

INFORMATION SHEET

PRESIDING: Chairman Finley and Commissioners Brown-Bland, Dockham, Patterson, Gray, Clodfelter and Mitchell
PLACE: Dobbs Building, Raleigh, NC
DATE: October 16, 2018
TIME: 2:31 p.m. – 5:01 p.m.
DOCKET NO.: W-354, Sub 360
COMPANY: Carolina Water Service, Inc. of North Carolina
DESCRIPTION: Application by Carolina Water Service, Inc. of North Carolina, 4944 Parkway Plaza Boulevard, Suite 375, Charlotte, North Carolina 28217, for Authority to Adjust and Increase Rates for Water and Sewer Utility Service in All of Its Service Areas in North Carolina, Except Corolla Light and Monteray Shores Service Area
VOLUME: 8

APPEARANCES

FOR CAROLINA WATER SERVICE, INC. OF NORTH CAROLINA:
Jo Anne Sanford, Esq.
Robert H. Bennink, Jr., Esq.

FOR THE USING AND CONSUMING PUBLIC:
Margaret A. Force, Esq. - NC Department of Justice

Gina C. Holt, Esq. – Public Staff - NCUC
William E. Grantmyre, Esq.
John Little, Esq.

WITNESSES

Please see attached.

EXHIBITS

Please see attached.

EMAIL COPIES ORDERED: E-mail: Sanford – 1; Force – 1; Little – 1; Holt – 1; Grantmyre - 1

CONFIDENTIAL: See email copies ordered above.

REPORTED BY: Joann Bunze

TRANSCRIBED BY: Joann Bunze

DATE TRANSCRIBED: October 19, 2018

TRANSCRIPT PAGES: 122

PREFILED PAGES: 94

TOTAL PAGES: 216

FILED

OCT 19 2018

Clerk's Office
N.C. Utilities Commission

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

2 FOR CAROLINA WATER SERVICE, INC. OF NORTH CAROLINA:

3 Jo Anne Sanford, Esq.

4 Sanford Law Office, PLLC

5 Post Office Box 28085

6 Raleigh, North Carolina 27611-8085

7
8 Robert H. Bennink, Jr., Esq.

9 Bennink Law Office

10 130 Murphy Drive

11 Cary, North Carolina 27513

12
13 FOR COROLLA LIGHT COMMUNITY ASSOCIATION, INC.:

14 Brady Allen, Esq.

15 Allen Law Offices, PLLC

16 1514 Glenwood Avenue, Suite 200

17 Raleigh, North Carolina 27604

18
19 FOR THE USING AND CONSUMING PUBLIC:

20 Margaret A. Force, Esq.

21 Assistant Attorney General

22 North Carolina Department of Justice

23 Post Office Box 629

24 Raleigh, North Carolina 27602

1 A P P E A R A N C E S Cont'd:

2 FOR THE USING AND CONSUMING PUBLIC:

3 Gina C. Holt, Esq.

4 William E. Grantmyre, Esq.

5 John D. Little, Esq.

6 Public Staff - North Carolina Utilities Commission

7 4326 Mail Service Center

8 Raleigh, North Carolina 27699-4300

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

T A B L E O F C O N T E N T S

E X A M I N A T I O N S

GINA CASSELBERRY PAGE

Examination By Commissioner Patterson..... 7

Examination By Chairman Finley..... 7

Examination By Commissioner Brown-Bland... 15

Recross Examination By Ms. Sanford..... 19

PANEL OF PAGE
WINDLEY HENRY, SONJA JOHNSON,
And MICHELLE BOSWELL

Direct Examination By Ms. Holt..... 21

Prefiled Direct Testimony of Lynn Feasel,. 23
Adopted By Windley HenryPrefiled Supplemental Testimony of..... 51
Windley HenryPrefiled Direct, Prefiled Supplemental,... 63
And Prefiled Second Supplemental
Testimony of Sonja JohnsonPrefiled Direct and Prefiled Supplemental. 82
Testimony of Michelle Boswell

Cross Examination By Ms. Force..... 102

Cross Examination By Ms. Sanford..... 105

Cross Examination By Mr. Bennink..... 109

Redirect Examination By Ms. Holt..... 127

Examination By Chairman Finley..... 131

Examination By Commissioner Patterson..... 138

Examination By Commissioner Brown-Bland... 139

1	Redirect Examination By Ms. Holt.....	140
2	Recross Examination By Ms. Sanford.....	141
3	BRYCE MENDENHALL	PAGE
4	Direct Examination By Ms. Sanford.....	145
5	Prefiled Rebuttal Testimony.....	147
6	Examination By Commissioner Clodfelter....	156
7	Examination By Chairman Finley.....	158
8	Examination By Commissioner Brown-Bland...	158
9	DANTE DESTEFANO	PAGE
10	Direct Examination By Ms. Sanford.....	160
11	Prefiled Rebuttal Testimony.....	162
12	Cross Examination By Ms. Holt.....	188
13	Examination By Commissioner Clodfelter....	200
14	Examination By Chairman Finley.....	202
15	Examination By Commissioner Brown-Bland...	207
16	Recross Examination By Ms. Force.....	209
17		
18		
19		
20		
21		
22		
23		
24		

E X H I B I T S

IDENTIFIED/ADMITTED

1
2 Casselberry Exhibit Numbers 1..... - /20
3 Through 23
4 Clark Appendix Number 3, Exhibit - /20
5 Numbers B1 through B8
6 Feasel Exhibit Number 1, Adopted by .. 22/144
7 Windley Henry
8 Henry Supplemental Exhibit Number 1... 50/144
9 Johnson Exhibit Number 1..... 63/144
10 Johnson Supplemental Exhibit Number 1. 63/144
11 Boswell Supplemental Exhibit Number 1. 82/144
12 Public Staff Panel Redirect Exhibit .. 128/144
13 Number 1
14 Confidential Mendenhall Rebuttal 146/159
15 Exhibit Numbers 1 and 2
16 Clark Appendix 1, Exhibit 5 - /211
17
18 Rate Case application, including the . - /215
19 W-1 filed April 27th and the
20 confidential documents
21 Boswell Supplemental Exhibit 2..... - /211
22
23 Amendment to Application filed - /215
24 May 16th
Boswell Supplemental Exhibit I, - /211
Schedule 2(a)
Three-Year WSIC/SSIC plan filed - /215
May 30th
Customer reports from New Bern and ... - /215
Wilmington, from Charlotte, and from
Asheville

NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE 10-16-18
DOCKET #: W-354 Sub 360
NAME OF ATTORNEY To Anne Sanford
TITLE Attorney
FIRM NAME Sanford Law Office, PLLC
ADDRESS P.O. Box 28085
CITY RALEIGH NC
ZIP 27611-8085

APPEARING FOR: CWSNC

APPLICANT ☒ COMPLAINANT _____ INTERVENOR _____
PROTESTANT _____ RESPONDENT _____ DEFENDANT _____

PLEASE NOTE: Electronic Copies of the regular transcript can be obtained from the NCUC website at HTTP://NCUC.commerce.state.nc.us/docksr ch.html under the respective docket number.

There will be a charge of \$5.00 for each emailed copy of transcript.

☒ Please check for an electronic copy of the transcript.

1 # of Copies

Email: sanford@sanfordlawoffice.com
(Required for distribution)

☐ Please check for the confidential portion of the transcript, only if a confidentiality agreement has been signed.

____ # of Copies

Signature: To Anne Sanford
(Required for distribution)

NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE October 16, 2018
DOCKET #: W-354, Sub 360
NAME OF ATTORNEY Robert H. BENNINK, JR.
TITLE ATTORNEY
FIRM NAME BENNINK LAW OFFICE
ADDRESS 130 MURPHY DRIVE
CITY CARY, NC
ZIP 27513

APPEARING FOR: CAROLINA WATER SERVICE, INC. OF NC

APPLICANT ☒ COMPLAINTANT ☐ INTERVENOR ☐
PROTESTANT ☐ RESPONDENT ☐ DEFENDANT ☐

PLEASE NOTE: Electronic Copies of the regular transcript can be obtained from the NCUC website at [HTTP://NCUC.commerce.state.nc.us/docksr_ch.html](http://NCUC.commerce.state.nc.us/docksr_ch.html) under the respective docket number.

