolf Laurel	54						54				2					2	56		
Willowbrook	166						166									0	166		
Multiple Dwelling Units						169	169									0	169		
SkyLeaf Building	44						44									0	44		
Uniform	6,819	15	-	1	-	1,576	8,411	382	4	5	39	4	1	-	41	476	8,887	-	-
Carolina Trace	1540	1		2			1,543	15	2	1	1					19	1,562		
Connetsee Falls	984					5	989	7			1					8	997	259	

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 7  
Page 2 of 2

Billing Analysis for End of Period Customers Consolidated at Proposed Rates

CWSNC Sewer

Service Area	5/8 R	1 R	1.5 R	2 R	3 R	Flat R	Total Res.	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Flat Comm	Total Comm	Total EOP	Availability Conestee	Availability Sapphire
Sapphire Valley						850	850	18	2	4	6	1				31	881		89
Nags Head						657	657	11	7	4	7			2		31	688		
Total Uniform Sewer	9,343	16	-	3	-	3,088	12,450	433	15	14	54	5	1	2	41	565	13,015	259	89
Regalwood						357	357									0	357		
White Oak Estates						688	688									0	688		
White oak High School						1	1									0	1		
Child Daycare						1	1									0	1		
White Oak Planation	417						417									0	417		
College Park	49					1	50									0	50		
Kings Grant Charlotte	177	1					178									0	178		
Mt Carmel	387						387									0	387		
Fairfield Mountain	398	12					410									0	410		
Elk River	1	1					2	102	21	2						125	127		
CL/MS	775	91	0	0	0		866	71	18	3	3	1				96	962		
							-									0	-		
Total	11,547	121	-	3	-	4,136	15,807	606	54	19	57	6	1	2	41	786	16,593	259	89

Kings Grant - Charlotte was reclassified from uniform to purchased sewer

Kinks Grant - Raleigh was added to uniform rates

Fairfield Mountain treatment for commercial customers : small 7, medium 11, large 3

CWSNC Sewer

Service Area	5/8 R	1 R	1.5 R	2 R	3 R	Bulk S	Total Res.	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Flat Apts.	Total Comm	Total EOP	Availability Harbour	Availability
Bradfield Farms	1,044	2				156									379		1581		
Fairfield Harbour	1,829	1					1,830	13		2	1					16	1,846	876	
Total	2,873	3	0	0	0	156	3,032	13	0	2	1	0	0	0	379	395	3,427	876	

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 8  
Page 1 of 1

Consumption Consolidated for End of Period Customers at Proposed Rates

CWSNC Water

Service Area	Total												Total		
	5/8 R	3/4 R	1 R	1.5 R	2 R	Res.	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	Comm.	Total
Uniform Rates	747,738,222	958,990	1,443,380	319,200	42,700	750,502,492	9,676,459	5,114,672	5,320,605	19,749,454	9,998,970	776,970	2,112,670	52,749,800	803,252,292
Clearwater	101,289,220					101,289,220	5,390							5,390	101,294,610
Treasure Cove	18,681,303		138,140		131,300	18,950,743								-	18,950,743
Forest Hills	5,650,985					5,650,985	112,510	748,500	1,186,240					2,047,250	7,698,235
Conneetee Falls	36,125,003					36,125,003	335,000			1,121,954				1,456,954	37,581,957
Fairfield Sapphire Valley	39,163,560	48,002	283,940	5,583,382	2,844,594	47,923,478	1,945,266	689,846	2,147,142	1,160,730	1,484,827			7,427,811	55,351,289
Fairfield Mt/Apple Valley	27,598,899	477,390	1,847,310			29,923,599	2,432,210	1,138,670	895,520	972,730				5,439,130	35,362,729
Total Uniform	976,247,192	1,484,382	3,712,770	5,902,582	3,018,594	990,365,520	14,506,835	7,691,688	9,549,507	23,004,868	11,483,797	776,970	2,112,670	69,126,335	1,059,491,855
Elk River	2,945	5,429,230	1,066,399			6,498,574	394,409	128,140		377,164				899,713	7,398,287
Bradfield Farms	61,620,657	6,898,799	1,032,891			69,552,347								-	69,552,347
Fairfield Harbor	79,353,576	36,080	103,450			79,493,106	1,343,824	37,050	493,700	713,200				2,587,774	82,080,880
Total	140,974,233	6,934,879	1,136,341	-	-	149,045,453	1,343,824	37,050	493,700	713,200	-	-	-	2,587,774	151,633,227



Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 9  
Page 1 of 1

Consumption Consolidated for End of Period Customers at Proposed Rates

CWSNC Sewer

Service Area	5/8 R	1 R	1.5R	2 R	Total Residential	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6C	Total Commercial	Grand Total
Uniform Sewer	293,436,504	702,202		42,700	294,181,406	23,559,317	283,780	2,537,200	13,518,150	9,047,670	776,970		49,723,087	343,904,493
Carolina Trace	56,774,289	57,320	29,800		56,861,409	799,910	157,220	500,700	89,900				1,547,730	58,409,139
Conneestee Falls	26,314,000				26,314,000	147,000	869,000						1,016,000	27,330,000
Sapphire Valley					-	1,322,216	689,846	1,174,149	974,892	1,484,827			5,645,930	5,645,930
Nags Head					-	1,690,810	4,448,850	1,661,830	5,242,500			3,792,952	16,836,942	16,836,942
Total	376,524,793	759,522	29,800	42,700	377,356,815	27,519,253	6,448,696	5,873,879	19,825,442	10,532,497	776,970	3,792,952	74,769,689	452,126,504
CL/MS	41,519,782	9,651,480			51,171,262	6,522,778	3,035,120	1,258,800	1,935,400	126,000			12,878,098	64,049,360
Mt Carmel	16,060,320				16,060,320								-	16,060,320
College Park	2,355,400				2,355,400								-	2,355,400
Kings Grant Charlotte	7,969,580	284,918			8,254,498								-	8,254,498
Whit Oak Planation	20,139,604				20,139,604								-	20,139,604
Elk River	11,563				11,563	1,373,541	240,599		238,005				1,852,145	1,863,708
Total	464,581,042	10,695,920	29,800	42,700	475,349,462	35,415,572	9,724,415	7,132,679	21,998,847	10,658,497	776,970	3,792,952	89,499,932	564,849,394
Fairfield Mountain													small	1,297,790
Fairfield Mountain													medium	2,230,760
Fairfield Mountain													large	405,620
Total														568,783,564

SEWER

Service Area	5/8 R	1 R	1.5R	2 R	Total Residential	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6C	Total Commercial	Grand Total
Bradfield Farms	74,600,123	3,802,389			78,402,512								-	78,402,512
Fairfield Harbour	78,859,319	12,620			78,871,939	1,102,710		493,700	528,800				2,125,210	80,997,149
	153,459,442	3,815,009	-	-	157,274,451	1,102,710	-	493,700	528,800	-	-	-	2,125,210	159,399,661

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 10  
Page 1 of 8

Public Staff's Revenue at Present Rates

CWSNC Water

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Flat Residential	-		-	416	4,992	41.60	207,667	207,667
5/8" Residential Metered	747,738,222	6.40	4,785,525	14,189	170,268	22.40	3,814,003	8,599,528
3/4" Residential Metered	958,990	6.40	6,138	20	240	22.40	5,376	11,514
1" Residential Metered	1,443,380	6.40	9,238	24	288	56.01	16,131	25,369
1.5" Residential Metered	319,200	6.40	2,043	2	24	112.02	2,688	4,731
2" Residential Metered	42,700	6.40	273	1	12	179.23	2,151	2,424
Total Residential Metered	750,502,492		4,803,216	14,236	170,832		3,840,349	8,643,565
Added 694,871 gallons to 5/8" residential metered usage for SkyLeaf								
5/8" Commercial Metered	9,676,459	6.40	61,929	146	1,752	22.40	39,245	101,174
1" Commercial Metered	5,114,672	6.40	32,734	37	444	56.10	24,908	57,642
1.5" Commercial Metered	5,320,605	6.40	34,052	13	156	112.02	17,475	51,527
2" Commercial Metered	19,749,454	6.40	126,397	61	732	179.23	131,196	257,593
3" Commercial Metered	9,998,970	6.40	63,993	6	72	336.06	24,196	88,190
4" Commercial Metered	776,970	6.40	4,973	1	12	560.10	6,721	11,694
6" Commercial Metered	2,112,670	6.40	13,521	2	24	1,120.19	26,885	40,406
Total Commercial Metered	52,749,800		337,599	266	3,192		270,627	608,225
Total								9,459,458

Purchased Water

Carolina Forest

5/8" Residential Metered	5,727,411	3.19	18,270	197	2,364	22.40	52,954	71,224
1" Residential Metered	84,710	3.19	270	1	12	56.01	672	942
5/8" Commercial Metered	29,462	3.19	94	4	48	22.40	1,075	1,169

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 10  
Page 2 of 8

Public Staff's Revenue at Present Rates

CWSNC Water

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
1" Commercial Metered	161,610	3.19	516	1	12	56.01	672	1,188
1.5" Commercial Metered	67,123	3.19	214	1	12	112.02	1,344	1,558
<b>Total</b>	<b>6,070,316</b>		<b>19,364</b>	<b>204</b>	<b>2,448</b>		<b>56,717</b>	<b>76,082</b>

High Vista Estates

5/8" Residential Metered	10,550,670	3.25	34,290	234	2,808	22.40	62,899	97,189
1" Residential Metered	61,500	3.25	200	1	12	56.01	672	872
5/8" Commercial Metered	11,000	3.25	36	1	12	22.40	269	305
2" Commercial Metered	926,700	3.25	3,012	2	24	179.23	4,302	7,313
<b>Total</b>	<b>11,549,870</b>		<b>37,537</b>	<b>238</b>	<b>2,856</b>		<b>68,142</b>	<b>105,679</b>

Riverpointe

5/8" Residential Metered	15,752,797	6.30	99,243	190	2,280	22.40	51,072	150,315
5/8" Commercial Metered	727,260	6.30	4,582	5	60	22.40	1,344	5,926
<b>Total</b>	<b>16,480,057</b>		<b>103,824</b>	<b>195</b>	<b>2,340</b>		<b>52,416</b>	<b>156,240</b>

Whispering Pines

5/8" Residential Metered	85,279,733	2.23	190,174	1,519	18,228	22.40	408,307	598,481
1" Residential Metered	1,208,810	2.23	2,696	15	180	56.01	10,082	12,777
5/8" Commercial Metered	993,770	2.23	2,216	28	336	22.40	7,526	9,743
1" Commercial Metered	2,181,248	2.23	4,864	5	60	56.01	3,361	8,225
1.5" Commercial Metered	621,389	2.23	1,386	5	60	112.02	6,721	8,107

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 10  
Page 3 of 8

Public Staff's Revenue at Present Rates

CWSNC Water

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
2" Commercial Metered	419,900	2.23	936	1	12	179.23	2,151	3,087
4" Commercial Metered	500	2.23	1	1	12	560.10	6,721	6,722
<b>Total</b>	<b>90,705,350</b>		<b>202,273</b>	<b>1,574</b>	<b>18,888</b>		<b>444,869</b>	<b>647,142</b>

White Oak Planation/Lee  
Forest/Winston  
Planation/Winston Point

5/8" Residential Metered	25,363,484	3.25	82,431	507	6,084	22.40	136,282	218,713
1.5" Commercial Metered	184,500	3.25	600	1	12	112.02	1,344	1,944
<b>Total</b>	<b>25,547,984</b>		<b>83,031</b>	<b>508</b>	<b>6,096</b>		<b>137,626</b>	<b>220,657</b>

Woodrun

5/8" Residential Metered	17,048,700	3.19	54,385	463	5,556	22.40	124,454	178,840
5/8" Commercial Metered	122,120	3.19	390	4	48	22.40	1,075	1,465
1" Commercial Metered	388,136	3.19	1,238	1	12	56.01	672	1,910
<b>Total</b>	<b>17,558,956</b>		<b>56,013</b>	<b>468</b>	<b>5,616</b>		<b>126,202</b>	<b>182,215</b>

Yorktown

5/8" Residential Metered	3,755,800	5.01	18,817	107	1,284	22.40	28,762	47,578
--------------------------	-----------	------	--------	-----	-------	-------	--------	--------

Zemosa Acres

5/8" Residential Metered	12,124,948	5.27	63,898	239	2,868	22.40	64,243	128,142
1" Residential Metered	66,819	5.27	352	2	24	56.01	1,344	1,696

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2017

Casselberry  
Exhibit No. 10  
Page 4 of 8

Public Staff's Revenue at Present Rates

CWSNC Water

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
1" Commercial Metered	90,807	5.27	479	1	12	56.01	672	1,151
<b>Total</b>	<b>12,282,574</b>		<b>64,729</b>	<b>242</b>	<b>2,904</b>		<b>66,260</b>	<b>130,989</b>

Clearwater Systems

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Residential Flat	-	-	-	99	1,188	37.18	44,170	44,170
5/8" Residential Metered	101,289,220	4.50	455,801	1,953	23,436	16.27	381,304	837,105
5/8" Commercial Metered	5,390	4.50	24	4	48	16.27	781	805
<b>Total</b>	<b>101,294,610</b>		<b>455,826</b>	<b>2,056</b>	<b>24,672</b>		<b>426,255</b>	<b>882,080</b>

Treasure Cove

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	18,681,303	1.90	35,494	284	3,408	14.50	49,416	84,910
1" Residential Metered	138,140	1.90	262	1	12	14.50	174	436
2" Residential Metered	131,300	1.90	249	1	12	14.50	174	423
<b>Total</b>	<b>18,950,743</b>		<b>36,006</b>	<b>286</b>	<b>3,432</b>		<b>49,764</b>	<b>85,770</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2017

Casselberry  
Exhibit No. 10  
Page 5 of 8

Public Staff's Revenue at Present Rates

Forest Hill Subdivision

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	5,650,985	5.23	29,555	119	1,428	22.43	32,030	61,585
5/8" Commercial Metered	112,510	5.23	588	1	12	22.43	269	858
1" Commercial Metered	748,500	5.23	3,915	2	24	56.08	1,346	5,261
1.5" Commercial Metered	1,186,240	5.23	6,204	3	36	112.16	4,038	10,242
Total Commercial Metered	2,047,250		10,707	6	72		5,653	16,360
Total	7,698,235		40,262	125	1,500		37,683	77,945

