

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. W-354, SUB 360

In the Matter of  
Application by Carolina Water Service, )  
Inc.of NC for Authority to Adjust and )  
Increase Rates for Water and Sewer )  
Utility Service in All Service Areas in )  
North Carolina )  
)  
)

TESTIMONY OF  
GINA Y. CASSELBERRY  
PUBLIC STAFF – NORTH  
CAROLINA UTILITIES  
COMMISSION

OFFICIAL COPY

Oct 11 2018

STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH

CAROLINA WATER SERVICE, INC. OF NORTH CAROLINA  
DOCKET NO. W-354, SUB 360

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

OCTOBER 11, 2018

1 Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL  
2 TESTIMONY?

3 A. The purpose of my supplemental testimony is to discuss customer  
4 complaints and witness testimony at public hearings.

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

8 A. Yes. The Public Staff reviewed approximately 64 position  
9 statements from Carolina Water Service, Inc. of North Carolina  
10 (CWSNC) customers. The service areas represented are Abington  
11 (1), Amber Acres North (1) and petition with 27 signatures, Bradfield  
12 Farms (3) including a resolution objecting to the rate increase from  
13 the Bradfield Farms Homeowners Association, Board of Directors  
14 and petition with approximately 263 signatures, Brandywine Bay (9),  
15 Carolina Pines (1), Carolina Trace (13), Conneffee Falls (3), Elk  
16 River (1), Fairfield Harbour (12), Fairfield Mountain (2), Linville Ridge

1 (1), Nags Head (1), Queens Harbor (1) including a petition with  
2 approximately 100 signatures, The Ridges at Mountain Harbor (4),  
3 The Villages at Sugar Mountain (1), Wood Haven/Pleasant Hill (2)  
4 and unspecified service areas (8). All of the customers objected to  
5 the magnitude of the increase. Their primary concerns were the high  
6 rate of return, the increase in the rates compared to inflation, the  
7 impact of the new federal tax act and their rates compared to local  
8 municipalities. Many stated that the company provided no  
9 justification for the rate increase and questioned the high base facility  
10 charge. Customers in Linville Ridge and The Ridges at Mountain  
11 Harbor (The Ridges) requested metered rates now that all of the  
12 customers have meters. Most of the customers in Carolina Trace  
13 complained that only the base charge for water was increasing.  
14 Customers in Abington, Fairfield Harbor, Brandywine Bay, and  
15 Queens Harbor complained as to the hardness of the water and  
16 discoloration. Hearings were held across the state for customer  
17 testimony, which voiced similar complaints.

18 **General Concerns**

19 **Rate of Return:**

20 The rate of return is addressed in Public Staff Economist, Bob  
21 Hinton's testimony.

1           Annual Inflation

2           The revenue requirement used in calculate rates is based on the  
3           Public Staff's audit of actual expenses. See Public Staff Accountant,  
4           Lynn Feasel's testimony.

5           Federal Tax Act

6           The impact of new law concerning state and federal taxes is  
7           discussed in Public Staff Accountant Michelle Boswell's testimony.

8           Comparison between Private Utilities and Municipalities:

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

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

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

- 1           4.     Capital projects: Private utilities fund capital projects through  
2                     private investors or loans. Municipalities and county systems  
3                     may qualify for low interest tax free bonds and other loans to  
4                     fund capital projects.
- 5           5.     Rate of Return: Under the general statutes, private utilities  
6                     have the right to earn a rate of return on their investment and  
7                     to recover their operating expenses.

8           Justification for the Rate Increase:

9           One of the main reasons cited by CWSNC for the rate increase is to  
10           recover its investment for capital improvements. Within the last  
11           six months, CWSNC spent approximately \$4,472,131 on capital  
12           projects. In August and September, I inspected capital projects to  
13           insure that they were complete and in service, which is discussed in  
14           more detail under customer hearings.

15           Base Facility Charge:

16           As I stated in my testimony, filed on October 3, 2018, the Public Staff  
17           opposes the Company's alternative rate design, which would  
18           increase the ratio, base charge to usage charge, from 47:53 to 60:40.  
19           It is the Public Staff's opinion that higher base charges do not  
20           encourage conservation. The Public Staff recommended that the  
21           ratio remain in the range of 45:55 base charge to usage charge,  
22           which is consistent with what has been recommended in the past.

1           Metered Rates for Linville Ridge and The Ridges:

2           As I stated in my testimony, filed on October 3, 2018, the Public Staff  
3           is recommending uniform metered water rates for Linville Ridge  
4           and The Ridges. The Public Staff is also recommending purchased  
5           sewer rates for The Ridges. It is the Public Staff's understanding that  
6           the Company agrees with the Public Staff's recommendation.