There will be a charge of \$5.00 for each emailed copy of transcript.

☐ Please check for an electronic copy of the transcript.
___ # of Copies

Email: _____
(Required for distribution)

☐ Please check for the confidential portion of the transcript, only if a confidentiality agreement has been signed.
___ # of Copies

Signature: _____
(Required for distribution)

NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE 10/16/2018
DOCKET #: W-354 sub 360
NAME OF ATTORNEY Brady W Allen
TITLE attorney
FIRM NAME Allen Law Offices, PLLC
ADDRESS 1514 Glenwood Ave Ste 200
CITY Raleigh, NC 27604
ZIP _____

APPEARING FOR: Corolla Light Community Association, Inc

APPLICANT _____ COMPLAINANT _____ INTERVENOR R ☒
PROTESTANT _____ RESPONDENT _____ DEFENDANT _____

PLEASE NOTE: Electronic Copies of the regular transcript can be obtained from the NCUC website at [HTTP://NCUC.commerce.state.nc.us/docksr_ch.html](http://NCUC.commerce.state.nc.us/docksr_ch.html) under the respective docket number.

There will be a charge of \$5.00 for each emailed copy of transcript.

☐ Please check for an electronic copy of the transcript.
____ # of Copies

Email: _____
(Required for distribution)

☐ Please check for the confidential portion of the transcript, only if a confidentiality agreement has been signed.
____ # of Copies

Signature: _____
(Required for distribution)

NORTH CAROLINA UTILITIES COMMISSION
APPEARANCE SLIP

DATE 10/16/18
DOCKET #: W-354 Sub 360
NAME OF ATTORNEY Margaret Force
TITLE Assistant Attorney General
FIRM NAME NC Department of Justice
ADDRESS P O Box 629
CITY Raleigh
ZIP 27602

APPEARING FOR: _____

APPLICANT _____ COMPLAINANT _____ INTERVENOR R ☒
PROTESTANT _____ RESPONDENT _____ DEFENDANT _____

PLEASE NOTE: Electronic Copies of the regular transcript can be obtained from the NCUC website at [HTTP://NCUC.commerce.state.nc.us/docksr_ch.html](http://NCUC.commerce.state.nc.us/docksr_ch.html) under the respective docket number.

There will be a charge of \$5.00 for each emailed copy of transcript.

☒ Please check for an electronic copy of the transcript.

1 # of Copies

Email: Pforce@ncdoj.gov
(Required for distribution)

☒ Please check for the confidential portion of the transcript, only if a confidentiality agreement has been signed.

1 # of Copies

Signature: Margaret Force
(Required for distribution)

NORTH CAROLINA UTILITIES COMMISSION
PUBLIC STAFF - APPEARANCE SLIP

DATE 10-16-18 DOCKET # W-354, Sub 360

PUBLIC STAFF MEMBER Gina C. Holt

ORDER FOR TRANSCRIPT OF TESTIMONY TO BE **EMAILED** TO THE
PUBLIC STAFF - PLEASE INDICATE YOUR DIVISION AS WELL AS
YOUR EMAIL ADDRESS BELOW:

ACCOUNTING _____

☒ WATER _____

gina.casselberry@psncuc.nc.gov

COMMUNICATIONS _____

ELECTRIC _____

GAS _____

TRANSPORTATION _____

ECONOMICS _____

LEGAL _____

gina.holt@psncuc.nc.gov

CONSUMER SERVICES _____

john.little@psncuc.nc.gov
william.grantmyer@psncuc.nc.gov

PLEASE NOTE: Electronic Copies of the regular transcript can be obtained from the NCUC web site at [HTTP://NCUC.commerce.state.nc.us/docksrch.html](http://NCUC.commerce.state.nc.us/docksrch.html) under the respective docket number.

☒ Number of copies of Confidential portion of regular transcript (assuming a confidentiality agreement has been signed). Confidential pages will still be received in paper copies.

***PLEASE INDICATE BELOW WHO HAS SIGNED A CONFIDENTIALITY AGREEMENT. IF YOU DO NOT SIGN, YOU WILL NOT RECEIVE THE CONFIDENTIAL PORTIONS!!!!

Gina C. Holt

Signature of Public Staff Member

1A
vol. 8



Carolina Water Service
of North Carolina™

Appendix 3 Deborah Clark

Exhibits B1-B8 Social Media and News Articles

DOCKET NO. W-354, SUB 360

Appendix 3

Exhibit B-1

Social media post and News Article - Employees Good News Anthony Futrell and Matthew Golden

Exhibit B-2

Social media post and News Article – Landscape with water-wise landscaping

Exhibit B-3

Social media post and News Article – Carolina Trace Boil Water Advisory Rescinded
Area Manager Steve Harrell

Exhibit B-4

Social media post and News Article – High Vista Update from Area Manager Gary Peacock

Exhibit B-5

Social media post and News Article – Carolina Water Service Inc. of North Carolina
Salvation Participates in the Army's Angel Tree and Silver Bells Program

Exhibit B-6

Social media post and News Article – Riverpointe Subdivision Routine Flushing July
26, 2018

Exhibit B-7

Social media post and News Article – Did you know? Hurricane Preparedness tips

Exhibit B-8

Social media post and News Article – Winter Weather Tips - Brrr. It's Getting Cold!
Prevent your Pipes from Freezing

Exhibit B-1

Docket No. W-345, Sub 360



Carolina Water Service
of North Carolina™

Thank you for your excellent customer service Anthony Futrell and Matthew Golden who worked in 90 degree heat to fix a sewer issue in the Fairfield Harbour community. Their work was commended by a customer who called to let us know you were FANTASTIC!

Your hard work and dedication to our customers is always greatly valued.

Exhibit B-2

Docket No. W-354, Sub 360



Take steps each day to save water and protect the environment by in your home, yard, and business

Landscape with water-wise landscaping principles.

- Use native plants or plants that require little water to thrive in your region.
- Plant turf grass only in areas where people will use it actively for recreation.
- Organize your landscape into hydro-zones. Hydro-zones are areas of landscape with plant and vegetation that have similar water requirements. This prevents over-watering some plants and under-watering others.
- Keep soil healthy and add mulch to prevent water loss through evaporation.
- If watering with a hose, make sure it has a shut-off nozzle.
- Water in the morning to prevent water loss due to evaporation.
- Avoid watering when it is windy.
- Use a rain barrel to collect water for use in the landscape.
- Add a graywater system to collect water from your washing machine or shower and bath and use it in the landscape



Exhibit B-3

Docket No. W-354, Sub 360



Carolina Water Service
of North Carolina™

Carolina Trace Boil Water Advisory RESCINDED Area Manager Steve Harrell



Please be advised that the previously issued Boil Advisory has been rescinded. It is no longer necessary for customers to boil water for human consumption (including, drinking, making ice, brushing teeth, washing dishes and food preparation)

Again, the boil advisory has been rescinded. The water sample results from the laboratory confirmed that your water continues to be safe and you no longer have to boil your water.

Please contact our Customer Service Department at 1-800-525-7990 if you have any questions.

The following streets were impacted by the project.

2005 Country Club Court
2000 Country Club Court
2001 Country Club Court
2010 Country Club Court
2100 Country Club Court

Exhibit B-4

Docket No. W-354, Sub 360



Carolina Water Service
of North Carolina

High Vista Update from Area Manager Gary Peacock

We are working on the water line tie-in.

Customers will experience periods of low pressure and/or outages in the distribution system due to a new water line tie in, in your area again today. Work should begin at approximately noon with completion expected by approximately 5 pm, barring no complications.