Carolina Trace

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	58,012,009	5.06	293,541	1,573	18,876	14.05	265,208	558,749
1" Residential Metered	57,320	5.06	290	1	12	14.05	169	459
2" Residential Metered	29,800	5.06	151	2	24	14.05	337	488
Total Residential Metered	58,099,129		293,982	1,576	18,912		265,714	559,695
5/8" Commercial Metered	1,096,820	5.06	5,550	24	288	14.05	4,046	9,596
1" Commercial Metered	157,220	5.06	796	2	24	14.05	337	1,133
1.5" Commercial Metered	500,700	5.06	2,534	1	12	14.05	169	2,702
2" Commercial Metered	2,710,830	5.06	13,717	3	36	14.05	506	14,223
Total Commercial Metered	4,465,570		22,596	30	360		5,058	27,654
Total	62,564,699		316,577	1,606	19,272		270,772	587,349

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2017

Casselberry  
Exhibit No. 10  
Page 6 of 8

Public Staff's Revenue at Present Rates

Connetsee Falls

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	36,125,003	6.65	240,231	1,356	16,272	27.41	446,015.52	686,247
5/8" Commercial Metered	335,000	6.65	2,227.75	16	192	27.41	5,262.72	7,490
2" Commercial Metered	1,121,954	6.65	7,460.99	3	36	219.22	7,891.92	15,353
Total Commercial Metered	1,456,954		9,689	19	228		13,155	22,843
<b>Total</b>	<b>37,581,957</b>		<b>249,920</b>	<b>1,375</b>	<b>16,500</b>		<b>459,170</b>	<b>709,090</b>

Sapphire Valley

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	39,163,560	9.17	359,130	1,533	18,396	19.89	365,896	725,026
3/4" Residential Metered	48,002	9.17	440	4	48	19.89	955	1,395
1" Residential Metered	283,940	9.17	2,604	5	60	19.89	1,193	3,797
1.5" Residential Metered	5,583,382	9.17	51,200	32	384	19.89	7,638	58,837
2" Residential Metered	2,844,594	9.17	26,085	17	204	19.89	4,058	30,142
Total Residential Metered	47,923,478		439,458	1,591	19,092		379,740	819,198
5/8" Commercial Metered	1,945,266	9.17	17,838	38	456	19.89	9,070	26,908
1" Commercial Metered	689,846	9.17	6,326	2	24	49.73	1,194	7,519
1.5" Commercial Metered	2,147,142	9.17	19,689	7	84	99.45	8,354	28,043
2" Commercial Metered	1,160,730	9.17	10,644	8	96	159.13	15,276	25,920
3" Commercial Metered	1,484,827	9.17	13,616	1	12	298.37	3,580	17,196

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2017

Casselberry  
Exhibit No. 10  
Page 7 of 8

Public Staff's Revenue at Present Rates

**Sapphire Valley**

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Total Commercial Metered	7,427,811		68,113	56	672		37,474	105,587
<b>Total</b>	<b>55,351,289</b>		<b>507,571</b>	<b>1,647</b>	<b>19,764</b>		<b>417,214</b>	<b>924,785</b>

**Fairfield Mountain**

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	27,598,899	7.10	195,952	1,001	12,012	19.23	230,991	426,943
3/4" Residential Metered	477,390	7.10	3,389	17	204	19.23	3,923	7,312
1" Residential Metered	1,847,310	7.10	13,116	12	144	19.23	2,769	15,885
Total Residential Metered	29,923,599		212,458	1,030	12,360		237,683	450,140
5/8" Commercial Metered	2,432,210	7.10	17,269	46	552	19.23	10,615	27,884
1" Commercial Metered	1,138,670	7.10	8,085	4	48	48.07	2,307	10,392
1.5" Commercial Metered	895,520	7.10	6,358	4	48	96.14	4,615	10,973
2" Commercial Metered	972,730	7.10	6,906	4	48	153.83	7,384	14,290
Total Commercial Metered	5,439,130		38,618	58	696		24,921	63,539
<b>Total</b>	<b>35,362,729</b>		<b>251,075</b>	<b>1,088</b>	<b>13,056</b>		<b>262,604</b>	<b>513,679</b>



Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2017

Casselberry  
Exhibit No. 10  
Page 8 of 8

Public Staff's Revenue at Present Rates

Elk River

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	2,945	4.29	13	2	24	19.52	468	481
3/4" Residential Metered	5,429,230	4.29	23,291	257	3,084	19.52	60,200	83,491
1" Residential Metered	1,066,399	4.29	4,575	31	372	48.79	18,150	22,725
Total Residential Metered	6,498,574		27,879	290	3,480		78,818	106,697
5/8" Commercial Metered	394,409	4.29	1,692	28	336	19.52	6,559	8,251
1" Commercial Metered	128,140	4.29	550	1	12	48.79	585	1,135
2" Commercial Metered	337,164	4.29	1,446	4	48	156.12	7,494	8,940
Total Commercial Metered	859,713		3,688	33	396		14,638	18,326
Total	7,358,287		31,567	323	3,876		93,456	125,023
<b>Availability</b>								
Linville Ridge (monthly)	-		-	63	756	12.32	9,314	9,314
Carolina Forest (semi annually)				734	1,468	24.64	36,172	36,172
Woodrun (semi annually)				693	1,386	24.64	34,151	34,151
Sapphire Valley (monthly)				748	8,976	9.07	81,412	81,412
Connestee (monthly)				524	6,288	4.79	30,120	30,120
Total Availability	-			2,762	18,874		191,168	191,168
Total Water Revenue	510,113,456		2,474,393	14,804	163,378		3,189,078	15,122,929

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 11  
Page 1 of 5

Public Staff's Revenue at Proposed Rates Consolidated

CWSNC Water

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Flat Residential	-		-	515	6,180	50.17	310,051	310,051
5/8" Residential Metered	976,247,192	7.70	7,517,103	20,435	245,220	26.95	6,608,679	14,125,782
3/4" Residential Metered	1,484,382	7.70	11,430	41	492	26.95	13,259	24,689
1" Residential Metered	3,712,770	7.70	28,588	42	504	67.38	33,960	62,548
1.5" Residential Metered	5,902,582	7.70	45,450	34	408	134.75	54,978	100,428
2" Residential Metered	3,018,594	7.70	23,243	19	228	215.60	49,157	72,400
<b>Total Residential Metered</b>	<b>990,365,520</b>		<b>7,625,815</b>	<b>20,571</b>	<b>246,852</b>		<b>6,760,033</b>	<b>14,385,847</b>
5/8" Commercial Metered	14,506,835	7.70	111,703	251	3,012	26.95	81,173	192,876
1" Commercial Metered	7,691,688	7.70	59,226	45	540	67.38	36,385	95,611
1.5" Commercial Metered	9,549,507	7.70	73,531	27	324	134.75	43,659	117,190
2" Commercial Metered	23,004,868	7.70	177,137	76	912	215.60	196,627	373,765
3" Commercial Metered	11,483,797	7.70	88,425	7	84	404.25	33,957	122,382
4" Commercial Metered	776,970	7.70	5,983	1	12	673.75	8,085	14,068
6" Commercial Metered	2,112,670	7.70	16,268	2	24	1,347.50	32,340	48,608
<b>Total Commercial Metered</b>	<b>69,126,335</b>		<b>532,273</b>	<b>409</b>	<b>4,908</b>		<b>432,227</b>	<b>964,500</b>
<b>Total</b>	<b>1,059,491,855</b>		<b>8,158,087</b>	<b>21,495</b>	<b>257,940</b>		<b>7,502,310</b>	<b>15,660,397</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 11  
Page 2 of 5

Public Staff's Revenue at Proposed Rates Consolidated

CWSNC Water

Elk River

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	2,945	4.29	13	2	24	19.52	468	481
3/4" Residential Metered	5,429,230	4.29	23,291	257	3,084	19.52	60,200	83,491
1" Residential Metered	1,066,399	4.29	4,575	31	372	48.79	18,150	22,725
<b>Total Residential Metered</b>	<b>6,498,574</b>		<b>27,879</b>	<b>290</b>	<b>3,480</b>		<b>78,818</b>	<b>106,697</b>
5/8" Commercial Metered	394,409	4.29	1,692	28	336	19.52	6,559	8,251
1" Commercial Metered	128,140	4.29	550	1	12	48.79	585	1,135
2" Commercial Metered	337,164	4.29	1,446	4	48	156.12	7,494	8,940
<b>Total Commercial Metered</b>	<b>859,713</b>		<b>3,688</b>	<b>33</b>	<b>396</b>		<b>14,638</b>	<b>18,326</b>
<b>Total</b>	<b>7,358,287</b>		<b>31,567</b>	<b>323</b>	<b>3,876</b>		<b>93,456</b>	<b>125,023</b>
Availability								
Linville Ridge (monthly)	-		-	63	756	12.32	9,314	9,314
Sapphire Valley (monthly)				748	8,976	9.07	81,412	81,412
Connestee (monthly)				524	6,288	4.79	30,120	30,120
<b>Total Uniform</b>	<b>1,066,850,142</b>		<b>8,189,654</b>	<b>23,153</b>	<b>277,836</b>		<b>7,716,612</b>	<b>15,906,266</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 11  
Page 3 of 5

Public Staff's Revenue at Proposed Rates Consolidated

Purchased water

Carolina Trace

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	58,012,009	2.21	128,207	1,573	18,876	26.95	508,708	636,915
1" Residential Metered	57,320	2.21	127	1	12	67.38	809	935
2" Residential Metered	29,800	2.21	66	2	24	215.60	5,174	5,240
<b>Total Residential Metered</b>	<b>58,099,129</b>		<b>128,399</b>	<b>1,576</b>	<b>18,912</b>		<b>514,691</b>	<b>643,090</b>
5/8" Commercial Metered	1,096,820	2.21	2,424	24	288	26.95	7,762	10,186
1" Commercial Metered	157,220	2.21	347	2	24	67.38	1,617	1,965
1.5" Commercial Metered	500,700	2.21	1,107	1	12	134.75	1,617	2,724
2" Commercial Metered	2,710,830	2.21	5,991	3	36	215.60	7,762	13,753
<b>Total Commercial Metered</b>	<b>4,465,570</b>		<b>9,869</b>	<b>30</b>	<b>360</b>		<b>18,757</b>	<b>28,626</b>
<b>Total</b>	<b>62,564,699</b>		<b>138,268</b>	<b>1,606</b>	<b>19,272</b>		<b>533,448</b>	<b>671,716</b>

Carolina Forest

5/8" Residential Metered	5,727,411	3.19	18,270	197	2,364	26.95	63,710	81,980
1" Residential Metered	84,710	3.19	270	1	12	67.38	809	1,079
5/8" Commercial Metered	29,462	3.19	94	4	48	26.95	1,294	1,388
1" Commercial Metered	161,610	3.19	516	1	12	67.38	809	1,324
1.5" Commercial Metered	67,123	3.19	214	1	12	134.75	1,617	1,831
<b>Total</b>	<b>6,070,316</b>		<b>19,364</b>	<b>204</b>	<b>2,448</b>		<b>68,238</b>	<b>87,602</b>
Carolina Forest (semi annually)				734	1,468	24.64	36,172	36,172
<b>Total</b>	<b>6,070,316</b>		<b>19,364</b>	<b>938</b>	<b>3,916</b>		<b>104,409</b>	<b>123,773</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 11  
Page 4 of 5

Public Staff's Revenue at Proposed Rates Consolidated

**Purchased Water**

**High Vista Estates**

5/8" Residential Metered	10,550,670	3.25	34,290	234	2,808	26.95	75,676	109,965
1" Residential Metered	61,500	3.25	200	1	12	67.38	809	1,008
5/8" Commercial Metered	11,000	3.25	36	1	12	26.95	323	359
2" Commercial Metered	926,700	3.25	3,012	2	24	215.60	5,174	8,186
<b>Total</b>	<b>11,549,870</b>		<b>37,537</b>	<b>238</b>	<b>2,856</b>		<b>81,982</b>	<b>119,519</b>

**Riverpointe**

5/8" Residential Metered	15,752,797	6.30	99,243	190	2,280	26.95	61,446	160,689
5/8" Commercial Metered	727,260	6.30	4,582	5	60	26.95	1,617	6,199
<b>Total</b>	<b>16,480,057</b>		<b>103,824</b>	<b>195</b>	<b>2,340</b>		<b>63,063</b>	<b>166,887</b>

**Whispering Pines**

5/8" Residential Metered	85,279,733	2.23	190,174	1,519	18,228	26.95	491,245	681,418
1" Residential Metered	1,208,810	2.23	2,696	15	180	67.38	12,128	14,824
5/8" Commercial Metered	993,770	2.23	2,216	28	336	26.95	9,055	11,271
1" Commercial Metered	2,181,248	2.23	4,864	5	60	67.38	4,043	8,907
1.5" Commercial Metered	621,389	2.23	1,386	5	60	134.75	8,085	9,471
2" Commercial Metered	419,900	2.23	936	1	12	215.60	2,587	3,524
4" Commercial Metered	500	2.23	1	1	12	673.75	8,085	8,086
<b>Total</b>	<b>90,705,350</b>		<b>202,273</b>	<b>1,574</b>	<b>18,888</b>		<b>535,228</b>	<b>737,501</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 11  
Page 5 of 5

Public Staff's Revenue at Proposed Rates Consolidated

Purchased Water

White Oak Planation/Lee  
Forest/Winston  
Planation/Winston Point

5/8" Residential Metered	25,363,484	3.25	82,431	507	6,084	26.95	163,964	246,395
1.5" Commercial Metered	184,500	3.25	600	1	12	134.75	1,617	2,217
<b>Total</b>	<b>25,547,984</b>		<b>83,031</b>	<b>508</b>	<b>6,096</b>		<b>165,581</b>	<b>248,612</b>

Woodrun

5/8" Residential Metered	17,048,700	3.19	54,385	463	5,556	26.95	149,734	204,120
5/8" Commercial Metered	122,120	3.19	390	4	48	26.95	1,294	1,683
1" Commercial Metered	388,136	3.19	1,238	1	12	67.38	809	2,047
<b>Total</b>	<b>17,558,956</b>		<b>56,013</b>	<b>468</b>	<b>5,616</b>		<b>151,836</b>	<b>207,849</b>
Woodrun (semi annually)				693	1,386	24.64	34,151	34,151
<b>Total</b>	<b>17,558,956</b>		<b>56,013</b>	<b>1,161</b>	<b>7,002</b>		<b>185,987</b>	<b>242,000</b>