7           Carolina Trace:

8           Carolina Trace is a purchased water system. The supplier is the City  
9           of Stanford (City). The usage rate is established based on the  
10          supplier's rate. The existing usage charge is \$2.21 per 1,000 gallons.  
11          Under the general statutes, utility companies may petition the  
12          Commission for a pass through outside of a general rate case. This  
13          allows a company to directly pass on to customers the increased cost  
14          of purchased water. In this proceeding, there is no change in the  
15          City's usage charge, and therefore, CWSNC is proposing the same  
16          usage charge as the existing usage rate. However, since Carolina  
17          Trace is in the uniform water rate division, should the base charge  
18          for uniform rates increase, the new rate would apply to Carolina  
19          Trace as well.

20          Service and Water Quality Complaints

21          Service and water quality issues are addressed with customer  
22          hearings.

1 Customer Hearings

2 New Bern Hearing

3 Ten customers testified at the hearing in New Bern: Ted Warnock,  
4 Simon Lock, Diana Viglianese, Jim Brown, Mike Shannon, Ralph  
5 Tridico, Irvin Joffee, Michael Kaplan, John Gumbel and Benny  
6 Thompson. The subdivisions represented included Fairfield Harbour  
7 (8), Brandywine Bay (1) and Carolina Pines (1). All of the customers  
8 at the hearing opposed the magnitude of the increase. Many filed  
9 information regarding rate comparatives to municipalities, opposed  
10 the high rate of return, the increase compared to inflation and  
11 questioned the need for an increase considering the new federal tax  
12 act, which I addressed in the previous section. Customers were also  
13 concerned with the ever increasing base facility charge. Several  
14 customers indicated that CWSNC provided no justification for the  
15 increase. Customers in Fairfield Harbour and Brandywine Bay were  
16 dissatisfied with the quality of the water. They stated that the water  
17 was too hard and as a result corroded their appliances and left stains  
18 in their sinks and toilet bowls.

19 On August 28, 2018, I inspected capital projects for the Fairfield  
20 Harbour service area. CWSNC spent approximately \$376,909 to  
21 replace three lift stations. The lift stations consist of a wet well, a pit  
22 valve well, control panel and stand by generator. All three lift stations



1           were in service and operating properly. On August 29, 2018, I also  
2           inspected the water system at Brandywine Bay and the wastewater  
3           treatment plants (WWTPs) at Brandywine Bay/Spooner Creek and  
4           Hestron Park. The water system was in good condition and the  
5           chemical feed pumps were operating properly. The WWTPs at  
6           Brandywine Bay and Hestron Park are old but were operating  
7           efficiently. There was no odor emanating from either plant and the  
8           effluent was very clear. The retention lagoons at Brandywine  
9           Bay had plenty of free board for extra storage. I was informed by  
10          CWSNC's that in the near future, CWSNC intends to replace the  
11          WWTP at Brandywine Bay, reroute sewage from Hestron Park to the  
12          new plant, and then remove the plant at Hestron Park.

13          On September 18, 2018, CWSNC filed Its Report on Customer  
14          Comments from Public Hearings in New Bern and Wilmington.  
15          In regard to a central treatment system for hardness in Fairfield  
16          Harbour, in Docket W-778, Sub 88, prior to the merger with CWSNC,  
17          the Public Staff requested that CWS Systems, Inc. (CWSS)  
18          investigate the cost to install a central treatment system for hardness  
19          for the Fairfield Harbour service area. On April 28, 2011, CWSS filed  
20          its report with the Commission. Based on the report submitted, the  
21          estimated cost was \$912,000, not including engineering or required  
22          permits. To the best of my recollection, there were two major factors

1 the Fairfield Harbour Property Owners Association (FHPOA) Board  
2 was considering: 1) most of the residential customers already had  
3 individual water softeners and 2) how would the cost of the system  
4 impacted rates. However, on June 22, 2011, the Board filed a letter  
5 with the Commission stating that due to the upcoming Board election,  
6 the Board decided to defer their decision to a later date. For the two  
7 reasons stated above, the Public Staff does not recommend a central  
8 treatment system for hardness at this time. In regard to the ever  
9 increasing base charge, the Public Staff's position was stated in the  
10 above section.

11 Wilmington Hearing

12 One customers testified at the hearing in Wilmington, David  
13 Holsinger, representing Belvedere Subdivision. Mr. Holsinger  
14 expressed his surprise that CWSNC filed another rate increase so  
15 soon after the last one. He stated that when the system was flushed  
16 it left his clothing dingy. CWSNC stated that it has a flushing program  
17 in place and are looking for ways to improve it. I have no further  
18 recommendations.