Periods of low or no pressure in the distribution system increases the potential for back siphonage and introduction of bacteria into the water system, therefore, the boil water advisory will be in effect until further notice. As a precautionary measure, when water is restored consumers should continue to boil all water used for human consumption (including, drinking, making ice, brushing teeth, washing dishes and food preparation). As an alternative, bottled water may be used. The North Carolina Division of Water Resources Public Water Supply Section has been contacted concerning this event.

We are very close to completion on the replacement project and we really appreciate your patience.

As a reminder, report leaks or water outages at 1-800-525-7990. This ensures you get the quickest service and response.

The following streets are impacted by the project.

793 HIGH, VISTA, DR
4 WHITE, BIRCH, DR
10 WHITE, BIRCH, DR
11 WHITE, OAK, LN
9 WHITE, BIRCH, DR
7 WHITE, BIRCH, DR
5 WHITE, BIRCH, DR
892 HIGH, VISTA, DR
5 WILLOW, VIEW, DR
9 WILLOW, VIEW, DR
15 WILLOW, VIEW, DR
19 WILLOW, VIEW, DR
14 WILLOW, VIEW, DR
12 WILLOW, VIEW, DR
8 WILLOW, VIEW, DR
4 WILLOW, VIEW, DR
4 WILLOW, VIEW, DR

Exhibit B-5

Docket No. W-354, Sub 360



Carolina Water Service
of North Carolina™



DOING THE MOST GOOD®
Serving Mecklenburg & Union Counties since 1904

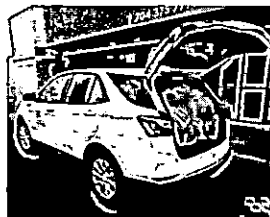
Carolina Water Service, Inc. of North Carolina (CWSNC) is excited to once again support the Salvation Army's Angel Tree and Silver Bells programs.

The Salvation Army Angel Tree program is a need-based program for children ages 0 to 12 years old in Mecklenburg and Union counties. CWSNC employees support children through their donations of clothing, toys, and other unique gifts to the region's most underprivileged children.

CWSNC also supports the Silver Bells program for our elderly neighbors (60+) who live on a tight, fixed income by donating clothing, shoes, toiletries, and daily essentials such as small appliances and food.

"We are honored to help bring cheer to local children and our seniors through the Salvation Army's Angel Tree and Silver Bells program," said Matthew Klein, President of CWSNC.

CWSNC employee participation in this program is an example of our more extensive charitable giving program that supports charities across North Carolina.



Riverpointe Subdivision



Carolina Water Service
of North Carolina™

CWSNC would like to advise customers of the routine flushing taking place in your area tomorrow, July 26, 2018.

Beginning at approximately 1:00 p.m. with completion expected by 4:00 p.m., barring no complications.

Flushing is done periodically as a preventative maintenance measure to ensure the best possible water quality.

While we do not anticipate any problems or inconveniences, customers may experience brief periods of lower than normal water pressure, possible cloudy water and/or temporary discoloration. As a precaution, we recommend customers postpone laundry washing until the flushing has been completed and the water returns to normal.

Service should return to normal after flushing is complete.

However, if you continue to experience any problems after 4:00 p.m., please contact our Customer Service Department at 800-525-7990.



Carolina Water Service
of North Carolina™

Did you know?

Hurricanes are powerful tropical weather systems with clear circulation and winds of 74 miles per hour or higher. When hurricanes move onto land, they sweep the ocean inward. They can cause tornadoes. They make heavy rains and floods. Hurricanes are grouped into categories based on the wind speed. The stronger the wind speed, the higher the category. Most damage caused by hurricanes is from flooding, not the strong winds.

North Carolina's coast is one of the nation's areas most open to a direct hurricane strike because its coastline extends out. All areas of the state – from coastal and sound counties to the mountains – have been impacted by hurricanes in the past 20 years. Heavy winds, tornadoes, strong thunderstorms, flooding, storm surge and landslides can all be caused by hurricanes causing tragic damage.

The Atlantic Hurricane Season runs from June 1 to November 30 with the peak season from mid-August to late October.

Categories

Tropical Depression - contains winds up to 39 miles per hour (mph).

Tropical Storm - 39 - 73 mph winds

Category 1 – 74 to 95 mph winds

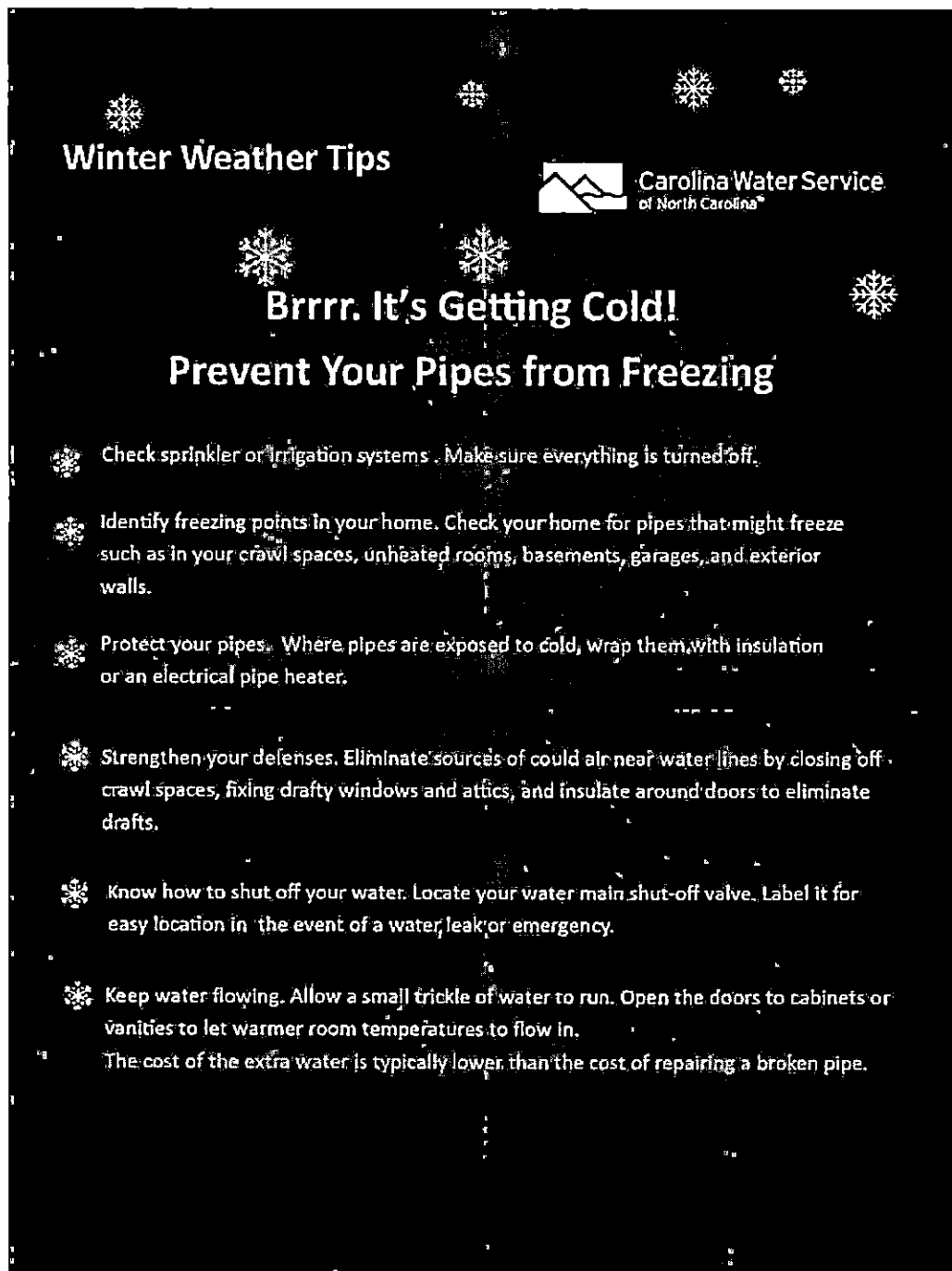
Category 2 – 96 to 110 mph winds

Category 3 – 111 to 129 mph winds


Category 4 – 130 to 156 mph winds.