Yorktown

5/8" Residential Metered	3,755,800	5.01	18,817	107	1,284	26.95	34,604	53,420
--------------------------	-----------	------	--------	-----	-------	-------	--------	--------

Zemosa Acres

5/8" Residential Metered	12,124,948	5.27	63,898	239	2,868	26.95	77,293	141,191
1" Residential Metered	66,819	5.27	352	2	24	67.38	1,617	1,969
1" Commercial Metered	90,807	5.27	479	1	12	67.38	809	1,287
<b>Total</b>	<b>12,282,574</b>		<b>64,729</b>	<b>242</b>	<b>2,904</b>		<b>79,718</b>	<b>144,447</b>

<b>TOTAL</b>	<b>1,313,365,748</b>		<b>8,913,511</b>	<b>29,723</b>	<b>342,394</b>		<b>9,500,633</b>	<b>18,414,144</b>
--------------	----------------------	--	------------------	---------------	----------------	--	------------------	-------------------

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016  
SEWER

Casselberry  
Exhibit No. 12  
Page 1 of 7

Public Staff's Revenue at Present Rates

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Residential Flat, Sewer		-	-	1,576	18,912	52.55	993,826	993,826
5/8" Residential Metered (1)	293,436,504	2.90	850,966	6,819	81,828	42.40	3,469,507	4,320,473
1" Res Metered (2)	702,202	2.90	2,036	15	180	42.40	7,632	9,668
2" Res Metered	42,700	2.90	124	1	12	42.40	509	633
Total Residential	294,181,406		853,126	8,411	100,932		4,471,474	5,324,600
Commercial Flat Rate		-	-	41	492	52.55	25,855	25,855
5/8" Commercial Metered	23,559,317	2.90	68,322	382	4,584	42.40	194,362	262,684
1" Commercial Metered	283,780	2.90	823	4	48	106.00	5,088	5,911
1.5" Commercial Metered	2,537,200	2.90	7,358	5	60	211.99	12,719	20,077
2" Commercial Metered	13,518,150	2.90	39,203	39	468	339.18	158,736	197,939
3" Commercial Metered	9,047,670	2.90	26,238	4	48	635.97	30,527	56,765
4" Commercial Metered	776,970	2.90	2,253	1	12	1,059.95	12,719	14,973
Total Commercial	49,723,087		144,197	476	5,712		440,006	584,203
Regalwood	-		-	357	4,284	52.55	225,124	225,124
White Oaks	-		-	688	8,256	52.55	433,853	433,853
White Oaks School	-		-	1	12	1,630.74	19,569	19,569
Child Castle Daycare	-		-	1	12	202.85	2,434	2,434
Total	343,904,493		997,323	9,934	119,208		5,592,459	6,589,783

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
Test Year Ending December 31, 2016  
SEWER

Casselberry  
Exhibit No. 12  
Page 2 of 7

Public Staff's Revenue at Present Rates

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
<b>CL/MS</b>								
5/8" Residential Sewer	41,519,782	6.62	274,861	775	9,300	52.06	484,158	759,019
1" Residential Sewer	9,651,480	6.62	63,893	91	1,092	130.15	142,124	206,017
5/8" Commercial Sewer	6,522,778	6.62	43,181	71	852	52.06	44,355	87,536
1" Commercial Sewer	3,035,120	6.62	20,092	18	216	130.15	28,112	48,205
1.5" Commercial Sewer	1,258,800	6.62	8,333	3	36	260.31	9,371	17,704
2" Commercial Sewer	1,935,400	6.62	12,812	3	36	416.49	14,994	27,806
3" Commercial Sewer	126,000	6.62	834	1	12	780.92	9,371	10,205
<b>Total</b>	<b>64,049,360</b>		<b>424,007</b>	<b>962</b>	<b>11,544</b>		<b>732,485</b>	<b>1,156,492</b>

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
<b>Nags Head</b>								
Flat Rate	-		-	657	7,884	62.65	493,933	493,933
5/8" Commercial Sewer	1,690,810	9.31	15,741	11	132	18.43	2,433	18,174
1" Commercial Sewer	4,448,850	9.31	41,419	7	84	46.10	3,872	45,291
1.5" Commercial Sewer	1,661,830	9.31	15,472	4	48	92.19	4,425	19,897
2" Commercial Sewer	5,242,500	9.31	48,808	7	84	147.51	12,391	61,199



Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
Test Year Ending December 31, 2016  
SEWER

Casselberry  
Exhibit No. 12  
Page 3 of 7

Public Staff's Revenue at Present Rates

Nags Head

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
6" Commercial Sewer	3,792,952	9.31	35,312	2	24	921.93	22,126	57,439
<b>Total</b>	<b>16,836,942</b>		<b>156,752</b>	<b>688</b>	<b>8,256</b>		<b>539,180</b>	<b>695,932</b>

Mount Carmel	16,060,320	5.88	94,435	387	4,644	34.10	158,360	252,795
--------------	------------	------	--------	-----	-------	-------	---------	---------

College Park

Residential Flat, Sewer only	-	-	-	1	12	52.55	631	631
5/8" Residential Metered	2,355,400	5.70	13,426	49	588	33.92	19,945	33,371
<b>Total</b>	<b>2,355,400</b>		<b>13,426</b>	<b>50</b>	<b>600</b>		<b>20,576</b>	<b>34,001</b>

Kings Grant

5/8" Residential Metered	7,969,580	3.80	30,284	177	2,124	33.92	72,046	102,330
1" Res Metered	284,918	3.80	1,083	1	12	33.92	407	1,490
<b>Total</b>	<b>8,254,498</b>		<b>31,367</b>	<b>178</b>	<b>2,136</b>		<b>72,453</b>	<b>103,820</b>

White Oak Plantation/Lee  
Forest/Winston Pointe

5/8" Residential Metered	20,139,604	4.55	91,635	417	5,004	33.92	169,736	261,371
--------------------------	------------	------	--------	-----	-------	-------	---------	---------

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016  
SEWER

Casselberry  
Exhibit No. 12  
Page 4 of 7

Public Staff's Revenue at Present Rates

Fairfield Mountain

Billing Type	Usage Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Res. Collection			-	398	4,776	86.67	413,936	413,936
1" Res Collection			-	12	144	86.67	12,480	12,480
Residential Collection			-	410	4,920		426,416	426,416
Small Commercial	1,297,790	12.16	15,781.13	7	84	78.50	6,594	22,375
Medium Commercial	2,230,760	12.16	27,126.04	11	132	139.50	18,414	45,540
Large Commercial	405,620	12.16	4,932.34	3	36	219.50	7,902	12,834
Nonresidential Metered	3,934,170.00		47,839.51	21	252		32,910.00	80,750
Total	3,934,170		47,840	419	5,028		446,846	494,685

Sapphire Valley

Billing Type	Usage Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
3/4" Residential Metered	-			-	-		-	-
5/8" Residential Metered	14,849,302			652	7,824	35.52	277,908	277,908
1" Res Residential Metered	140,436			2	24	35.52	852	852
1.5" Residential Metered	5,583,382			128	1,536	35.52	54,559	54,559
2" Residential Metered	2,844,594			68	816	35.52	28,984	28,984
Total Residential Metered	23,417,714		-	850	10,200		362,304	362,304

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016  
SEWER

Casselberry  
Exhibit No. 12  
Page 5 of 7

Public Staff's Revenue at Present Rates

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
<b>Sapphire Valley</b>								
5/8" Commercial Metered	1,322,216	7.88	10,419	18	216	15.62	3,374	13,793
1" Commercial Metered	689,846	7.88	5,436	2	24	39.04	937	6,373
1.5" Commercial Metered	1,174,149	7.88	9,252	4	48	78.08	3,748	13,000
2" Commercial Metered	974,892	7.88	7,682	6	72	124.92	8,994	16,676
3" Commercial Metered	1,484,827	7.88	11,700	1	12	234.23	2,811	14,511
Total Commercial Metered	5,645,930		44,490	31	372		19,864	64,354
Availability				89	1,068	8.28	8,843	8,843
Total	29,063,644		44,490	970	11,640		391,011	435,501

Carolina Trace

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	56,774,289	8.38	475,769	1,540	18,480	35.41	654,377	1,130,145
1" Res Residential Metered	57,320	8.38	480	1	12	35.41	425	905
2" Residential Metered	29,800	8.38	250	2	24	35.41	850	1,100
Total Residential Metered	56,861,409		476,499	1,543	18,516		655,652	1,132,150

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016  
SEWER

Casselberry  
Exhibit No. 12  
Page 6 of 7

Public Staff's Revenue at Present Rates

Carolina Trace

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Commercial Metered	799,910	8.38	6,703	15	180	35.41	6,374	13,077
1" Commercial Metered	157,220	8.38	1,318	2	24	35.41	850	2,167
1.5" Commercial Metered	500,700	8.38	4,196	1	12	35.41	425	4,621
2" Commercial Metered	89,900	8.38	753	1	12	35.41	425	1,178
Total Commercial Metered	1,547,730		12,970	19	228		8,073	21,043
<b>Total</b>	<b>58,409,139</b>		<b>489,469</b>	<b>1,562</b>	<b>18,744</b>		<b>663,725</b>	<b>1,153,194</b>

Connetsee Falls

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Flat Rate	-		-	5	60	45.11	2,707	2,707
5/8" Residential	26,314,000	6.75	177,620	984	11,808	26.86	317,163	494,782
5/8" Commercial Sewer	147,000	6.75	992	7	84	26.86	2,256	3,248
2" Commercial Sewer	869,000	6.75	5,866	1	12	214.89	2,579	8,444
Availability				259	3,108	4.69	14,577	14,577
<b>Total</b>	<b>27,330,000</b>		<b>184,478</b>	<b>1,256</b>	<b>15,072</b>		<b>339,281</b>	<b>523,758</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016  
SEWER

Casselberry  
Exhibit No. 12  
Page 7 of 7

Public Staff's Revenue at Present Rates

Elk River

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
3/4" Residential Metered	124	3.00	0	1	12	23.38	281	281
1" Res Residential Metered	11,439	3.00	34	1	12	58.45	701	736
Total Residential Metered	11,563		34	2	24		982	1,017
5/8" Commercial Sewer	2,945	3.00	9	2	24	23.38	561	570
3/4" Commercial Sewer	1,370,596	3.00	4,112	100	1,200	23.38	28,056	32,168
1" Commercial Sewer	240,599	3.00	722	21	252	58.45	14,729	15,451
2" Commercial Sewer	238,005	3.00	714	2	24	187.05	4,489	5,203
Total Commercial Sewer	1,852,145		5,556	125	1,500		47,836	53,392
Total	1,863,708		5,590	127	1,524		48,818	54,409
Total	592,201,278		2,580,810	16,950	203,400		9,174,930	11,755,741

1 Increased usage by 694,871 for SkyLeaf and reduced usage by 7,969,580 for Kings Grant - Charlotte

2 Reduced usage by 284,918 for Kings Grant - Charlotte

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 13  
Page 1 of 5

Public Staff's Revenue at Proposed Rates Consolidated

CWSNC Sewer

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Residential Flat, Sewer		-	-	3,088	37,056	60.22	2,231,512	2,231,512
5/8" Residential Metered	376,524,793	3.32	1,250,062	9,343	112,116	48.59	5,447,716	6,697,779
1" Res Metered	759,522	3.32	2,522	16	192	121.48	23,324	25,846
1.5" Res Metered	29,800	3.32	99	-	-	242.95	-	99
2" Res Metered	42,700	3.32	142	3	36	388.72	13,994	14,136
Commercial Flat Rate		-	-	41	492	60.22	29,628	29,628
5/8" Commercial Metered	27,519,253	3.32	91,364	433	5,196	48.59	252,474	343,838
1" Commercial Metered	6,448,696	3.32	21,410	15	180	121.48	21,866	43,276
1.5" Commercial Metered	5,873,879	3.32	19,501	14	168	242.95	40,816	60,317
2" Commercial Metered	19,825,442	3.32	65,820	54	648	388.72	251,891	317,711
3" Commercial Metered	10,532,497	3.32	34,968	5	60	728.85	43,731	78,699
4" Commercial Metered	776,970	3.32	2,580	1	12	1,214.75	14,577	17,157
6" Commercial Metered	3,792,952	3.32	12,593	2	24	2,429.50	58,308	70,901
Total	452,126,504		1,501,060	13,015	156,180		8,429,837	9,930,897
Regalwood	-		-	357	4,284	60.22	257,982	257,982
White Oaks	-		-	688	8,256	60.22	497,176	497,176
White Oaks School	-		-	1	12	1,868.71	22,425	22,425
Child Castle Daycare	-		-	1	12	232.45	2,789	2,789

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 13  
Page 2 of 5

Public Staff's Revenue at Proposed Rates Consolidated

CWSNC Sewer								
Billing		Usage	Usage	EOP	EOP	Base	Base Charge	Total
Type	Usage	Rate	Revenue	Customers	x 12 months	Charge	Revenue	Revenue
Availability								
Sapphire Valley				89	1,068	8.28	8,843	8,843
Connestee				259	3,108	4.69	14,577	14,577
Total	452,126,504		1,501,060	14,410	172,920		9,233,630	10,734,690

Billing		Usage	Usage	EOP	EOP	Base	Base Charge	Total
Type	Usage	Rate	Revenue	Customers	x 12 months	Charge	Revenue	Revenue
Mount Carmel	16,060,320	5.88	94,435	387	4,644	45.64	211,952	306,387

Billing		Usage	Usage	EOP	EOP	Base	Base Charge	Total
Type	Usage	Rate	Revenue	Customers	x 12 months	Charge	Revenue	Revenue
College Park								
Residential Flat, Sewer only	-	-	-	1	12	60.22	723	723
5/8" Residential Metered	2,355,400	5.70	13,426	49	588	38.87	22,856	36,281
Total	2,355,400		13,426	50	600		23,578	37,004

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 13  
Page 3 of 5

Public Staff's Revenue at Proposed Rates Consolidated

CWSNC Sewer								
Billing		Usage	Usage	EOP	EOP	Base	Base Charge	Total
Type	Usage	Rate	Revenue	Customers	x 12 months	Charge	Revenue	Revenue
<b>Kings Grant</b>								
5/8" Residential Metered	7,969,580	3.80	30,284	177	2,124	38.87	82,560	112,844
1" Res Metered	284,918	3.80	1,083	1	12	38.87	466	1,549
<b>Total</b>	<b>8,254,498</b>		<b>31,367</b>	<b>178</b>	<b>2,136</b>		<b>83,026</b>	<b>114,393</b>