19 Charlotte Hearing

20 Ten customers testified at the hearing in Charlotte: Patricia  
21 Marquardt, William Colyer, Nicoline Howell, Griffin Rice, Margaret  
22 Quan, Deborah J. Atkinson, Nicholas Stephen Kirkley,

1 Tom Moody, Karen Cynowa and Mike Tepedino. The subdivisions  
2 represented included Hemby Acres (1), Bradfield Farms (7) and  
3 Yachtsman/Queens Harbor (2). All of the customers at the hearing  
4 opposed the magnitude of the increase. Their primary concerns  
5 were the increase in rates compared to inflation, the high rate of  
6 return, rate reduction due to the new federal tax act, rates compared  
7 to other municipalities, and that there was no justification for the  
8 increase. In Yachtmans/Queens Harbour, Mr. Moody complained of  
9 hard water and that when his water softener broke it left calcium rings  
10 on his fixture and in his toilet bowl; and Ms. Cynowa suggested the  
11 water contained carcinogens. Ms. Marquardt opposed the flat sewer  
12 rate in Hemby Acres.

13 The rate of return, inflation, the new federal tax act, and the  
14 comparison to other municipalities is addressed in general concerns.  
15 In regard to Hemby Acres, Union County provides water service to  
16 customers in Hemby Acres. CWSNC has been unable to negotiate  
17 an agreement with the County to acquire metered readings. As a  
18 result, CWSNC continues to charge a flat sewer rate.

19 Treasure Cove, Bradfield Farms and Fairfield Harbour (TC/BF/FH)  
20 are in the same rate division for water and Bradfield Farms and  
21 Fairfield Harbour (BF/FH) are in the same rate division for sewer. As  
22 I have previously testified, CWSNC spent approximately \$376,909 to

1 replace three lift stations in Fairfield Harbour. The improvements  
2 were not necessarily in Bradfield Farms but are included in rate base  
3 for the BF/FH sewer rate division. The same would apply for Fairfield  
4 Harbour had the improvements been done in Bradfield Farms.  
5 A greater number of customer lowers the cost of capital  
6 improvements by spreading the cost over a larger customer base.  
7 This is referred to as “economy of scale”. Queens Harbor and  
8 Hemby Acres are systems within CWSNC’s uniform water and sewer  
9 rate divisions. In the last six months, CWSNC spent approximately  
10 \$154,330 on capital projects in the Charlotte area; primarily  
11 stationary generators, replacing a hydro-tank and purchasing a  
12 portable generator. The projects were not specifically in Queens  
13 Harbor or Hemby Acres but the same theory applies. In addition, the  
14 system would have access to a portable generator if necessary.

15 On October, 4, 2018, CWSNC filed its Report on Customer  
16 Comments from Public Hearing in Charlotte, North Carolina, Held on  
17 September 19, 2018. I have read the report and I do not have any  
18 additional comments or recommendations.

19 Boone Hearing

20 Four customers testified at the hearing in Boone: Harvey Bauman,  
21 Sid Eibl Von Rospeunt, George Hall and Tim Presnell. The  
22 subdivisions represented included Elk River (2), Hounds Ear (1) and

1 Ski Mountain (1). All of the customers at the hearing opposed the  
2 magnitude of the increase. Their primary concerns were that there  
3 was no justification for the increase and the ever increasing base  
4 facility charge, especially since most of them were season  
5 customers.

6 On September 25, 2018, I inspected Elk River, Sugar Mountain and  
7 Hounds Ear. CWSNC spent approximately \$153,240 on capital  
8 projects in Elk River. The project consists of installing dual stainless  
9 steel air-headers, blowers, concrete pads, miscellaneous plumbing  
10 and installing a new standby generator with control panel.  
11 The project was complete and operational during my inspection.  
12 CWSNC spent approximately \$127,186 on an infiltration problem in  
13 Sugar Mountain. The project consist of replacing approximately  
14 1,000 feet of sewer main, five manholes and repaving the road.  
15 CWSNC is also in the process of relocating a water main in Hounds  
16 Ear at the request of the NC Department of Transportation. The  
17 project will not be completed in time to be included in this general  
18 rate case. Earlier in the year, CWSNC did work on the splitter box  
19 at the WWTP and added a standard by generator and controls.

20 In reference to the base charge and seasonal customers, in order for  
21 customers to have water and sewer service available year round, the  
22 water and sewer facility must remain operational year round. The

1 base charge covers those costs to keep the systems operating such  
2 as testing, purchased power, maintenance and repairs, chemicals,  
3 sludge removal, salaries and other general fixed costs.