Category 5 – winds 157 mph or greater.





Winter Weather Tips

 **Carolina Water Service**
of North Carolina

Brrrr. It's Getting Cold!

Prevent Your Pipes from Freezing

- ❄ Check sprinkler or irrigation systems. Make sure everything is turned off.
- ❄ Identify freezing points in your home. Check your home for pipes that might freeze such as in your crawl spaces, unheated rooms, basements, garages, and exterior walls.
- ❄ Protect your pipes. Where pipes are exposed to cold, wrap them with insulation or an electrical pipe heater.
- ❄ Strengthen your defenses. Eliminate sources of cold air near water lines by closing off crawl spaces, fixing drafty windows and attics, and insulate around doors to eliminate drafts.
- ❄ Know how to shut off your water. Locate your water main shut-off valve. Label it for easy location in the event of a water leak or emergency.
- ❄ Keep water flowing. Allow a small trickle of water to run. Open the doors to cabinets or vanities to let warmer room temperatures to flow in.

The cost of the extra water is typically lower than the cost of repairing a broken pipe.

I/A
w1.7/w1.8

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

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

CWSNC Water

Service Area

Olde Point
Pinnacle Shores
Powder Horn Mountain
Quail Ridge
Queen's Harbor
Riverwood
Saddlewood
Sherwood Forest
Sherwood Park
Ski Mountain
Stone Hollow
Suburban Heights
Sugar Mountain
The Harbor/Point
The Ridges at Mountain Harbor
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 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 1
Page 3 of 3

CWSNC Water

Service Area

Tuckahoe
Jordan Woods
Hidden Hollow
Lindsey Point

New Under Uniform Rates

Forest Hills
Connettee Falls
Fairfield Sapphire Valley
Fairfield Mountain (a.k.a. Rumbling Bald)
E k River (proposed)

Purchased Water Systems

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

Service Area

Bradfield Farms
Fairfield Harbor
Treasure Cove

I / A
w1.7 | w1.8

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

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
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
The Ridges at Mountain Harbor
Fairfield Mountain

New Under Uniform Rates

Carolina Trace
Connestee Falls
Nags Head
Sapphire Valley
E k River (proposed)

Service Area

Bradfield Farms
Fairfield Harbour

Corolla Light/Monteray Shores

I / A
W-7 W-7

WATER UTILITY SERVICE UNDER UNIFORM RATES

Monthly Metered Water Service: (Residential and Commercial)

	<u>Existing</u>	<u>Proposed</u>
Base Facility Charges (zero usage)		
< 1" meter	\$ 24.44	\$ 28.16
1" meter	\$ 61.10	\$ 70.39
1-1/2" meter	\$ 122.20	\$ 140.79
2" meter	\$ 195.52	\$ 225.26
3" meter	\$ 366.60	\$ 422.36
4" meter	\$ 611.00	\$ 703.93
6" meter	\$1,222.00	\$1,408.87

	<u>Existing</u>	<u>Proposed</u>
Usage Charge, per 1,000 gallons		
Treated Water	\$ 7.70	\$ 8.87
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	CLT Water	\$ 6.30	\$ 6.30
Whispering Pines	Town of Southern Pines	\$ 2.23	\$ 2.23
White Oak Plantation/ Lee Forest	Johnston County	\$ 2.28	\$ 2.28
Winston Plantation	Johnston County	\$ 2.28	\$ 2.28
Winston Pointe	Johnston County	\$ 2.28	\$ 2.28
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
Carolina Trace	City of Sanford	\$ 2.21	\$ 2.21

<u>Monthly Flat Rate Water Service:</u> (per residence or single family equivalent)	\$ 47.45	\$ 54.67
--	----------	----------

Availability Rates (semi-annual):

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

Availability Rates (Monthly):

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

Availability Rates (Monthly):

Applicable only to property owners in Fairfield Sapphire Valley Service Area	\$ 9.10	\$ 9.10
---	---------	---------

Availability Rates (Monthly):

Applicable only to property owners in Connestee Falls	\$ 4.80	\$ 4.80
---	---------	---------

SEWER UTILITY SERVICE UNDER UNIFORM RATES

Monthly Metered Sewer Service:

Base Facility Charges

	<u>Existing</u>	<u>Proposed</u>
Residential (zero usage)	\$ 45.97	\$ 50.10
Commercial (zero usage)		
<1" meter	\$ 45.97	\$ 50.10
1" meter	\$ 114.97	\$ 125.25
1-1/2" meter	\$ 229.85	\$ 250.50
2" meter	\$ 367.76	\$ 400.80
3" meter	\$ 689.55	\$ 751.50
4" meter	\$1,149.25	\$1,252.50
6" meter	\$2,298.50	\$2,504.99

Usage charge, per 1,000 gallons	\$ 3.11	\$ 3.39
---------------------------------	---------	---------

Monthly Metered Purchased Sewer Service:

Collection charge (Residential and Commercial/SFE)	\$ 36.75	\$ 40.05
--	----------	----------

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	\$ 4.82	\$ 4.82
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>	\$ 56.57	\$ 61.65
---	----------	----------

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)	\$ 36.75	\$ 40.05
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	\$ 56.57	\$ 61.65
White Oak High School	\$1,770.10	\$1,929.12
Child Castle Daycare	\$ 219.90	\$ 239.66
Pantry	\$ 116.80	\$ 127.29

Fairfield Mountain/Apple Valley (a.k.a. Rumbling Bald) service area, Highland Shores Subdivision and Laurel Mountain Estates:

Monthly Sewer Rates:

	<u>Existing</u>	<u>Proposed</u>
Residential		
Collection charge/dwelling unit	\$ 36.75	\$ 40.05
Treatment charge/dwelling unit	\$ 69.50	\$ 69.50
Total monthly flat rate/dwelling charge	\$ 106.25	\$ 109.55
Commercial and Other		
Minimum monthly collection and treatment charge	\$ 106.25	\$ 109.55
Monthly collection and treatment charge for Customers who do not take water service (per single family equivalent)	\$ 106.25	\$ 109.55
Treatment charge per dwelling unit		
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)	\$ 13.93	\$ 13.93

Availability Rates (Monthly):

Applicable only to property owners in Fairfield Sapphire Valley Service Area	\$ 8.30	\$ 8.30
--	---------	---------

Availability Rates (Monthly):

Applicable only to property owners in Conestee Falls	\$ 4.70	\$ 4.70
--	---------	---------

TREASURE COVE, REGISTER PLACE ESTATES, NORTH HILLS AND GLEN ARBOR/NORTH BEND SUBDIVISIONS, FAIRFIELD HARBOUR SERVICE AREA, BRADFIELD FARMS SUBDIVISION, LARKHAVEN SUBDIVISION, SILVERTON AND WOODLAND SUBDIVISIONS AND HAWTHORNE AT THE GREEN APARTMENTS

Monthly Metered Water Service: (Residential and Commercial)

	<u>Existing</u>	<u>Proposed</u>
Base Facility Charges (based on meter size with zero usage)		
< 1" meter	\$ 11.44	\$ 18.08
1" meter	\$ 28.60	\$ 45.21
1-1/2" meter	\$ 57.20	\$ 90.42
2" meter	\$ 91.52	\$ 144.67
Usage Charge, per 1,000 gallons	\$ 3.36	\$ 4.92

Availability Rates (Monthly):

Applicable only to property owners in Fairfield Harbour Service Area	\$ 3.28	\$ 3.28
--	---------	---------

Monthly Sewer Rates:

<u>Residential:</u>	<u>Existing</u>	<u>Proposed</u>
Flat Rate, per dwelling unit	\$ 41.40	\$50.81
Bulk Flat Rate, per REU	\$ 40.40	\$50.81
<u>Commercial and other:</u>		
Monthly Flat Rate (Customers who do not take water service)	\$ 41.40	\$ 50.81
Monthly Metered Rates (based on meter size with zero usage)		
	<u>Existing</u>	<u>Proposed</u>
<1" meter	\$ 11.12	\$ 13.65
1-1/2" mete	\$ 55.60	\$ 68.24
2" meter	\$ 88.96	\$ 109.18
Usage charge, per 1,000 gallons	\$ 6.20	\$ 6.36
Monthly Sewer Availability Rate	\$ 2.64	\$ 2.64
<u>Bulk Sewer for Hawthorne at the Green Apartments</u>		
Bulk Flat Rate, per REU	\$ 40.40	\$ 49.81
<u>Availability Rates (Monthly):</u>		
Applicable only to property owners in Fairfield Harbour Service Area	\$ 2.65	\$ 2.65

ELK RIVER DEVELOPMENT

Monthly Metered Water Service: (Residential and Commercial)

	<u>Elk River's Existing</u>	<u>CWSNC Uniform Proposed</u>
Base Facility Charges (zero usage)		
< 1"meter	\$ 19.52	\$ 28.16
1" meter	\$ 48.79	\$ 70.39
1-1/2" meter	N/A	\$ 140.79
2" meter	\$ 156.12	\$ 225.26
Usage Charge, per 1,000 gallons	\$ 4.29	\$ 8.87

Monthly Metered Sewer Service: (Residential and Commercial)

	<u>Elk River's Existing</u>
Base Facility Charges (zero usage)	
< 1"meter	\$ 23.38
1" meter	\$ 58.45
2" meter	\$ 187.05
Usage Charge, per 1,000 gallons	\$ 3.00

Base Facility Charges

	CWSNC Uniform <u>Proposed</u>
Residential (zero usage)	\$ 50.10
Commercial (zero usage)	
<1" meter	\$ 50.10
1" meter	\$ 125.25
1-1/2" meter	\$ 250.50
2" meter	\$ 400.80
Usage charge, per 1,000 gallons	\$ 3.39

I/A
Vol. 7 Vol. 8

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 4
Page 1 of 4

Billing Analysis for End of Period Customers

CWSNC Water

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	availb	availb	availb	availb	availb
Abington/InterLarken	591									591	1							1	592					
Bahia Bay	116									116								0	116					
Bear Paw	342	3								345	5	1						6	351					
Beechbrook	37									37								0	37					
Belvedere Plantation	1203		2							1205	3	2		7	4			16	1221					
Bent Creek	302									302	1							1	303					
Brandywine Bay	846		3		1					850	10	3	2					15	865					
Buffalo Creek	284									284								0	284					
Chapel Hill	103									103								0	103					
College Park	80									80								0	80					
Country Club Annex	24									24								0	24					
Country Hills	67									67								0	67					
Crestview	39									39								0	39					
Crystal Mountain	48									48								0	48					
Lamplight/Danby/Wtisd Fall	1311		3							1314	3	2	1	1				7	1321					
Eagle Crossing	78									78								0	78					
Eastwood Forest	127									127	1							1	128					
Forest Brook/Ole lamp Place	126	1								127		1						1	128					
Grandview at T-Square	75									75	1							1	76					
Harbor House Estates	60									60								0	60					
Heathfield	67									67		1						1	68					
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	423		6	1						430	8	2	0	3				13	443					
Huntington Forest	59									59								0	59					
Kings Grant	180		1							181	1							1	182					
Larkhaven	147	16								163								0	163					
Lemmond Acres	34									34	1							1	35					

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 4
Page 2 of 4

Billing Analysis for End of Period Customers

CWSNC Water

CWVSNC 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	availb	availb	availb	availb	availb		
Meadow Glen	33									33								0	33							
Misty Mountain	141									141								0	141							
Monterey	27									27								0	27							
Mt Mitchell	204								16	220	2		2	1				5	225							
Nero	124									124								0	124							
Oakdale terrace	41									41								0	41							
Olde Point	192		3							195	1			1				2	197							
Pinnacle Shores	162									162	10							10	172							
Powder Horn Mountain	230									230	1	1						2	232							
Quail Ridge	172		2							174	1							1	175							
Queen's Harbor	112									112	2					1		3	115							
Ridges at Mt Harbor									59	59	1			1				2	61							
Riverwood	192	1	1		1					195			1	0				1	196							
Saddlewood	127									127								0	127							
Sherwood Forest	252									252	6		1	1				8	260							
Sherwood Park	96									96			1					1	97							
Ski Mountain	245									245								0	245							
Stone Hollow	222									222	1							1	223							
Suburban Heights	24									24								0	24							
Sugar Mountain	1423									1423	62	4	4	22	1			93	1516							
The Harbor/Point	1520		2	1						1523	15	3	1	3			2	24	1547							
Vander	258									258	1			2				3	261							
Watauga Vista	141									141								0	141							
Waterylyn	43									43								0	43							
Westwood Forest	117									117								0	117							
Wildlife Bay	83									83	1							1	84							
Wlkwood green	227									227	1							1	228							
Willowbrook	170									170		1						1	171							
Wolf Laurel	643									643	6	14		3				23	666							

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 4
Page 3 of 4

Billing Analysis for End of Period Customers

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	availb	availb	availb	availb	availb
Wood Trace	46									46								0	46					
Woodhaven Manor	78		1							79								0	79					
Mason Landing	14									14	1			1				2	16					
Linville Ridge									341	341	1	1		4	1			7	348			58		
Uniform	14455	21	24	2	2	0	0	0	416	14920	152	37	15	58	6	1	2	271	15191	0	0	58		
Clearwater	1869								99		4													
Forest Hills	119									119	1	2	3					6	125					
Connestee Falls	1383									1383	16			3				19	1402				487	
Fairfield Sapphire Valley	1550	4	5	32	17					1608	41	3	5	12	1			62	1670					812
Fairfield MUApple Valley	1010	17	12							1039	43	4	4	4				55	1094					
Uniform	20486	42	41	34	19	0	0	0	515	21137	257	46	27	77	7	1	2	417	21554	0	0	58	487	812
Elk River	2	267	13							282	34	1		4				39	321					
Total Uniform	20488	309	54	34	19	0	0	0	515	21419	291	47	27	81	7	1	2	456	21875	0	0	58	487	812
Purchased Water Systems																								
Carolina Trace	1589		2		2					1593	25	1	1	3				30	1623					
Carolina Forest	200		1							201	4	1	1					6	207	671				
High Vista	257		1							258	1			2				3	261					
Riverpointe	195		2							197	5							5	202					
Whispering Pines	1560		16							1576	28	6	5	1		1		41	1617					
White Oak Plantation	571									571			1					1	572					
Woodrun	457									457	4	1						5	462		682			
Yorktown	105									105								0	105					
Zemosa Acres	240	1	2							243		1						1	244					
Grant Total	25662	310	78	34	21	0	0	0	515	26620	358	57	35	87	7	2	2	548	27168	671	682	58	487	812

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 4
Page 4 of 4

Billing Analysis for End of Period Customers

Service Area	Total																Total	Total						
	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
Bradfield Farms	997	99	0							1093	1	5						6	1099					
Fairfield Harbor	1836	2	2							1840	22	1	2	3				28	1869	1064				
Treasure Cove	299	1	1		1					302									302					
Total	3132	99	3	0	1	0	0	0	0	3235	23	6	2	3	0	0	0	34	3269	1064				