Billing		Usage	Usage	EOP	EOP	Base	Base Charge	Total
Type	Usage	Rate	Revenue	Customers	x 12 months	Charge	Revenue	Revenue
<b>White Oak Plantation/Lee Forest/Winston Pointe</b>								
5/8" Residential Metered	20,139,604	4.55	91,635	417	5,004	38.87	194,505	286,141

Fairfield Mountain

Billing		Usage	Usage	EOP	EOP	Base	Base Charge	Total
Type	Usage	Rate	Revenue	Customers	x 12 months	Charge	Revenue	Revenue
5/8" Res. Collection/Treatm.			-	398	4,776	108.37	517,575	517,575
1" Res Collection/Treatm.			-	12	144	108.37	15,605	15,605
Residential Collection			-	410	4,920		533,180	533,180



Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 13  
Page 4 of 5

Public Staff's Revenue at Proposed Rates Consolidated

CWSNC Sewer  
Fairfield Mountain

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Small Commercial	1,297,790	13.93	18,078.21	7	84	78.50	6,594	24,672
Medium Commercial	2,230,760	13.93	31,074.49	11	132	139.50	18,414	49,488
Large Commercial	405,620	13.93	5,650.29	3	36	219.50	7,902	13,552
Nonresidential Metered	3,934,170.00		54,802.99	21	252		32,910.00	87,713
<b>Total</b>	<b>3,934,170</b>		<b>54,803</b>	<b>419</b>	<b>5,028</b>		<b>550,485</b>	<b>605,288</b>

CL/MS

5/8" Residential Sewer	41,519,782	6.62	274,861	775	9,300	52.06	484,158	759,019
1" Residential Sewer	9,651,480	6.62	63,893	91	1,092	130.15	142,124	206,017
5/8" Commercial Sewer	6,522,778	6.62	43,181	71	852	52.06	44,355	87,536
1" Commercial Sewer	3,035,120	6.62	20,092	18	216	130.15	28,112	48,205
1.5" Commercial Sewer	1,258,800	6.62	8,333	3	36	260.31	9,371	17,704
2" Commercial Sewer	1,935,400	6.62	12,812	3	36	416.49	14,994	27,806
3" Commercial Sewer	126,000	6.62	834	1	12	780.92	9,371	10,205
<b>Total</b>	<b>64,049,360</b>		<b>424,007</b>	<b>962</b>	<b>11,544</b>		<b>732,485</b>	<b>1,156,492</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 13  
Page 5 of 5

Public Staff's Revenue at Proposed Rates Consolidated

CWSNC Sewer								
Elk River								
Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	124	3.00	0	1	12	23.38	281	281
1" Res Residential Metered	11,439	3.00	34	1	12	58.45	701	736
Total Residential Metered	11,563		34	2	24		982	1,017
5/8" Commercial Metered	1,373,541	3.00	4,121	102	1,224	23.38	28,617	32,738
1" Commercial Metered	240,599	3.00	722	21	252	58.45	14,729	15,451
2" Commercial Metered	238,005	3.00	714	2	24	187.05	4,489	5,203
Total Commercial Metered	1,852,145		5,556	125	1,500		47,836	53,392
Total	1,863,708		5,590	127	1,524		48,818	54,409
Total	568,783,564		2,216,323	16,950	203,400		11,078,480	13,294,803

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016  
Water

Casselberry  
Exhibit No. 14  
Page 1 of 1

Public Staff's Revenue at Present Rates

Fairfield Harbor

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	79,353,576	2.69	213,461	1,840	22,080	9.73	214,838	428,300
3/4" Residential Metered	36,080	2.69	97	2	24	9.73	234	331
1" Residential Metered	103,450	2.69	278	2	24	9.73	234	512
<b>Total Residential Metered</b>	<b>79,493,106</b>		<b>213,836</b>	<b>1,844</b>	<b>22,128</b>		<b>215,305</b>	<b>429,142</b>
5/8" Commercial Metered	1,343,824	2.69	3,615	22	264	9.73	2,569	6,184
1" Commercial Metered	37,050	2.69	100	1	12	24.29	291	391
1.5" Commercial Metered	493,700	2.69	1,328	2	24	48.58	1,166	2,494
2" Commercial Metered	713,200	2.69	1,919	3	36	77.74	2,799	4,717
<b>Total Commercial Metered</b>	<b>2,587,774</b>		<b>6,961</b>	<b>28</b>	<b>336</b>		<b>6,825</b>	<b>13,786</b>
Availability				874	10,488	3.28	34,401	34,401
<b>Total</b>	<b>82,080,880</b>		<b>220,798</b>	<b>2,746</b>	<b>32,952</b>		<b>256,531</b>	<b>477,328</b>

Bradfield Farms

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	61,620,657	1.95	120,160	952	11,424	8.29	94,705	214,865
3/4" Residential Metered	6,898,799	1.95	13,453	94	1,128	8.29	9,351	22,804
1" Residential Metered	1,032,891	1.95	2,014	5	60	8.29	497	2,512
<b>Total Residential Metered</b>	<b>69,552,347</b>		<b>135,627</b>	<b>1,051</b>	<b>12,612</b>		<b>104,553</b>	<b>240,181</b>
<b>Total</b>	<b>151,633,227</b>		<b>356,425</b>	<b>3,797</b>	<b>45,564</b>		<b>361,084</b>	<b>717,509</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months December 31, 2016

Casselberry  
Exhibit No. 15  
Page 1 of 1

Public Staff's Revenue at Proposed Rates Consolidated

WATER

Fairfield Harbour and Bradfield Farms Consolidated

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	147,909,112	3.55	525,077	2,888	34,656	12.84	444,983	970,060
1" Residential Metered	1,136,341	3.55	4,034	7	84	32.10	2,696	6,730
<b>Total Residential Metered</b>	<b>149,045,453</b>		<b>529,111</b>	<b>2,895</b>	<b>34,740</b>		<b>447,679</b>	<b>976,791</b>
5/8" Commercial Metered	1,343,824	3.55	4,771	22	264	12.84	3,390	8,160
1" Commercial Metered	37,050	3.55	132	1	12	32.10	385	517
1.5" Commercial Metered	493,700	3.55	1,753	2	24	64.20	1,541	3,293
2" Commercial Metered	713,200	3.55	2,532	3	36	102.72	3,698	6,230
<b>Total Commercial Metered</b>	<b>2,587,774</b>		<b>9,187</b>	<b>28</b>	<b>336</b>		<b>9,014</b>	<b>18,200</b>
Availability				874	10,488	3.28	34,401	34,401
<b>Total</b>	<b>151,633,227</b>		<b>538,298</b>	<b>3,797</b>	<b>45,564</b>		<b>491,094</b>	<b>1,029,392</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2017

Casselberry  
Exhibit No. 16  
Page 1 of 1

Public Staff's Revenue at Present Rates

Sewer								
Fairfield Harbor								
Billing	Usage	Usage	Usage	EOP	EOP	Base	Base Charge	Total
Type	Usage	Rate	Revenue	Customers	x 12 months	Charge	Revenue	Revenue
5/8" Residential Metered	-		-	1,829	21,948	37.89	831,610	831,610
1" Residential Metered	-		-	1	12	37.89	455	455
Total Residential Metered	-		-	1,830	21,960		832,064	832,064
5/8" Commercial Metered	1,102,710	5.63	6,208	13	156	10.17	1,587	7,795
1.5" Commercial Metered	493,700	5.63	2,780	2	24	50.85	1,220	4,000
2" Commercial Metered	528,800	5.63	2,977	1	12	81.36	976	3,953
Total Commercial Metered	2,125,210		11,965	16	192		3,783	15,748
Availability				876	10,488	2.64	27,688	27,688
Total	2,125,210		11,965	2,722	32,640		863,536	875,501
Bradfield Farms								
Billing	Usage	Usage	Usage	EOP	EOP	Base	Base Charge	Total
Type	Usage	Rate	Revenue	Customers	x 12 months	Charge	Revenue	Revenue
5/8" Residential Metered				1,044	12,528	26.56	332,744	332,744
1" Residential Metered				2	24	26.56	637	637
Bulk Sewer				156	1,872	25.20	47,174	47,174
Apartments				379	4,548	25.20	114,610	114,610
Total Residential Metered				1,581	18,972		495,165	495,165
Total	2,125,210		11,965	4,303	51,612		1,358,701	1,370,666

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 17  
Page 1 of 1

**Public Staff's Revenue at Proposed Rates Consolidated**

**Sewer**

**Fairfield Harbour and Bradfield Farms Consolidated**

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered			-	2,873	34,476	42.83	1,476,607	1,476,607
1" Residential Metered			-	3	36	42.83	1,542	1,542
Bulk Sewer				156	1,872	41.83	78,306	78,306
Apartments				379	4,548	41.83	190,243	190,243
<b>Total Residential Metered</b>	-		-	3,411	40,932		1,746,698	1,746,698
5/8" Commercial Metered	1,102,710	6.36	7,013	13	156	11.50	1,794	8,807
1.5" Commercial Metered	493,700	6.36	3,140	2	24	57.50	1,380	4,520
2" Commercial Metered	528,800	6.36	3,363	1	12	92.00	1,104	4,467
<b>Total Commercial Metered</b>	2,125,210		13,516	16	192		4,278	17,794
<b>Total</b>	2,125,210		13,516	3,427	41,124		1,750,976	1,764,492
Availability				876	10,512	2.64	27,752	27,752
<b>Total</b>	2,125,210		13,516	4,303	51,636		1,778,727	1,792,244

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
Test Year Ending December 31, 2016

Casselberry  
Exhibit No. 18  
Page 1 of 1

Purchased Water Adjustment for Water Loss

Service Area	Total Gallons Purchased	Total Gallons Sold	Loss	20% Loss	Sold Plus 20% loss	Loss at 20%	Reduction In gallons	Usage Rate per 1000 gal.	Adjusted Expense
Carolina Forest	15,028,400	6,070,316	8,958,084.0	59.61	7,587,895	1,517,579	7,440,505.00	3.19	23,735
High Vista Estates	18,118,500	11,549,870	6,568,630.0	36.25	14,437,338	2,887,468	3,681,162.50	3.25	11,964
Riverpointe	17,744,494	16,480,057	1,264,437.0	7.13					
Whispering Pines	105,467,347	90,712,979	14,754,368.0	13.99					
Woodrun	23,371,800	17,558,956	5,812,844.0	24.87	21,948,695	4,389,739	1,423,105.00	3.19	4,540
Zemosa Acres	15,469,500	12,282,575	3,186,925.0	20.60	15,353,219	3,070,644	116,281.25	5.27	613
Yorktown	4,100,212	3,755,800	344,412.0	8.40					
White Oak	23,760,030	25,363,484							
Carolina Trace	66,564,699	62,564,699	4,000,000.0	6.01					
						Total Loss			40,851

Purchased Water Summary

Acct #	Service Area	Company	Outside Test year Removed	Adjustment	Public Staff Corrected Invoices	Company Ledger Total	Correction to ledger	Company's	Public Staff Company Total
		Invoices & Public Staff Invoices		for New Rates				Adjustment for Dec Accrual	
104	The Point	236,477.73	11,922.65		224,555.08	222,482.63		(13,995.10)	236,477.73
114	Zemosa	84,331.10			84,331.10	94,889.20	(13,458.11)	2,900.00	84,331.09
125	Willow Brook	3,029.04			3,029.04	3,029.04		-	3,029.04
132	Vander	55,033.81	7,405.66		47,628.15	52,361.04	(5,936.30)	8,609.07	55,033.81
133	White oak	54,555.08		3,081.00	57,636.08	55,055.08		500.00	54,555.08
137	Bent Creek	46,047.13			46,047.13	45,947.15		(100.00)	46,047.15
141	Whispering P	257,874.38			257,874.38	280,640.77	(8,666.39)	(14,100.00)	257,874.38
152	C. Forest	47,903.09			47,903.09	48,630.59	(4,027.50)	3,300.00	47,903.09
153	Woodrun	74,533.54			74,533.54	75,366.04	(9,432.50)	8,600.00	74,533.54
154	Kings Grant	4,309.56			4,309.56	4,309.56		-	4,309.56
170	Yorktown	6,117.64	1,515.27		4,602.37	3,317.65		2,800.00	6,117.65
189	Danby	147,875.16			147,875.16	150,609.22	(12,334.06)	9,600.00	147,875.16
214	High Vista	57,016.95		1,428.50	58,445.45	55,316.95		1,700.00	57,016.95
235	Riverpoint	112,866.43			112,866.43	118,166.43		(5,300.00)	112,866.43
100	Carolina Trace	155,800.51			155,800.51	157,500.51		(1,700.00)	155,800.51
		1,343,771.15	20,843.58	4,509.50	1,327,437.07	1,367,621.86			1,343,771.17
			Water loss		(40,851.00)				
			Total Purchased Water		1,286,586.07				



Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
Test year Ending December 31, 2016

Casselberry  
Exhibit No. 20  
Page 1 of 2

Sludge Hauling

CWSNC

Bus. Unit	Service Area	Sub 336 2011/2012	Sub 344 2014	Sub 356 2015	Sub 356 2016	2014-16 Average	Adjusted average
		Amount	Amount	Amount	Amount	Average	
182101	Kynwood Abington	15,056	15,712	24,436	14,436	18,195	18,195
102	Brandybay Wine/Spooners Cr.	10,558	13,500	14,580	9,030	12,370	12,370
107	Sugar Mountain	14,455	14,560	10,640	15,120	13,440	13,440
110	Saddlewood	1,120	1,996	432	756	1,061	1,061
115	Ashely Hills	19,273	44,013	43,446	49,313	45,591	45,591
117	Corolla Light	18,525	13,500	17,450	7,390	12,780	12,780
120	Hestron Park	6,570	3,780	4,320	3,090	3,730	3,730
123	Hounds Ear	2,240	-	-	2,800	933	933
126	Willowbrook	5,736	5,856	9,150	9,516	8,174	1 9,333
130	Wolf Laurel	720	920	3,920	3,000	2,613	2,613
136	Kings Grant - Raleigh	4,312	2,186	5,876	1,830	3,297	3,297
138	Bent Creek	9,470	12,950	12,630	30,410	18,663	2 12,790
149	Bear Paw Resort	-	-	-	200	67	67
155	Kings Grant Charlotte	9,572	-	-	370	123	123
160	College Park	2,135	1,890	-	-	630	630
173	Monteray Shores	27,900	35,815	32,850	28,650	32,438	32,438
176	Olde Point	1,033	1,575	1,960	875	1,470	1,470
178	Independent/Hemby	17,935	11,687	22,045	22,121	18,618	18,618
190	Danby	41,116	25,797	17,819	31,190	24,935	24,935
197	Queens harbor	2,120	16,153	4,050	6,048	8,750	8,750
209	Nags head	22,000	29,800	40,065	46,120	38,662	3 43,093
217	Regalwood	20,391	9,720	10,260	9,180	9,720	9,720
218	White Oak Estates	15,450	21,450	22,680	23,250	22,460	22,460
233	Belvedere Middle Point	13,170	9,981	18,130	25,166	17,759	4 25,166
236	Riverpointe	4,345	9,652	3,348	5,805	6,268	6,268