4 Asheville Hearing

5 Five customers testified at the hearing in Asheville: Jack Zinselmeier,  
6 Phil Reitano, Gerard Worster, Chuck Van Rens, and Connie Brown.  
7 The subdivisions represented included Fairfield Mountain/Apple  
8 Valley (2), Mt. Carmel (2) and Woodhaven (1). All of the customers  
9 at the hearing opposed the magnitude of the increase. Their primary  
10 concerns were the rate of return, the rate of inflation in comparison to  
11 the increase in the rates, and that there were no improvements to  
12 justify the increase. Mr. Worster opposed the magnitude of the  
13 collection charge for Mt. Carmel, as well as Ms. Brown. There were  
14 two service complaints, a patch in Fairfield Mountain, which took too  
15 long to pave; and a lift station in Mt. Carmel, which required pumping  
16 out every Saturday.

17 The rate of return is addressed in Public Staff Economist, Bob Hinton  
18 testimony. The patch was the same patch as in the last general rate  
19 case and was addressed in that proceeding. Ms. Brown spoke with  
20 Company personal after the hearing and the problem with the lift  
21 station will be addressed.

1 On September 26, 2018, I inspected Mt. Carmel and High Vista.  
2 I inspected Sapphire Valley and Connestee Falls on September 27,  
3 2018, and on September 28, 2018, I inspected Fairfield  
4 Mountain/Apple Valley. The purpose of my inspection was to verify  
5 that the projects were complete and in service. During the last six  
6 months, CWSNC spent approximately \$1,858,234 on capital projects  
7 in the Asheville area. The projects are listed below:

8 **Mt. Carmel** \$174,135 Complete and in service  
9 Rehabilitation of an existing lift station, to include replacing  
10 approximately 200 feet of sewer main, three manholes, repaving and  
11 replacing a portion of an existing concrete driveway.

12 **High Vista** \$402,205 Complete and in service  
13 Replaced approximately 3,200 feet of 6-inch ductile water main and  
14 repaving the roadway.

15 **Sapphire Valley** Pending 90 percent complete  
16 Installed a Booster Pack with variable frequency drive (VFD) pumps.  
17 Installed approximately 2,000 feet of 6-inch water main, which  
18 interconnects the water system into one continuous loop, increasing  
19 the efficiency of the system and providing continuous pressure  
20 throughout the loop.

1           **Sapphire Valley**    Follow-up from last year.  
2            Replaced a booster station with new VFD pumps. Rehabilitated 5  
3            well houses and replaced four water mains traversing a stream,  
4            preventing infiltration and damage in the event of a flash flood.

5           **Connestee Falls**    \$879,411    Complete and in service  
6            Replaced three lift stations with new wet wells, new valve pit wells,  
7            new control panels, an emergency bypass and standby generator  
8            capability.

9            In addition, CWSNC has begun the construction of Connestee's new  
10           wastewater treatment facility. The facility will include a 360,000  
11           gallon per day (gpd) plant treatment plant, treatment building, blower  
12           building, chemical storage building and office.

13           **Fairfield Mountain** \$402,484    Complete and in service  
14            The installation of a Radium Ion Exchange Treatment System, to  
15            include two ion exchange water softeners, a 25,000 gallon tank for  
16            backwash, pumps and miscellaneous plumbing. CWSNC also  
17            replaced a hydro tank with two flex-lite pressure tanks.

18    Raleigh Hearing

19            Five customers testified at the hearing in Raleigh: William S. Gance,  
20            Vince Roy, Judith Bassett, Vicki Smith and Ben Farmer. The  
21            subdivisions represented included Carolina Trace (2), Amber Acres  
22            (2) and Jordan Woods (1). All of the customers at the hearing



1           opposed the magnitude of the increase, particularly the base charge,  
2           and that there was no justification for the increase.

3           On August 23, 2018, I inspected Carolina Trace and Whispering  
4           Pines. CWSNC spent approximately \$225,400 on Carolina Trace’s  
5           wastewater treatment plant (WWTP). The project consists of  
6           refurbishing one of its two digesters. The other digester is scheduled  
7           to be refurbished next spring. CWSNC spent approximately  
8           \$650,000 to replace a booster lift station in Whispering Pines and  
9           \$800,000 for water main replacement. All three projects were  
10          complete and operational.

11          Customers in Carolina Trace also opposed uniform rates, and  
12          suggest smaller rate divisions. In regard to smaller rate divisions, it  
13          is the Public Staff’s opinion that uniform rates increase the economy  
14          of scale; and as a result, reduces the cost per customer, especially  
15          in regard to rate case expenses and large capital improvements,  
16          such as replacing water or sewer mains or WWTP.

17          There were no specific complaints in regard to service or quality of  
18          water.

19                                 **Conclusion**

20          It is the Public Staff’s opinion that with the exception of a few isolated  
21          service issues which the Company has addressed or is in the  
22          process of resolving, the quality of service has improved since the

1 last general rate case and is overall good. It is also the Public Staff's  
2 opinion that water quality meets the standards set forth by the Safe  
3 Drinking Water Act and is satisfactory.

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

5 A. Yes.