17A
m.7 m.8

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 5
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	5 C	Flat Comm	Total Comm	Total EOP	Availability Connestee	Availability Sapphire
Abington/Kynwood	591					110	701	1								1	702		
Ashley Hills	1,173					23	1,196									0	1,196		
Bear Paw	69						69	3								3	72		
Belvedere Plantation	704	2					706	1			4	3			3	11	717		
Bent Creek	302						302									0	302		
Brandywine Bay	766	3		1		47	817	4							3	7	824		
Carolina Pines						341	341	1								1	342		
Lamplight/Danby/Wdsd F	1,308	3				7	1,318	327		1	2				4	334	1,652		
Hestron Park							-	1	0	2	7				1	11	11		
Hounds Ear	179	4					183	6	1		3					10	193		
Huntwick transferred							-									0	-		
Hemby Acres/Beacon Hill						685	686								8	8	694		
Kings Grant - Charlotte							-									0	-		
Kings Grant - Raleigh						118	118									0	118		
Kynwood							-									0	-		
Nero	124						124									0	124		
Olde Point	118	3					121				1					1	122		
Queen's Harbor	112						112	1					1			2	114		
Ridges at Mt. Harbour							-	1			1				35	37	37		
Riverpointe	195	1					196	1								1	197		
Saddlewood	18						18									0	18		
Sugar Mountain	1,105	1				137	1,243	38	3	2	19	1				63	1,306		
Wolf Laurel	55						55				2					2	57		
Willowbrook	170						170									0	170		
Total	6,989	17	-	1	-	1,469	8,476	385	4	5	39	4	1	-	54	492	8,968		
Carolina Trace	1559	2		2			1,563	15	1	1	1					18	1,581		
Connestee Falls	998					5	1,003	7			1					8	1,011	260	
Nags Head						646	646	11	7	4	7			2		31	677		
Total	9,546	19	-	3	-	2,120	11,688	418	12	10	48	4	1	2	54	549	12,237	260	-

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 5
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 Connetsee	Availability Sapphire
Regalwood/white oak						1061	1,061									0	1,061		
White Oak Estates						0	-									0	-		
White oak High School						1	1									0	1		
Child Daycare						1	1									0	1		
Elk River	116	4					120	2	1	2						5	125		
CL/MS	781	90	0	0	0		871	67	19	3	2	1				92	963		
Sapphire Valley (1)	645	2	128	68			843	19	3	2	6	1				31	874		91
Purchased Sewer																			
White Oak Planation	478						478									0	478		
College Park	51					1	52									0	52		
Kings Grant Charlotte	180	1					181									0	181		
Mt Carmel	381						381									0	381		
Fairfield Mountain (2,3)	399	12					411									0	411		

Total	12,577	128	128	71	-	3,184	16,088	506	35	17	56	6	1	2	54	677	16,765	260	91
-------	--------	-----	-----	----	---	-------	--------	-----	----	----	----	---	---	---	----	-----	--------	-----	----

Note

- 1 Sapphire Residential customers are flat rate. Puplic Staff is recommending meter rates
- 2 Fairfield Mountain residential customers are flat rate
- 3 Fairfield Mountain treatment for commercial customers : ww only flat 2, 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	Availb Harbour	Multi Units
Bradfield Farms	1089					158	1,247		2		0				379	381	3256		3
Fairfield Harbour	1821	0					1,821	15	1	2	1					19	1,840	1050	
Total	2910	0	0	0	0	158	3,068	15	3	2	1	0	0	0	379	400	3,468	1050	

I / A
w/7 w/8

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 6
Page 1 of 3

Billing Analysis for Consumption

CWSNC Water

Service Area	5/8 R	3/4 R	1 R	1.5 R	2 R	Total Residential	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	TOTAL COMMERCIAL	Grand Total
Abington/InterLarken	29,648,018	-	-	-	-	29,648,018	189,990	-	-	-	-	-	-	189,990	29,838,008
Bahia Bay	5,388,322					5,388,322								-	5,388,322
Bear Paw	4,664,180	57,220				4,721,400	225,960	158,840						384,800	5,106,200
Beechbrook	1,621,770					1,621,770								-	1,621,770
Belvedere Plantation	57,874,288		131,750			58,006,038	49,290	158,160		2,153,382	5,619,395			7,980,227	65,986,265
Bent Creek	12,571,364					12,571,364	27,078							27,078	12,598,442
Brandywine Bay	33,713,893		66,140		58,000	33,838,003	396,580	552,980	52,400					1,001,960	34,839,963
Buffalo Creek	12,096,130					12,096,130								-	12,096,130
Chapel Hill	3,192,297					3,192,297								-	3,192,297
College Park	3,871,020					3,871,020								-	3,871,020
Country Club Annex	1,008,180					1,008,180								-	1,008,180
Country Hills	3,674,440					3,674,440								-	3,674,440
Crestview	1,233,623					1,233,623								-	1,233,623
Crystal Mountain	891,329					891,329								-	891,329
Lamplight/Danby/Wisd Fall	64,248,880		164,970			64,413,850	151,700	206,480	360,900	64,900				513,980	65,227,830
Eagle Crossing	3,866,720					3,866,720								-	3,866,720
Eastwood Forest	5,944,815					5,944,815	32,800							32,800	5,977,615
Forest Brook/Ole lamp Place	6,438,973	12,170				6,449,143		109,170						109,170	6,558,313
Grandview at T-Square	3,451,440					3,451,440	71,030							71,030	3,522,470
Harbor House Estates	2,436,790					2,436,790								-	2,436,790
Heathfield	7,203,260					7,203,260		53,660						53,660	7,256,920
Hestron Park	-					-	34,040		689,800	3,204,570				3,928,410	3,928,410
High Meadows	6,628,615					6,628,615	408,762			238,807				647,569	7,276,204
Holly Acres	2,449,110					2,449,110		360,500						360,500	2,809,610
Hounds Ear	9,475,328		67,503	128,520		9,669,349	827,170	683,560		510,649				1,821,379	11,490,728
Huntington Forest	3,052,103					3,052,103								-	3,052,103
Kings Grant	8,043,531		223,570			8,267,101	37,560							37,560	8,304,661
Larkhaven	8,135,010	841,200				8,976,210								-	8,976,210
Lemmond Acres	2,011,360					2,011,360	78,680							78,680	2,090,040
Linville Ridge	-					-	70	3,208,786		1,765,753	98,600			5,091,209	5,091,209
Mason Landing	502,790					502,790	109,514			159,700				269,214	772,004
Meadow Glen	1,816,520					1,816,520								-	1,816,520
Misty Mountain	2,781,711					2,781,711								-	2,781,711
Monteray	1,372,700					1,372,700								-	1,372,700
Mt Mitchell	5,360,181					5,360,181	115,640		186,556	832				303,428	5,663,609
Nero	5,695,630					5,695,630								-	5,695,630
Oakdale terrace	1,558,190					1,558,190								-	1,558,190
Okde Point	8,588,148		104,920			8,693,068	32,380			290,600				322,990	9,016,058
Pinnacle Shores	10,688,380					10,688,380	1,122,570							1,122,570	11,810,950
Powder Horn Mountain	4,708,467					4,708,467	40,420	243,436						283,856	4,992,323
Quail Ridge	8,443,150		54,810			8,497,960	112,250							112,250	8,610,210