OFFICIAL COPY

Sep 19 2017

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
Test year Ending December 31, 2016

Casselberry  
Exhibit No. 20  
Page 2 of 2

Sludge Hauling

Bus. Unit	Service Area	Sub 336	Sub 344	Sub 356		2014-16 Average	Adjusted average
		2011/2012 Amount	2014 Amount	2015 Amount	2016 Amount		
241	Carolina Pines	3,922	11,340	12,960	12,960	12,420	12,420
243	Nero	6,055	6,605	5,124	3,680	5,136	5,136
2247	Ridges at Mountain Harbor (new)		-	-	555	185	185
	Total	295,179	322,453	340,186	364,877	340,490	347,614
181101	Elk River	n/a	5,315	10,080	10,018	8,471	5 10,049
183102	Sapphire valley	n/a	10,099	4,665	5,829	6,864	6,864
183109	Fairfield Mountain	n/a	425	-	-	142	142
187101	Carolina Trace	n/a	47,239	38,641	44,796	43,559	43,559
188101	Transylvania	n/a	14,960	15,050	19,600	16,537	16,537
	Total		78,038	68,436	80,243	75,572	77,150
	Total CWSNC		400,491	408,622	445,120	416,063	424,765

Bradfield Farms/Fairfield Harbor

Bus. Unit	Service Area	Sub 336	Sub 344	Sub 356		2014-16 Average	Adjusted average
		2011/2012 Amount	2014 Amount	2015 Amount	2016 Amount		
191101	Bradfield Farms	n/a	29,014	33,122	31,037	31,058	31,058
183106	Fairfield harbor	n/a	19,844	24,664	25,067	23,192	23,192
	Total BF/FH		48,858	57,786	56,104	54,249	54,249

- 1 New treatment process two year average
- 2 Wasted sludge do to repairs
- 3 New treatment process two year average
- 4 New treatment process beginning in October 2015
- 5 Two year average

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 21  
Page 1 of 6

Public Staff's Recommended Rates

CWSNC Water

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Flat Residential	-		-	515	6,180	47.45	293,241	293,241
(based on 3,000 gallons)								
5/8" Residential Metered	957,565,889	7.70	7,373,257	20,151	241,812	24.44	5,909,885	13,283,143
3/4" Residential Metered	1,484,382	7.70	11,430	41	492	24.44	12,024	23,454
1" Residential Metered	3,574,630	7.70	27,525	41	492	61.10	30,061	57,586
1.5" Residential Metered	5,902,582	7.70	45,450	34	408	122.20	49,858	95,307
2" Residential Metered	2,887,294	7.70	22,232	18	216	195.52	42,232	64,464
<b>Total Residential Metered</b>	<b>971,414,777</b>		<b>7,479,894</b>	<b>20,285</b>	<b>243,420</b>		<b>6,044,061</b>	<b>13,523,955</b>
5/8" Commercial Metered	14,506,835	7.70	111,703	251	3,012	24.44	73,613	185,316
1" Commercial Metered	7,691,688	7.70	59,226	45	540	61.10	32,994	92,220
1.5" Commercial Metered	9,549,507	7.70	73,531	27	324	122.20	39,593	113,124
2" Commercial Metered	23,004,868	7.70	177,137	76	912	195.52	178,314	355,452
3" Commercial Metered	11,483,797	7.70	88,425	7	84	366.60	30,794	119,220
4" Commercial Metered	776,970	7.70	5,983	1	12	611.00	7,332	13,315
6" Commercial Metered	2,112,670	7.70	16,268	2	24	1,222.00	29,328	45,596
<b>Total Commercial Metered</b>	<b>69,126,335</b>		<b>532,273</b>	<b>409</b>	<b>4,908</b>		<b>391,969</b>	<b>924,241</b>
<b>Total</b>	<b>1,040,541,112</b>		<b>8,012,167</b>	<b>21,209</b>	<b>254,508</b>		<b>6,729,271</b>	<b>14,741,437</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 21  
Page 2 of 6

Public Staff's Recommended Rates

CWSNC Water

Treasure Cove

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	18,681,303	3.36	62,769	284	3,408	11.44	38,988	101,757
1" Residential Metered	138,140	3.36	464	1	12	28.60	343	807
2" Residential Metered	131,300	3.36	441	1	12	91.52	1,098	1,539
<b>Total</b>	<b>18,950,743</b>		<b>63,674</b>	<b>286</b>	<b>3,432</b>		<b>40,429</b>	<b>104,103</b>

Elk River

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	2,945	4.29	13	2	24	19.52	468	481
3/4" Residential Metered	5,429,230	4.29	23,291	257	3,084	19.52	60,200	83,491
1" Residential Metered	1,066,399	4.29	4,575	31	372	48.79	18,150	22,725
<b>Total Residential Metered</b>	<b>6,498,574</b>		<b>27,879</b>	<b>290</b>	<b>3,480</b>		<b>78,818</b>	<b>106,697</b>
5/8" Commercial Metered	394,409	4.29	1,692	28	336	19.52	6,559	8,251
1" Commercial Metered	128,140	4.29	550	1	12	48.79	585	1,135
2" Commercial Metered	337,164	4.29	1,446	4	48	156.12	7,494	8,940
<b>Total Commercial Metered</b>	<b>859,713</b>		<b>3,688</b>	<b>33</b>	<b>396</b>		<b>14,638</b>	<b>18,326</b>
<b>Total</b>	<b>7,358,287</b>		<b>31,567</b>	<b>323</b>	<b>3,876</b>		<b>93,456</b>	<b>125,023</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 21  
Page 3 of 6

Public Staff's Recommended Rates

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Availability								
Linville Ridge (monthly)	-		-	63	756	12.35	9,337	9,337
Sapphire Valley (monthly)				748	8,976	9.10	81,682	81,682
Connestee (monthly)				524	6,288	4.80	30,182	30,182
<b>Total Uniform</b>	<b>1,066,850,142</b>		<b>8,107,408</b>	<b>23,153</b>	<b>277,836</b>		<b>6,984,356</b>	<b>15,091,764</b>

Purchased water

Carolina Trace

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	58,012,009	2.21	128,207	1,573	18,876	24.44	461,329	589,536
1" Residential Metered	57,320	2.21	127	1	12	61.10	733	860
2" Residential Metered	29,800	2.21	66	2	24	195.52	4,692	4,758
<b>Total Residential Metered</b>	<b>58,099,129</b>		<b>128,399</b>	<b>1,576</b>	<b>18,912</b>		<b>466,755</b>	<b>595,154</b>
5/8" Commercial Metered	1,096,820	2.21	2,424	24	288	24.44	7,039	9,463
1" Commercial Metered	157,220	2.21	347	2	24	61.10	1,466	1,814
1.5" Commercial Metered	500,700	2.21	1,107	1	12	122.20	1,466	2,573
2" Commercial Metered	2,710,830	2.21	5,991	3	36	195.52	7,039	13,030
<b>Total Commercial Metered</b>	<b>4,465,570</b>		<b>9,869</b>	<b>30</b>	<b>360</b>		<b>17,010</b>	<b>26,879</b>
<b>Total</b>	<b>62,564,699</b>		<b>138,268</b>	<b>1,606</b>	<b>19,272</b>		<b>483,765</b>	<b>622,033</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 21  
Page 4 of 6

Public Staff's Recommended Rates

Purchased water

Carolina Forest

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	5,727,411	3.19	18,270	197	2,364	24.44	57,776	76,047
1" Residential Metered	84,710	3.19	270	1	12	61.10	733	1,003
5/8" Commercial Metered	29,462	3.19	94	4	48	24.44	1,173	1,267
1" Commercial Metered	161,610	3.19	516	1	12	61.10	733	1,249
1.5" Commercial Metered	67,123	3.19	214	1	12	122.20	1,466	1,681
<b>Total</b>	<b>6,070,316</b>		<b>19,364</b>	<b>204</b>	<b>2,448</b>		<b>61,882</b>	<b>81,246</b>
Carolina Forest (semi annually)				734	1,468	24.65	36,186	36,186
<b>Total</b>	<b>6,070,316</b>		<b>19,364</b>	<b>938</b>	<b>3,916</b>		<b>98,068</b>	<b>117,433</b>

High Vista Estates

5/8" Residential Metered	10,550,670	3.25	34,290	234	2,808	24.44	68,628	102,917
1" Residential Metered	61,500	3.25	200	1	12	61.10	733	933
5/8" Commercial Metered	11,000	3.25	36	1	12	24.44	293	329
2" Commercial Metered	926,700	3.25	3,012	2	24	195.52	4,692	7,704
<b>Total</b>	<b>11,549,870</b>		<b>37,537</b>	<b>238</b>	<b>2,856</b>		<b>74,346</b>	<b>111,884</b>

Riverpointe

5/8" Residential Metered	15,752,797	6.30	99,243	190	2,280	24.44	55,723	154,966
5/8" Commercial Metered	727,260	6.30	4,582	5	60	24.44	1,466	6,048
<b>Total</b>	<b>16,480,057</b>		<b>103,824</b>	<b>195</b>	<b>2,340</b>		<b>57,190</b>	<b>161,014</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 21  
Page 5 of 6

Public Staff's Recommended Rates

Purchased Water

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
<b>Whispering Pines</b>								
5/8" Residential Metered	85,279,733	2.23	190,174	1,519	18,228	24.44	445,492	635,666
1" Residential Metered	1,208,810	2.23	2,696	15	180	61.10	10,998	13,694
5/8" Commercial Metered	993,770	2.23	2,216	28	336	24.44	8,212	10,428
1" Commercial Metered	2,181,248	2.23	4,864	5	60	61.10	3,666	8,530
1.5" Commercial Metered	621,389	2.23	1,386	5	60	122.20	7,332	8,718
2" Commercial Metered	419,900	2.23	936	1	12	195.52	2,346	3,283
4" Commercial Metered	500	2.23	1	1	12	611.00	7,332	7,333
<b>Total</b>	<b>90,705,350</b>		<b>202,273</b>	<b>1,574</b>	<b>18,888</b>		<b>485,378</b>	<b>687,651</b>
<b>White Oak Planation/Lee Forest/Winston Planation/Winston Point</b>								
5/8" Residential Metered	25,363,484	2.28	57,829	507	6,084	24.44	148,693	206,522
1.5" Commercial Metered	184,500	2.28	421	1	12	122.20	1,466	1,887
<b>Total</b>	<b>25,547,984</b>		<b>58,249</b>	<b>508</b>	<b>6,096</b>		<b>150,159</b>	<b>208,409</b>
<b>Woodrun</b>								
5/8" Residential Metered	17,048,700	3.19	54,385	463	5,556	24.44	135,789	190,174
5/8" Commercial Metered	122,120	3.19	390	4	48	24.44	1,173	1,563
1" Commercial Metered	388,136	3.19	1,238	1	12	61.10	733	1,971
<b>Total</b>	<b>17,558,956</b>		<b>56,013</b>	<b>468</b>	<b>5,616</b>		<b>137,695</b>	<b>193,708</b>
Woodrun (semi annually)				693	1,386	24.65	34,165	34,165
<b>Total</b>	<b>17,558,956</b>		<b>56,013</b>	<b>1,161</b>	<b>7,002</b>		<b>171,860</b>	<b>227,873</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 21  
Page 6 of 6

Public Staff's Recommended Rates

Purchased Water

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
<b>Yorktown</b>								
5/8" Residential Metered	3,755,800	5.01	18,817	107	1,284	24.44	31,381	50,198
<b>Zemosa Acres</b>								
5/8" Residential Metered	12,124,948	5.27	63,898	239	2,868	24.44	70,094	133,992
1" Residential Metered	66,819	5.27	352	2	24	61.10	1,466	1,819
1" Commercial Metered	90,807	5.27	479	1	12	61.10	733	1,212
<b>Total</b>	<b>12,282,574</b>		<b>64,729</b>	<b>242</b>	<b>2,904</b>		<b>72,294</b>	<b>137,023</b>
<b>TOTAL</b>	<b>1,313,365,748</b>		<b>8,806,483</b>	<b>29,722</b>	<b>342,394</b>		<b>8,608,798</b>	<b>17,415,281</b>



Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 22  
Page 1 of 5

Public Staff's Recommended Rates

CWSNC Sewer

Billing Type	Usage Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Residential Flat, Sewer (based on 3,417 gallons)		-	-	3,088	37,056	56.57	2,096,258	2,096,258
5/8" Residential Metered	376,524,793	3.11	1,170,992	9,343	112,116	45.97	5,153,973	6,324,965
1" Res Metered	759,522	3.11	2,362	16	192	45.97	8,826	11,188
1.5" Res Metered	29,800	3.11	93	-	-	45.97	-	93
2" Res Metered	42,700	3.11	133	3	36	45.97	1,655	1,788
Commercial Flat Rate		-	-	41	492	56.57	27,832	27,832
5/8" Commercial Metered	27,519,253	3.11	85,585	433	5,196	45.97	238,860	324,445
1" Commercial Metered	6,448,696	3.11	20,055	15	180	114.93	20,687	40,743
1.5" Commercial Metered	5,873,879	3.11	18,268	14	168	229.85	38,615	56,883
2" Commercial Metered	19,825,442	3.11	61,657	54	648	367.76	238,308	299,966
3" Commercial Metered	10,532,497	3.11	32,756	5	60	689.55	41,373	74,129
4" Commercial Metered	776,970	3.11	2,416	1	12	1,149.25	13,791	16,207
6" Commercial Metered	3,792,952	3.11	11,796	2	24	2,298.50	55,164	66,960
Total	452,126,504		1,406,113	13,015	156,180		7,935,343	9,341,456
Regalwood	-		-	357	4,284	56.57	242,346	242,346
White Oaks	-		-	688	8,256	56.57	467,042	467,042
White Oaks School	-		-	1	12	1,770.10	21,241	21,241
Child Castle Daycare	-		-	1	12	219.90	2,639	2,639

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 22  
Page 2 of 5

Public Staff's Recommended Rates

CWSNC Sewer

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Availability								
Sapphire Valley				89	1,068	8.30	8,864	8,864
Conneestee				259	3,108	4.70	14,608	14,608
Total	452,126,504		1,406,113	14,410	172,920		8,692,083	10,098,196

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Mount Carmel	16,060,320	5.88	94,435	387	4,644	43.52	202,107	296,542

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
College Park								
Residential Flat, Sewer only	-	-	-	1	12	56.57	679	679
5/8" Residential Metered	2,355,400	5.70	13,426	49	588	36.75	21,609	35,035
Total	2,355,400		13,426	50	600		22,288	35,714

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 22  
Page 3 of 5

Public Staff's Recommended Rates

CWSNC Sewer								
Billing		Usage	Usage	EOP	EOP	Base	Base Charge	Total
Type	Usage	Rate	Revenue	Customers	x 12 months	Charge	Revenue	Revenue
<b>Kings Grant</b>								
5/8" Residential Metered	7,969,580	3.80	30,284	177	2,124	36.75	78,057	108,341
1" Res Metered	284,918	3.80	1,083	1	12	36.75	441	1,524
<b>Total</b>	<b>8,254,498</b>		<b>31,367</b>	<b>178</b>	<b>2,136</b>		<b>78,498</b>	<b>109,865</b>

Billing		Usage	Usage	EOP	EOP	Base	Base Charge	Total
Type	Usage	Rate	Revenue	Customers	x 12 months	Charge	Revenue	Revenue
<b>White Oak Plantation/Lee Forest/Winston Pointe</b>								
5/8" Residential Metered	20,139,604	4.82	97,073	417	5,004	36.75	183,897	280,970

**Fairfield Mountain**

Billing		Usage	Usage	EOP	EOP	Base	Base Charge	Total
Type	Usage	Rate	Revenue	Customers	x 12 months	Charge	Revenue	Revenue
5/8" Res. Collection/Treatm.			-	398	4,776	106.25	507,450	507,450
1" Res Collection/Treatm.			-	12	144	106.25	15,300	15,300
Residential Collection			-	410	4,920		522,750	522,750

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 22  
Page 4 of 5

Public Staff's Recommended Rates

CWSNC Sewer  
Fairfield Mountain

Billing Type	Usage Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Small Commercial	1,297,790	13.93	18,078.21	7	84	78.50	6,594	24,672
Medium Commercial	2,230,760	13.93	31,074.49	11	132	139.50	18,414	49,488
Large Commercial	405,620	13.93	5,650.29	3	36	219.50	7,902	13,552
Nonresidential Metered	3,934,170.00		54,802.99	21	252		32,910.00	87,713
<b>Total</b>	<b>3,934,170</b>		<b>54,803</b>	<b>419</b>	<b>5,028</b>		<b>540,360</b>	<b>595,163</b>

CL/MS

5/8" Residential Sewer	41,519,782	6.62	274,861	775	9,300	52.06	484,158	759,019
1" Residential Sewer	9,651,480	6.62	63,893	91	1,092	130.15	142,124	206,017
5/8" Commercial Sewer	6,522,778	6.62	43,181	71	852	52.06	44,355	87,536
1" Commercial Sewer	3,035,120	6.62	20,092	18	216	130.15	28,112	48,205
1.5" Commercial Sewer	1,258,800	6.62	8,333	3	36	260.31	9,371	17,704
2" Commercial Sewer	1,935,400	6.62	12,812	3	36	416.49	14,994	27,806
3" Commercial Sewer	126,000	6.62	834	1	12	780.92	9,371	10,205
<b>Total</b>	<b>64,049,360</b>		<b>424,007</b>	<b>962</b>	<b>11,544</b>		<b>732,485</b>	<b>1,156,492</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 22  
Page 5 of 5

Public Staff's Recommended Rates

CWSNC Sewer

Elk River

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	124	3.00	0	1	12	23.38	281	281
1" Res Residential Metered	11,439	3.00	34	1	12	58.45	701	736
Total Residential Metered	11,563		34	2	24		982	1,017
5/8" Commercial Metered	1,373,541	3.00	4,121	102	1,224	23.38	28,617	32,738
1" Commercial Metered	240,599	3.00	722	21	252	58.45	14,729	15,451
2" Commercial Metered	238,005	3.00	714	2	24	187.05	4,489	5,203
Total Commercial Metered	1,852,145		5,556	125	1,500		47,836	53,392
Total	1,863,708		5,590	127	1,524		48,818	54,409
Total	568,783,564		2,126,814	16,950	203,400		10,500,535	12,627,350

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months December 31, 2016

Casselberry  
Exhibit No. 23  
Page 1 of 1

Public Staff's Recommended Rates

WATER

Fairfield Harbour and Bradfield Farms Consolidated

Billing Type	Usage Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	147,909,112	3.36	496,975	2,888	34,656	11.44	396,465	893,439
1" Residential Metered	1,136,341	3.36	3,818	7	84	28.60	2,402	6,221
<b>Total Residential Metered</b>	<b>149,045,453</b>		<b>500,793</b>	<b>2,895</b>	<b>34,740</b>		<b>398,867</b>	<b>899,660</b>
5/8" Commercial Metered	1,343,824	3.36	4,515	22	264	11.44	3,020	7,535
1" Commercial Metered	37,050	3.36	124	1	12	28.60	343	468
1.5" Commercial Metered	493,700	3.36	1,659	2	24	57.20	1,373	3,032
2" Commercial Metered	713,200	3.36	2,396	3	36	91.52	3,295	5,691
<b>Total Commercial Metered</b>	<b>2,587,774</b>		<b>8,695</b>	<b>28</b>	<b>336</b>		<b>8,031</b>	<b>16,726</b>
Availability				874	10,488	3.28	34,401	34,401
<b>Total</b>	<b>151,633,227</b>		<b>509,488</b>	<b>3,797</b>	<b>45,564</b>		<b>441,299</b>	<b>950,786</b>

Carolina Water Service, Inc. of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 24  
Page 1 of 1

**Public Staff's Recommended Rates**

**Sewer**

**Fairfield Harbour and Bradfield Farms Consolidated**

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered			-	2,873	34,476	41.40	1,427,306	1,427,306
1" Residential Metered			-	3	36	41.40	1,490	1,490
Bulk Sewer				156	1,872	40.40	75,629	75,629
Apartments				379	4,548	40.40	183,739	183,739
<b>Total Residential Metered</b>	-		-	3,411	40,932		1,688,165	1,688,165
5/8" Commercial Metered	1,102,710	6.20	6,837	13	156	11.12	1,735	8,572
1.5" Commercial Metered	493,700	6.20	3,061	2	24	55.60	1,334	4,395
2" Commercial Metered	528,800	6.20	3,279	1	12	88.96	1,068	4,346
<b>Total Commercial Metered</b>	2,125,210		13,176	16	192		4,137	17,313
<b>Total</b>	2,125,210		13,176	3,427	41,124		1,692,301	1,705,478
Availability				876	10,512	2.65	27,857	27,857
<b>Total</b>	2,125,210		13,176	4,303	51,636		1,720,158	1,733,335

**COMPANY'S PRESENT AND PROPOSED RATES AND THE PUBLIC STAFF'S  
RECOMMENDED WATER AND SEWER RATES**

**WATER RATES AND CHARGES**

**UNIFORM WATER SERVICE:**

**MONTHLY METERED SERVICE:** (Residential and Commercial)

	<u>Existing</u>	<u>Proposed</u>	<u>PublicStaff's Recommend</u>
Base Facilities Charges (zero usage)			
< 1" meter	\$ 22.40	\$ 26.95	\$ 24.44
1" meter	\$ 56.01	\$ 67.38	\$ 61.10
1-1/2" meter	\$ 112.02	\$ 134.75	\$ 122.20
2" meter	\$ 179.23	\$ 215.60	\$ 195.52
3" meter	\$ 336.06	\$ 404.25	\$ 366.60
4" meter	\$ 560.10	\$ 673.75	\$ 611.00
6" meter	\$1,120.19	\$1,347.50	\$1,222.00
<b><u>AVERAGE RESIDENTIAL BILL</u></b> (based on 3,980 gallons)	<b>\$ 47.87</b>	<b>\$ 57.60</b>	<b>\$ 55.09</b>

**USAGE CHARGE:**

A.	Treated Water/1,000 gallons	\$ 6.40	\$ 7.70	\$ 7.70
B.	Untreated Water/1,000 gallons (Brandywine Bay Irrigation Water)	\$ 4.11	\$ 4.11	\$ 4.11
C.	Purchased Water for Resale			
<u>Service Area</u>	<u>Bulk Provider</u>	<u>Usage Charge/ 1,000 gallons</u>	<u>Usage charge /1,000 gallons</u>	<u>Usagecharge /1,000gallons</u>
Carolina Forest	Montgomery County	\$ 3.19	\$ 3.19	\$ 3.19
High Vista Est.	City of Hendersonville	\$ 3.25	\$ 3.25	\$ 3.25
Riverpointe	Charlotte Water	\$ 6.30	\$ 6.30	\$ 6.30
Whispering Pines	Town of Southern Pines	\$ 2.23	\$ 2.23	\$ 2.23
White Oak Plt./				
Lee Forest	Johnston County	\$ 3.25	\$ 3.25	\$ 2.28
Winston Plt.	Johnston County	\$ 3.25	\$ 3.25	\$ 2.28
Winston Point	Johnston County	\$ 3.25	\$ 3.25	\$ 2.28
Woodrun	Montgomery County	\$ 3.19	\$ 3.19	\$ 3.19
Yorktown	City of Winston-Salem	\$ 5.01	\$ 5.01	\$ 5.01
Zemosa Acres	City of Concord	\$ 5.27	\$ 5.27	\$ 5.27

<b><u>MONTHLY FLAT RATE SERVICE:</u></b> (per residence or single family equivalent)	\$	\$ 50.17	\$
---	----	----------	----

<b><u>MONTHLY FLAT RATE SERVICE:</u></b>	\$ 41.60		\$ 47.45
--	----------	--	----------

**AVAILABILITY RATES (semi-annual):**

Applicable only to property owners in Carolina Forest and Woodrun Subdivision in Montgomery County	\$ 24.64	\$ 24.64	\$ 24.65
---	----------	----------	----------

**AVAILABILITY RATES (monthly):**

Applicable only to property owners in Linville Ridge Subdivision	\$ 12.32	\$ 12.32	\$ 12.35
---	----------	----------	----------



Carolina Water Service Inc., of North Carolina  
Docket No. W-354, Sub 344  
For the 12 Months Ending June 30, 2015

Casselberry  
Exhibit No. 25  
Page 2 of 10

**FORMER CLEARWATER SYSTEMS:**

**MONTHLY METERED SERVICE:**

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
Base Facilities Charges (zero usage)			
5/8" meter	\$ 16.27		
1" meter	\$ 40.67		
1-1/2" meter	\$ 81.34		
2" meter	\$ 130.14		
3" meter	\$ 244.07		
4" meter	\$ 406.76		
6" meter	\$ 813.37		
Usage Charge, per 1,000 gallons	\$ 4.50		

The Public Staff recommends CWSNC's Uniform Rates as shown below.

**MONTHLY METERED SERVICE:** (Residential and Commercial) CWSNC's Uniform Rates

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
Base Facilities Charges (zero usage)			
< 1" meter		\$ 26.95	\$ 24.44
1" meter		\$ 67.38	\$ 61.10
1-1/2" meter		\$ 134.75	\$ 122.20
2" meter		\$ 215.60	\$ 195.52
3" meter		\$ 404.25	\$ 366.60
4" meter		\$ 673.75	\$ 611.00
6" meter		\$1,347.50	\$1,222.00
Usage Charge, per 1,000 gallons Treated water		\$ 7.70	\$ 7.70
<b><u>AVERAGE RESIDENTIAL BILL</u></b> (based on 3,980 gallons)	\$ 34.18	\$ 57.60	\$ 55.09
<b><u>MONTHLY FLAT RATE SERVICE:</u></b> (per residence or single family equivalent)	\$	\$ 50.17	\$
<b><u>MONTHLY FLAT RATE SERVICE:</u></b>	\$ 41.60		\$ 47.45
Management Fee, Covington Crossing (Phases 1 & 2)	\$ 100.00	\$ 100.00	\$ 100.00

**TREASURE COVE, REGISTER PLACE ESTATES, NORTH HILLS  
AND GLEN ARBOR/NORTH BEND SUBDIVISION**

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
<b><u>Monthly Metered Water Rates:</u></b>			
Base Charge, zero usage	\$ 14.50		
Usage charge, per 1,000 gallons	\$ 1.90		

The Public Staff recommends the same rates as the recommended rates for Bradfield Farms and Fairfield Harbor as shown below.

**MONTHLY METERED SERVICE:** (Residential and Commercial)

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
Base Facilities Charges (zero usage)			
< 1" meter		\$ 26.95	\$ 11.44
1" meter		\$ 67.38	\$ 28.60
1-1/2" meter		\$ 134.75	\$ 57.20
2" meter		\$ 215.60	\$ 91.52
3" meter		\$ 404.25	\$
4" meter		\$ 673.75	\$
6" meter		\$1,347.50	\$
Usage Charge, per 1,000 gallons		\$ 7.70	\$ 3.36
<b><u>AVERAGE RESIDENTIAL BILL</u></b> (based on 3,980 gallons)	\$ 22.06	\$ 57.60	\$ 24.81

**FOREST HILLS SUBDIVISION**

**Monthly Metered Water Service:**

	<u>Existing</u>	<u>Proposed</u>	<u>PublicStaff's Recommend</u>
Base Facilities Charges (zero usage)			
Residential	\$ 22.43		
Commercial and Other:			
5/8" meter	\$ 22.43		
3/4" meter	\$ 33.66		
1" meter	\$ 56.08		
1-1/2" meter	\$ 112.16		
2" meter	\$ 179.46		
3" meter	\$ 336.49		
4" meter	\$ 560.81		
6" meter	\$1,121.63		
Usage charge, per 1,000 gallons	\$ 5.23		

The Public Staff recommends CWSNC's Uniform Rates as shown below.