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 6
Page 2 of 3

Billing Analysis for Consumption

CWSNC Water

Service Area	5/8 R	3/4 R	1 R	1.5 R	2 R	Total Residential	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	TOTAL COMMERCIAL	Grand Total
Queen's Harbor	4,076,820					4,076,820	93,700					904,300		998,000	5,074,820
Ridges at Mountain Harbour	2,915					2,915	464,520				207,600			672,120	
Riverwood	10,185,340	266,710	148,330		38,100	10,668,480	22,740		19,510	1,830				44,080	10,712,560
Saddlewood	6,085,890					6,085,890								-	6,085,890
Sherwood Forest	7,221,525					7,221,525	138,480		147,400	1,252,100				1,537,980	8,759,505
Sherwood Park	5,473,750					5,473,750			386,300					386,300	5,860,050
Ski Mountain	6,429,521					6,429,521								-	6,429,521
Stone Hollow	10,829,050					10,829,050	7,810							7,810	10,836,860
Suburban Heights	1,213,348					1,213,348								-	1,213,348
Sugar Mountain	21,218,546		57,370			21,275,916	2,620,613	331,736	1,779,220	6,144,812	3,557,971			14,434,352	35,710,268
The Harbor	192,815,683		155,140	102,030		193,072,853	867,170	708,970	1,166,800	740,790			3,976,660	7,480,390	200,553,243
Vander	12,114,137					12,114,137	9,300			1,244,867				1,254,167	13,368,304
Watauga Vista	3,031,575					3,031,575								-	3,031,575
Waterglyn	1,584,450					1,584,450								-	1,584,450
Westwood Forest	5,433,320					5,433,320								-	5,433,320
Wildlife Bay	4,811,120					4,811,120								-	4,811,120
Wildwood green	10,977,328					10,977,328	30,327							30,327	11,007,655
Willowbrook	5,941,530					5,941,530		52,500						52,500	5,994,030
Wolf Laurel	13,024,043					13,024,043	486,384	514,893		429,071				1,430,348	14,454,391
Wood Trace	2,356,980					2,356,980								-	2,356,980
Woodhaven Manor	3,159,420		33,760			3,193,180								-	3,193,180
Total	684,336,915	1,207,300	1,208,263	228,550	96,100	687,077,128	8,624,558	7,343,471	4,819,286	18,430,263	9,273,966	904,300	3,976,660	53,372,594	740,449,632
Cleanwater	101,557,612					101,557,612	13,500							13,500	101,571,112
Forest Hill	5,333,743					5,333,743	101,120	101,910	863,540					1,066,570	6,400,313
Conestee falls	35,001,080					35,001,080	275,000			1,757,300				2,032,300	37,033,380
Sapphire Valley	35,143,932	38,647	218,340	5,117,390	2,188,829	42,717,038	1,958,725	791,279	1,328,136	2,489,505	1,321,926			7,887,571	50,604,609
Fairfield Mountain	28,280,820	388,740	1,451,340			28,120,900	1,814,290	922,180	610,520	1,083,890				4,230,880	32,351,780
Total Uniform	887,654,102	1,834,587	2,877,943	5,345,940	2,294,929	899,807,501	12,585,193	9,158,840	7,621,482	23,760,858	10,595,892	904,300	3,976,660	68,603,325	968,410,826
Elk River	45,223	7,494,774	806,144			8,346,141	602,388	472,771		643,629				1,718,788	10,064,929
Total Uniform	887,699,325	9,129,361	3,684,087	5,345,940	2,294,929	908,163,642	13,187,581	9,631,611	7,621,482	24,404,587	10,595,892	904,300	3,976,660	70,322,113	978,475,755
Purchased Water															
Carolina Trace	57,731,470		155,083		16,200	57,902,753	1,319,932	113,540	481,600	2,161,310				4,076,382	61,979,135
Carolina Forest	6,951,899		17,330			6,979,229	25,238	84,850	57,940					168,028	7,147,257
High Vista	10,466,600		58,500			10,525,100	20,840			727,600				748,540	11,273,640
Riverpointe	14,385,855		554			14,386,209	649,240							649,240	15,035,449
Whispering Pines	94,454,327		1,350,059			95,804,426	1,203,630	3,031,860	840,430	567,800		300		5,644,020	101,448,446
White Oak Plantation	27,303,660					27,303,660			221,000					221,000	27,524,660
Woodrun	16,592,047					16,592,047	50,360	282,424						332,784	16,924,831
Yorktown	3,820,510					3,820,510								-	3,820,510
Zemosa Acres	11,902,225	69,960	92,124			12,064,309		83,327						83,327	12,147,636

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 6
Page 3 of 3

Billing Analysis for Consumption

TC/BF/FH Water

Service Area	5/8 R	3/4 R	1 R	1.5 R	2 R	Residential	5/8 C	1 C	1.5 C	2 C	3 C	4 C	6 C	COMMERCIAL	Total
Bradfield Farms	58,928,259	6,040,320	123,944			65,090,523	137,910	391,083						528,993	65,619,516
Fairfield Harbor	76,520,506	56,890	87,020			76,664,416	1,487,405	39,270	513,000	260,880				2,300,565	78,964,981
Treasure Cove	17,698,657	3,950	50,250		76,700	17,829,557								-	17,829,557
Total	153,145,422	6,101,160	261,214	-	76,700	169,584,496	1,625,315	430,353	513,000	260,890	-	-	-	2,829,558	162,414,054

I/A
Vol. 7 Vol. 8

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

Casselberry
Exhibit No. 7
Page 1 of 2

Billing Analysis for Consumption

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
Abington/InterLarken	29,648,018	-		-	29,648,018	189,990	-	-	-	-	-		189,990	29,838,008
Ashley Hills	59,626,015				59,626,015								-	59,626,015
Bear Paw	639,170				639,170	51,920							51,920	691,090
Belvedere Plantation	30,942,818	131,750			31,074,568	15,120			1,913,432	4,897,995			6,826,547	37,901,115
Bent Creek	12,571,364				12,571,364								-	12,571,364
Brandywine Bay	28,891,403	66,140		58,000	29,015,543	105,800							105,800	29,121,343
Carolina Pines	-				-	153,933							153,933	153,933
Lampight/Danby/Wdsd Falls	64,181,740	164,970			64,346,710	19,412,635		390,900	633,810				20,437,345	84,784,055
Hestron Park	-				-	34,040		689,800	3,204,570				3,928,410	3,928,410
Hounds Ear	3,901,602	51,630			3,953,232	575,128	81,040		510,649				1,166,817	5,120,049
Huntwick transferred	-				-								-	-
Independ/Hemby Acres/Beacon	-				-								-	-
Kings Grant - Raleigh	-				-								-	-
Kynwood	-				-								-	-
Mt. Carmel/Lees Ridge	-				-								-	-
Nero	5,695,630				5,695,630								-	5,695,630
Olde Point	4,382,387	104,920			4,487,307				290,600				290,600	4,777,907
Queen's Harbor	4,076,820				4,076,820	90,260					904,300		994,560	5,071,380
Ridges at Mountain harbour					-	464,520			207,600				672,120	672,120
Riverpointe	14,385,655	277			14,385,932	51,660							51,660	14,437,592
Saddlewood	751,750				751,750								-	751,750
Sugar Mountain	14,556,536	57,370			14,613,906	1,404,335	287,263	1,764,920	5,879,812	3,557,971			12,894,301	27,508,207
Willowbrook	5,941,530				5,941,530								-	5,941,530
Wolf Laurel	867,743				867,743				400,571				400,571	1,268,314
Regalwood	-				-								-	-
White Oak Estates	-				-								-	-
White oak High School	-				-								-	-
Child Daycare	-				-								-	-
Uniform	281,060,181	577,057	-	58,000	281,695,238	22,549,341	368,303	2,845,620	13,041,044	8,455,966	904,300	-	48,164,574	329,859,812