**MONTHLY METERED SERVICE:** (Residential and Commercial) CWSNC's Uniform Rates

	<u>Existing</u>	<u>Proposed</u>	<u>PublicStaff's Recommend</u>
Base Facilities Charges (zero usage)			
< 1" meter	\$	\$ 26.95	\$ 24.44
1" meter	\$	\$ 67.38	\$ 61.10
1-1/2" meter	\$	\$ 134.75	\$ 122.20
2" meter	\$	\$ 215.60	\$ 195.52
3" meter	\$	\$ 404.25	\$ 366.60
4" meter	\$	\$ 673.75	\$ 611.00
6" meter	\$	\$1,347.50	\$1,222.00
Usage Charge, per 1,000 gallons Treated water		\$ 7.70	\$ 7.70
<b><u>AVERAGE RESIDENTIAL BILL</u></b> (based on 3,980 gallons)	\$ 43.25	\$ 57.60	\$ 55.09

**FAIRFIRD MOUNTAIN/APPLE VALLEY (a.k.a. RUMBLING BALD) SERVICE AREA, HIGHLAND SHORES  
SUBDIVISION AND LAUREL MOUNTAIN ESTATES**

**Monthly Metered Water Service:**

	<u>Existing</u>	<u>Proposed</u>	<u>PublicStaff's Recommend</u>
Base Facilities Charges (zero usage)			
Residential	\$ 19.23		
Commercial and Other:			
5/8" meter	\$ 19.23		
3/4" meter	\$ 28.84		
1" meter	\$ 48.07		
1-1/2" meter	\$ 96.14		
2" meter	\$ 153.83		
3" meter	\$ 288.42		
4" meter	\$ 480.70		
6" meter	\$ 961.40		
Usage charge, per 1,000 gallons	\$ 7.10		

The Public Staff recommends CWSNC's Uniform Rates as shown below.

MONTHLY METERED SERVICE: (Residential and Commercial) CWSNC's Uniform Rates

	<u>Existing</u>	<u>Proposed</u>	<u>PublicStaff's Recommend</u>
Base Facilities Charges (zero usage)			
< 1" meter	\$	\$ 26.95	\$ 24.44
1" meter	\$	\$ 67.38	\$ 61.10
1-1/2" meter	\$	\$ 134.75	\$ 122.20
2" meter	\$	\$ 215.60	\$ 195.52
3" meter	\$	\$ 404.25	\$ 366.60
4" meter	\$	\$ 673.75	\$ 611.00
6" meter	\$	\$1,347.50	\$1,222.00
Usage Charge, per 1,000 gallons Treated water		\$ 7.70	\$ 7.70
<b><u>AVERAGE RESIDENTIAL BILL</u></b> (based on 3,980 gallons)	<b>\$ 47.49</b>	<b>\$ 57.60</b>	<b>\$ 55.09</b>

FAIRFIELD SAPPHIRE VALLEY SERVICE AREA

Monthly Metered Water Service:

	<u>Existing</u>	<u>Proposed</u>	<u>PublicStaff's Recommend</u>
Base Facilities Charges (zero usage)			
Residential	\$ 19.89		
Commercial and Other:			
5/8" meter	\$ 19.89		
3/4" meter	\$ 29.84		
1" meter	\$ 49.73		
1-1/2" meter	\$ 99.45		
2" meter	\$ 159.13		
3" meter	\$ 298.37		
4" meter	\$ 497.20		
6" meter	\$ 994.41		
Usage charge, per 1,000 gallons	\$ 9.17		

The Public Staff recommends CWSNC's Uniform Rates as shown below.

MONTHLY METERED SERVICE: (Residential and Commercial) CWSNC's Uniform Rates

	<u>Existing</u>	<u>Proposed</u>	<u>PublicStaff's Recommend</u>
Base Facilities Charges (zero usage)			
< 1" meter	\$	\$ 26.95	\$ 24.44
1" meter	\$	\$ 67.38	\$ 61.10
1-1/2" meter	\$	\$ 134.75	\$ 122.20
2" meter	\$	\$ 215.60	\$ 195.52
3" meter	\$	\$ 404.25	\$ 366.60
4" meter	\$	\$ 673.75	\$ 611.00
6" meter	\$	\$1,347.50	\$1,222.00
Usage Charge, per 1,000 gallons Treated water		\$ 7.70	\$ 7.70
<u>Monthly Water Availability Rate:</u>	\$ 9.07	\$ 9.07	\$ 9.10
<b><u>AVERAGE RESIDENTIAL BILL</u></b> (based on 3,980 gallons)	<b>\$ 56.39</b>	<b>\$ 57.60</b>	<b>\$ 55.09</b>

Carolina Water Service Inc., of North Carolina  
Docket No. W-354, Sub 344  
For the 12 Months Ending June 30, 2015

Casselberry  
Exhibit No. 25  
Page 5 of 10

### CAROLINA TRACE DEVELOPMENT

#### Monthly Metered Water Rates:

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
Base Charge, zero usage	\$ 14.05 (min.)		
Usage charge, per 1,000 gallons	\$ 5.06		

The Public Staff recommends CWSNC's Uniform Rates for Purchased Water System as shown below.

#### MONTHLY METERED SERVICE: (Residential and Commercial) CWSNC's Uniform Rates

##### Base Facilities Charges (zero usage)

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
< 1" meter		\$ 26.95	\$ 24.44
1" meter		\$ 67.38	\$ 61.10
1-1/2" meter		\$ 134.75	\$ 122.20
2" meter		\$ 215.60	\$ 195.52
3" meter		\$ 404.25	\$ 366.60
4" meter		\$ 673.75	\$ 611.00
6" meter		\$1,347.50	\$1,222.00
Purchased Water for resale, per 1,000 gallons		\$ 2.21	\$ 2.21
<b><u>AVERAGE RESIDENTIAL BILL</u> (based on 3,980 gallons)</b>	<b>\$ 34.19</b>	<b>\$ 35.75</b>	<b>\$ 33.24</b>

### CONNESTEE FALLS SUBDIVISION

#### Monthly Metered Water Service:

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
Base Facilities Charges (zero usage)			
5/8 x 3/4" meter	\$ 27.41		
1" meter	\$ 68.51		
2" meter	\$ 219.22		
Usage charge, per 1,000 gallons	\$ 6.65		

The Public Staff recommends CWSNC's Uniform Rates as shown below.

#### MONTHLY METERED SERVICE: (Residential and Commercial) CWSNC's Uniform Rates

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
Base Facilities Charges (zero usage)			
< 1" meter	\$	\$ 26.95	\$ 24.44
1" meter	\$	\$ 67.38	\$ 61.10
1-1/2" meter	\$	\$ 134.75	\$ 122.20
2" meter	\$	\$ 215.60	\$ 195.52
3" meter	\$	\$ 404.25	\$ 366.60
4" meter	\$	\$ 673.75	\$ 611.00
6" meter	\$	\$1,347.50	\$1,222.00
Usage Charge, per 1,000 gallons			
Treated water		\$ 7.70	\$ 7.70
<b><u>AVERAGE RESIDENTIAL BILL</u> (based on 3,980 gallons)</b>	<b>\$ 53.88</b>	<b>\$ 57.60</b>	<b>\$ 55.09</b>

## SEWER RATES AND CHARGES

### UNIFORM SEWER SERVICE

The Public Staff recommends the same base facility charge for all residential customers regardless as to the size of the meter as shown below.

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff Recommend</u>
Base Facilities Charges (zero usage)			
Residential	\$ 42.40		\$ 45.97
Commercial and Other:			
<1" meter	\$ 42.40		\$ 45.97
1" meter	\$ 106.00		\$ 114.93
1-1/2" meter	\$ 211.99		\$ 229.85
2" meter	\$ 339.18		\$ 367.76
3" meter	\$ 635.97		\$ 689.55
4" meter	\$1,059.95		\$1,149.25
6" meter	\$2,119.90		\$2,298.50
Usage charge, per 1,000 gallons	\$ 2.90		\$ 3.11

### MONTHLY METERED SEWER SERVICE: (Residential and Commercial)

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
Base Facilities Charges (zero usage)			
< 1" meter	\$	\$ 48.59	
1" meter	\$	\$ 121.48	
1-1/2" meter	\$	\$ 242.95	
2" meter	\$	\$ 388.72	
3" meter	\$	\$ 728.85	
4" meter	\$	\$1,214.75	
6" meter	\$	\$2,429.50	
Usage Charge, per 1,000 gallons	\$	\$ 3.32	

AVERAGE RESIDENTIAL BILL (based on 3,417 gallons) \$ 52.31 \$ 59.93 \$ 56.60

### MONTHLY METERED PURCHASED SEWER SERVICE:

Collection charge (Residential and Commercial/SFE) \$ 33.92 \$ 38.87 \$ 36.75

Usage charge, per 1,000 gallons based on purchased water

<u>Service Area</u>	<u>Bulk Provider</u>		<u>Usage Charge/ 1,000 gallons</u>	<u>Usage charge /1,000 gallons</u>
White Oak Pkt./Lee				
Forest/Winston Pt.	Johnston County	\$ 4.55	\$ 4.55	\$ 4.82
Kings Grant	Two Rivers Utilities	\$ 3.80	\$ 3.80	\$ 3.80
College Park	Town of Dallas	\$ 5.70	\$ 5.70	\$ 5.70

MONTHLY FLAT RATE SERVICE: \$ 52.55 \$ 60.22 \$ 56.57

Multi-residential customers who are served by a  
Master meter shall be charged the flat rate per unit

MT CARMEL SUBDIVISION SERVICE AREAS:

	<u>Existing</u>	<u>Proposed</u>	<u>PublicStaff's Recommend</u>
Monthly Base Facility Charge	\$ 6.77	\$ 6.77	\$ 6.77
Usage charge/1,000 gallons (based on metered water usage)	\$ 5.88	\$ 5.88	\$ 5.88
Monthly Collection Charge (Residential and Commercial)	\$ 27.33	\$ 38.87	\$ 36.75

REGALWOOD AND WHITE OAK ESTATES SUBDIVISION SERVICE AREAS:

A. Monthly Flat Rate Sewer Service:

	<u>Existing</u>	<u>Proposed</u>	<u>PublicStaff's Recommend</u>
Residential Service	\$ 52.55	\$ 60.22	\$ 56.57
White Oak High School	\$1,630.74	\$1,868.71	\$1,770.10
Child Castle Daycare	\$ 202.85	\$ 232.45	\$ 219.90
Pantry	\$ 107.74	\$ 123.46	\$ 116.80

THE VILLAGE OF NAGS HEAD

MONTHLY METERED SERVICE: (Commercial)

	<u>Existing</u>	<u>Proposed</u>	<u>PublicStaff's Recommend</u>
Base Facilities Charges (based on meter size with zero usage)			
<1" meter	\$ 18.43		\$
1" meter	\$ 46.10		\$
1-1/2" meter	\$ 92.19		\$
2" meter	\$ 147.51		\$
3" meter	\$ 276.58		\$
4" meter	\$ 460.96		\$
6" meter	\$ 921.93		\$
Usage Charge, per 1,000 gallons	\$ 9.31		\$
Minimum Monthly Charge	\$ 62.65		
<u>Monthly Flat Rate Sewer Service</u>	\$ 62.65		

The Public Staff recommends CWSNC's Uniform Rates with the same base facility charge for all residential customers regardless as to the size of the meter as shown below. Residential customers in Nags Head are monthly flat rate so the metered rate does not apply.

MONTHLY METERED SEWER SERVICE: (Residential and Commercial) CWSNC's Uniform Rates

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff Recommend</u>
Base Facilities Charges (zero usage)			
Residential	\$		\$ 45.97
Commercial and Other:			
<1" meter	\$	\$ 48.59	\$ 45.97
1" meter	\$	\$ 121.48	\$ 114.93
1-1/2" meter	\$	\$ 242.95	\$ 229.85
2" meter	\$	\$ 388.72	\$ 367.76
3" meter	\$	\$ 728.85	\$ 689.55
4" meter	\$	\$ 1,214.75	\$ 1,149.25
6" meter	\$	\$ 2,429.50	\$ 2,298.50
Usage charge, per 1,000 gallons	\$	\$ 3.32	\$ 3.11

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff Recommend</u>
<u>MONTHLY FLAT RATE SERVICE:</u>	\$	\$ 60.22	\$ 56.57

Multi-residential customers who are served by a  
Master meter shall be charged the flat rate per unit

<u>RESIDENTIAL BILL FLAT RATE</u>	\$ 62.65	\$ 60.22	\$ 56.57
-----------------------------------	----------	----------	----------

FAIRFIELD MOUNTAIN/APPLE VALLEY (a.k.a. RUMBLING BALD) SERVICE AREA, HIGHLAND SHORES  
SUBDIVISION AND LAUREL MOUNTAIN ESTATES

Public Staff recommends CWSNC's Uniform Rates for purchased sewer system as shown below.

Monthly Sewer Rates:

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff Recommend</u>
Residential			
Collection charge/dwelling unit	\$ 17.17	\$ 38.87	\$ 36.75
Treatment charge/dwelling unit	\$ 69.50	\$ 69.50	\$ 69.50
Total monthly flat rate/dwelling unit	\$ 86.67	\$ 108.37	\$ 106.25
Commercial and Other			
Minimum monthly collection and treatment charge	\$ 86.67	\$ 108.37	\$ 106.25
Monthly collection and treatment charge for Customers who do not take water service (per single family equivalent)	\$ 86.67	\$ 108.37	\$ 106.25
Treatment charge per dwelling unit			
Small (less than 2,500 gallons per month)	\$ 78.50	\$ 78.50	\$ 78.50
Medium (2,500 to 10,000 gallons per month)	\$ 139.50	\$ 139.50	\$ 139.50
Large (over 10,000 gallons per month)	\$ 219.50	\$ 219.50	\$ 219.50
Collection Charge, per 1,000 gallons	\$ 12.16	\$ 13.93	\$ 13.93
<u>RESIDENTIAL BILL</u>	\$ 86.67	\$ 108.37	\$ 106.25

FAIRFIELD SAPPHIRE VALLEY SERVICE AREA

Monthly Sewer Rates:

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
Residential			
Flat Rate, per dwelling unit	\$ 35.52		
<u>Monthly Sewer Rates:</u>			
Commercial and Other			
Minimum rate	\$ 35.52		
Customers who do not take water Service (per single family equivalent)	\$ 35.52		

Base Facilities Charges (based on meter size with zero usage))

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
5/8" meter	\$ 15.62		
3/4" meter	\$ 15.62		
1" meter	\$ 39.04		
1-1/2" meter	\$ 78.08		
2" meter	\$ 124.92		
3" meter	\$ 234.23		
4" meter	\$ 390.39		
6" meter	\$ 780.78		
Usage charge, per 1,000 gallons	\$ 7.88		

The Public Staff recommends CWSNC's Uniform Rates with the same base facility charge for all residential customers regardless as to the size of the meter as shown below. Residential customers in Sapphire Valley are monthly flat rate so the metered rate does not apply at this time.

MONTHLY METERED SEWER SERVICE: (Residential and Commercial) CWSNC's Uniform Rates

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff Recommend</u>
Base Facilities Charges (zero usage)			
Residential	\$		\$ 45.97
Commercial and Other:			
<1" meter	\$	\$ 48.59	\$ 45.97
1" meter	\$	\$ 121.48	\$ 114.93
1-1/2" meter	\$	\$ 242.95	\$ 229.85
2" meter	\$	\$ 388.72	\$ 367.76
3" meter	\$	\$ 728.85	\$ 689.55
4" meter	\$	\$ 1,214.75	\$ 1,149.25
6" meter	\$	\$ 2,429.50	\$ 2,298.50
Usage charge, per 1,000 gallons	\$	\$ 3.32	\$ 3.11
<u>MONTHLY FLAT RATE SERVICE:</u>	\$	\$ 60.22	\$ 56.57

Multi-residential customers who are served by a  
Master meter shall be charged the flat rate per unit

<u>RESIDENTIAL BILL FLAT RATE</u>	\$ 35.52	\$ 60.22	\$ 56.57
-----------------------------------	----------	----------	----------

CAROLINA TRACE DEVELOPMENT

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
<u>Monthly Metered Sewer Rates:</u>			
Base Charge, zero usage	\$ 35.41 (min.)		
Usage charge, per 1,000 gallons	\$ 8.38		



Carolina Water Service Inc., of North Carolina  
Docket No. W-354, Sub 344  
For the 12 Months Ending June 30, 2015

Casselberry  
Exhibit No. 25  
Page 10 of 10

The Public Staff recommends CWSNC's Uniform Rates with the same base facility charge for all residential customers regardless as to the size of the meter as shown below.

MONTHLY METERED SEWER SERVICE: (Residential and Commercial) CWSNC's Uniform Rates

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff Recommend</u>
Base Facilities Charges (zero usage)			
Residential	\$		\$ 45.97
Commercial and Other:			
<1" meter	\$	\$ 48.59	\$ 45.97
1" meter	\$	\$ 121.48	\$ 114.93
1-1/2" meter	\$	\$ 242.95	\$ 229.85
2" meter	\$	\$ 388.72	\$ 367.76
3" meter	\$	\$ 728.85	\$ 689.55
4" meter	\$	\$ 1,214.75	\$ 1,149.25
6" meter	\$	\$ 2,429.50	\$ 2,298.50
Usage charge, per 1,000 gallons	\$	\$ 3.32	\$ 3.11
<u>AVERAGE RESIDENTIAL BILL</u> (based on 3,417 gallons)	\$ 64.04	\$ 59.93	\$ 56.60

CONNESTEE FALLS SUBDIVISION

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
Monthly Flat Rate	\$ 45.11		
Monthly Metered Service			
Base Facilities Charges (zero usage)			
5/8 x 3/4" meter	\$ 26.86		
1" meter	\$ 67.15		
2" meter	\$ 214.89		
Usage charge, per 1,000 gallons	\$ 6.75		

The Public Staff recommends CWSNC's Uniform Rates with the same base facility charge for all residential customers regardless as to the size of the meter as shown below.

MONTHLY METERED SEWER SERVICE: (Residential and Commercial) CWSNC's Uniform Rates

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff Recommend</u>
Base Facilities Charges (zero usage)			
Residential	\$		\$ 45.97
Commercial and Other:			
<1" meter	\$	\$ 48.59	\$ 45.97
1" meter	\$	\$ 121.48	\$ 114.93
1-1/2" meter	\$	\$ 242.95	\$ 229.85
2" meter	\$	\$ 388.72	\$ 367.76
3" meter	\$	\$ 728.85	\$ 689.55
4" meter	\$	\$ 1,214.75	\$ 1,149.25
6" meter	\$	\$ 2,429.50	\$ 2,298.50
Usage charge, per 1,000 gallons	\$	\$ 3.32	\$ 3.11
<u>MONTHLY FLAT RATE SERVICE:</u>	\$	\$ 60.22	\$ 56.57

Multi-residential customers who are served by a  
Master meter shall be charged the flat rate per unit

<u>AVERAGE RESIDENTIAL BILL</u> (based on 3,417 gallons)	\$ 49.92	\$ 59.93	\$ 56.60
--	----------	----------	----------

**COMPANY'S PRESENT AND PROPOSED RATES AND THE PUBLIC STAFF'S  
RECOMMENDED WATER AND SEWER RATES FOR FAIRFIELD HARBOUR  
SERVICE AREA AND BRADFIELD FARMS SUBDIVISION**

**WATER RATES AND CHARGES**

**FAIRFIELD HARBOUR SERVICE AREA**

**MONTHLY METERED WATER SERVICE:**

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
Base Facilities Charges (zero usage)			
Residential	\$ 9.73		
Commercial and Other			
5/8" meter	\$ 9.73		
3/4" meter	\$ 14.60		
1" meter	\$ 24.29		
1-1/2" meter	\$ 48.58		
2" meter	\$ 77.74		
3" meter	\$ 145.99		
4" meter	\$ 243.31		
6" meter	\$ 486.62		
Usage Charge, per 1,000 gallons	\$ 2.69		
Monthly Water Availability Rate	\$ 3.28		

**BRADFIELD FARMS SUBDIVISION**

**MONTHLY METERED WATER SERVICE:**

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
Base charge, zero usage	\$ 8.29		
Usage charge, per 1,000 gallons	\$ 1.95		

**FAIFIELD HARBOR AND BRADFIELD FARMS NEW RATE DIVISION**

**MONTHLY METERED SERVICE: (Residential and Commercial)**

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
Base Facilities Charges (zero usage)			
< 1" meter	\$	\$ 12.84	\$ 11.44
1" meter	\$	\$ 32.10	\$ 28.60
1-1/2" meter	\$	\$ 64.20	\$ 57.20
2" meter	\$	\$ 102.72	\$ 91.52
Usage Charge, per 1,000 gallons			
Treated Water	\$	\$ 3.55	\$ 3.36

**AVERAGE RESIDENTIAL BILL (based on 3,980 gallons)**

Fairfield Harbor	\$ 20.44	\$ 26.97	\$ 24.81
Bradfield Farms	\$ 16.05	\$ 26.97	\$ 24.81

## SEWER RATES AND CHARGES

### FAIRFIELD HARBOUR SERVICE AREA

#### Monthly Sewer Rates:

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
<b>Residential</b>			
Flat Rate, per dwelling unit	\$ 37.89		
<b>Commercial and Other</b>			
Monthly Flat Rate (Customers who do not take water)	\$ 37.89		
Monthly Metered Rates (based on meter size with zero usage)			
5/8" meter	\$ 10.17		
3/4" meter	\$ 15.26		
1" meter	\$ 25.43		
1-1/2" meter	\$ 50.85		
2" meter	\$ 81.36		
3" meter	\$ 152.56		
4" meter	\$ 254.26		
6" meter	\$ 508.52		
Usage Charge, per 1,000 gallons	\$ 5.63		
Monthly Water Availability Rate	\$ 2.64		

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
<b><u>BRADFIELD FARMS SUBDIVISION</u></b>			
Residential Customer Monthly Flat Rate	\$ 26.56		
<b><u>SILVERTON and WOODLAND FARMS SUBDIVISION</u></b>			
Monthly Bulk Flat Rate, per customer	\$ 25.20		
<b><u>HAWTHORNE AT THE GREEN APARTMENTS</u></b>			
Monthly Bulk Flat Rate, per customer	\$ 25.20		

### FAIFIELD HARBOR AND BRADFIELD FARMS NEW RATE DIVISION

#### MONTHLY SEWER RATES:

	<u>Existing</u>	<u>Proposed</u>	<u>Public Staff's Recommend</u>
<b>Residential</b>			
Flat Rate, per dwelling unit	\$	\$ 42.83	\$41.40
Bulk Flat Rate, per REU	\$	\$ 41.83	\$40.40
<b>Commercial and Other</b>			
Monthly Flat Rate (Customers who do not take water)	\$	\$ 42.83	\$41.40
Monthly Metered Rates (based on meter size with zero usage)			
<1" meter	\$	\$ 11.50	\$11.12
1-1/2" meter	\$	\$ 57.50	\$55.60
2" meter	\$	\$ 92.00	\$88.96

Carolina Water Service Inc., of North Carolina  
Docket No. W-354, Sub 356  
For the 12 Months Ending December 31, 2016

Casselberry  
Exhibit No. 26  
Page 3 of 3

	<u>Existing</u>	<u>Proposed</u>	<u>PublicStaffs Recommend</u>
Usage Charge, per 1,000 gallons	\$	\$ 6.36	\$ 6.20
Fairfield Harbour			
Monthly Water Availability Rate	\$ 2.64	\$ 2.64	\$ 2.65

RESIDENTIAL BILL FLAT RATE

Fairfield Harbor	\$ 37.89	\$ 42.83	\$ 41.40
Bradfield Farms	\$ 26.56	\$ 42.83	\$ 41.40
Bulk Sewer (Bradfield Area)	\$ 25.20	\$ 41.83	\$ 40.40

**AVERAGE MONTHLY BILLS AT COMPANY'S PRESENT AND PROPOSED RATES  
AND PUBLIC STAFF'S RECOMMENDED RATES**

**WATER OPERATIONS**

<u>Service Area</u>	<u>CWSNC Present</u>	<u>CWSNC Proposed</u>	<u>Percent Increase</u>	<u>Public Staff Recommended</u>	<u>Percent Increase</u>
Uniform Flat	\$41.60	\$50.17	20.60%	\$47.45	14.06 %
Uniform Metered	\$47.87	\$57.60	20.33%	\$55.09	15.08 %
Clearwater	\$34.18	\$57.60	68.52%	\$55.09	61.18 %
Treasure Cove	\$22.06	\$57.60	161.11%	\$24.81	12.47 %
Forest Hill	\$43.25	\$57.60	33.18%	\$55.09	27.38 %
Fairfield Mountain	\$47.49	\$57.60	21.29%	\$55.09	16.00 %
Sapphire Valley	\$56.39	\$57.60	2.15%	\$55.09	( 2.31)%
Connestee Falls	\$53.88	\$57.60	6.90%	\$55.09	2.25 %
Carolina Trace	\$34.19	\$35.75	4.56%	\$33.24	( 2.78)%
Carolina Forest	\$35.10	\$39.65	12.96%	\$37.14	5.81 %
High Vista Estates	\$35.34	\$39.89	12.87%	\$37.38	5.77 %
Riverpointe	\$47.47	\$52.02	9.59%	\$49.51	4.30 %
Whispering Pines	\$31.28	\$35.83	14.55%	\$33.32	6.52 %
White Oak/Lee F.	\$35.34	\$39.89	12.87%	\$33.51	( 5.18)%
Winston Plantation	\$35.34	\$39.89	12.87%	\$33.51	( 5.18)%
Winston Pointe	\$35.34	\$39.89	12.87%	\$33.51	( 5.18)%
Woodrun	\$35.10	\$39.65	12.96%	\$37.14	5.81 %
Yorktown	\$42.34	\$46.89	10.75%	\$44.38	4.82 %
Zemosa Acres	\$43.37	\$47.92	10.49%	\$45.41	4.70 %
Fairfield Harbour	\$20.44	\$26.97	31.95%	\$24.81	21.38 %
Bradfield Farms	\$16.05	\$26.97	68.04%	\$24.81	54.58 %

Average bill calculated using the average consumption of 3,980 gallons, based on all residential customers with 5/8 inch meter.

**SEWER OPERATIONS**

<u>Service Area</u>	<u>CWSNC Present</u>	<u>CWSNC Proposed</u>	<u>Percent Increase</u>	<u>Public Staff Recommended</u>	<u>Percent Increase</u>
Uniform Flat	\$52.55	\$ 60.22	14.60%	\$ 56.57	7.65 %
Sapphire Valley	\$35.52	\$ 60.22	69.54%	\$ 56.57	59.26 %
Nags Head	\$62.65	\$ 60.22	(3.88%)	\$ 56.57	( 9.70)%
Connestee Falls	\$49.92	\$ 59.93	20.05%	\$ 56.60	13.38 %
Uniform Rate	\$52.31	\$ 59.93	14.57%	\$ 56.60	8.20 %
White Oak Plt./ Lee Forest/					
Winston Pt.	\$49.47	\$ 54.42	10.01%	\$ 53.22	7.58 %
Kings Grant	\$46.90	\$ 51.85	10.55%	\$ 49.73	6.03 %
College Park	\$53.40	\$ 58.35	9.27%	\$ 56.23	5.30%
Mt. Carmel	\$54.19	\$ 65.73	21.30%	\$ 63.61	17.38 %
Fairfield Mountain	\$86.67	\$108.37	25.04%	\$106.25	22.59 %
Carolina Trace	\$64.04	\$ 59.93	(6.42)	\$ 56.60	(11.62)%
Fairfield Harbour	\$37.89	\$ 42.83	13.04%	\$ 41.40	9.26 %
Bradfield Farms	\$26.56	\$ 42.83	61.26%	\$ 41.40	55.87 %
Bulk Sewer	\$25.20	\$ 41.83	65.99%	\$ 40.40	60.32 %

Average bill calculated using the average consumption of 3,417 gallons, based on all residential customers with 5/8 inch meter.