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 7
Page 2 of 2

Billing Analysis for Consumption

CWSNC Sewer

Service Area	Total											Total	Grand	
	5/8 R	1 R		2 R	Residential	5/8 C	1 C	1.5 C	2 C	3 C	4C	6C	Commercial	Total
Carolina Trace	56,398,900	155,083		16,200	56,570,183	990,062	113,540	481,600	109,900				1,695,102	58,265,285
Connetsee Falls	24,917,060				24,917,060	130,000			1,569,000				1,699,000	26,616,060
Nags Head					-	1,511,240	3,926,330	1,325,720	4,687,400			3,922,510	15,373,200	15,373,200
Total Uniform	362,376,141	732,140	-	74,200	363,182,481	25,180,643	4,408,173	4,652,940	19,407,344	8,455,966	904,300	3,922,510	66,931,876	430,114,357
Elk River	1,842,376	110,492			1,952,868	201,118	476,855		401,259				1,079,232	3,032,100
Total Uniform with Elk River	364,218,517	842,632	-	74,200	365,135,349	25,381,761	4,885,028	4,652,940	19,808,603	8,455,966	904,300	3,922,510	68,011,108	433,146,457
Sapphire Valley	13,580,338	87,117	5,117,390	2,198,829	20,983,674	1,692,720	791,279	877,016	2,401,171	1,321,926			7,084,112	28,067,786
Total Uniform with Sapphire	377,798,855	929,749	5,117,390	2,273,029	386,119,023	27,074,481	5,676,307	5,529,956	22,209,774	9,777,892	904,300	3,922,510	75,095,220	461,214,243
CL/MS	41,941,083	10,117,960			52,059,043	6,965,110	3,164,690	1,000,000	1,578,400	72,000			12,780,200	64,839,243
Purchased Sewer	32,486,251	223,570		-	32,709,821	-	-	-	-	-	-		-	32,709,821
White Oak Plantation	22,212,210				22,212,210								-	22,212,210
College Park	2,230,510				2,230,510								-	2,230,510
Kings Grant	8,043,531	223,570			8,267,101								-	8,267,101
Mt Carmel	15,998,846				15,998,846									
Fairfield Mountain														
LG	370,720													
MED	2,219,380													
SM	457,920													

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	65,238,945	925,979			66,164,924		1,908,468						1,908,468	68,073,392
Fairfield Harbour	76,034,766	-			76,034,766	1,232,960	11,110	513,000	86,190				1,843,260	77,878,026
Total	141,273,711	925,979	-	-	142,199,690	1,232,960	1,919,578	513,000	86,190	-	-	-	3,751,728	145,951,418

I/A
v7 v8

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 8

Customer growth for < 1 inch residential customers
at Present Rates

Water					Customer Growth Factor
Service Area	EOP	EOP x 12	Total Bills		
CWSNC Uniform Rates	14,476	173,712	172,354		1.00788
New Uniform Rate					
Clearwater	1,969	23,628	23,508		1.00510
Forest Hills	119	1,428	1,413		1.01062
Connetsee Falls	1,383	16,596	16,395		1.01226
Fairfield Sapphire Valley	1,554	18,648	18,415		1.01265
Fairfield Mt/Apple Valley	1,010	12,120	12,296		0.98569
Elk River	269	3,228	3,156		1.02281
Carolina Trace	1,589	19,068	18,932		1.00718
Carolina Forest	200	2,400	2,393		1.00293
High Vista	257	3,084	2,792		1.10458
Riverpointe	195	2,340	2,260		1.03540
Whispering Pines	1,560	18,720	18,451		1.01458
White Oak Plantation	571	6,852	6,521		1.05076
Woodrun	457	5,484	5,476		1.00146
Yorktown	105	1,260	1,277		0.98669
Zemosa Acres	241	2,892	2,927		0.98804
Total	25,955	311,460	308,566		1.00938
Harbor	1838	22,056	22133		0.99652
Bradfield farms	1093	13,116	12913		1.01572
Treasure Cove	300	3,600	3546		1.01523
Total	3231	38772	38592		1.00466

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 9

$\sqrt{7}$ I/A $\sqrt{8}$

Customer growth for < 1 inch residential customers

Sewer					Customer Growth Factor
Service Area	EOP	EOP x 12	Total Bills		
CWSNC Uniform Rates	6,989	83,868	83,214	1.00786	
New Uniform Rate					
Carolina Trace	1,559	18,708	18,562	1.00787	
Conestee Falls	998	11,976	11,860	1.00978	
Elk River	116	1,392	905	1.53812	
CL/MS	781	9,372	9,378	0.99936	
Sapphire Valley	645	7,740	7,745	0.99935	
White Oak Plantation	478	5,736	5,435	1.05538	
College Park	51	612	602	1.01661	
Kings Grant Charlotte	180	2,160	2,135	1.01171	
Total	11,797	141,564	139,836	1.01236	
Harbor	1838	22,056	22133	0.99652	
Bradfield farms	1093	13,116	12913	1.01572	
Total	2931	35172	35046	1.00360	

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 10
Page 1 of 6

I/A
v7 v8

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	-		-	515	6,180	47.45	293,241	293,241
5/8" Residential Metered	887,654,102	7.70	6,834,937	20,486	245,832	24.44	6,008,134	12,843,071
3/4" Residential Metered	1,634,587	7.70	12,586	42	504	24.44	12,318	24,904
1" Residential Metered	2,877,943	7.70	22,160	41	492	61.10	30,061	52,221
1.5" Residential Metered	5,345,940	7.70	41,164	34	408	122.20	49,858	91,021
2" Residential Metered	2,294,929	7.70	17,671	19	228	195.52	44,579	62,250
Total Residential Metered	899,807,501		6,928,518	20,622	247,464		6,144,949	13,073,467
5/8" Commercial Metered	12,585,193	7.70	96,906	257	3,084	24.44	75,373	172,279
1" Commercial Metered	9,158,840	7.70	70,523	46	552	61.10	33,727	104,250
1.5" Commercial Metered	7,621,482	7.70	58,685	27	324	122.20	39,593	98,278
2" Commercial Metered	23,760,958	7.70	182,959	77	924	195.52	180,660	363,620
3" Commercial Metered	10,595,892	7.70	81,588	7	84	366.60	30,794	112,383
4" Commercial Metered	904,300	7.70	6,963	1	12	611.00	7,332	14,295
6" Commercial Metered	3,976,660	7.70	30,620	2	24	1,222.00	29,328	59,948
Total Commercial Metered	68,603,325		528,246	417	5,004		396,808	925,053
Total	968,410,826		7,456,763	21,554	258,648		6,834,998	14,291,761

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 10
Page 2 of 6

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
Availability								
Linville Ridge (monthly)	-		-	58	696	12.35	8,596	8,596
Sapphire Valley (monthly)				812	9,744	9.10	88,670	88,670
Connestee (monthly)				487	5,844	4.80	28,051	28,051
Total Uniform	968,410,826		7,456,763	22,911	274,932		6,960,315	14,417,079
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	45,223	4.29	194	2	24	19.52	468	662
3/4" Residential Metered	7,494,774	4.29	32,153	267	3,204	19.52	62,542	94,695
1" Residential Metered	806,144	4.29	3,458	13	156	48.79	7,611	11,070
Total Residential Metered	8,346,141		35,805	282	3,384		70,622	106,427
5/8" Commercial Metered	602,388	4.29	2,584	34	408	19.52	7,964	10,548
1" Commercial Metered	472,771	4.29	2,028	1	12	48.79	585	2,614
2" Commercial Metered	643,629	4.29	2,761	4	48	156.12	7,494	10,255
Total Commercial Metered	1,718,788		7,374	39	468		16,043	23,417
Total	10,064,929		43,179	321	3,852		86,665	129,844

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 10
Page 3 of 6

Public Staff's Revenue at Present Rates

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	57,731,470	2.21	127,587	1,589	19,068	24.44	466,022	593,608
1" Residential Metered	155,083	2.21	343	2	24	61.10	1,466	1,809
2" Residential Metered	16,200	2.21	36	2	24	195.52	4,692	4,728
5/8" Commercial Metered	1,319,932	2.21	2,917	25	300	24.44	7,332	10,249
1" Commercial Metered	113,540	2.21	251	1	12	61.10	733	984
1.5" Commercial Metered	481,600	2.21	1,064	1	12	122.20	1,466	2,531
2" Commercial Metered	2,161,310	2.21	4,776	3	36	195.52	7,039	11,815
Total	61,979,135		136,974	1,623	19,476		488,751	625,725

Carolina Forest

5/8" Residential Metered	6,961,899	3.19	22,208	200	2,400	24.44	58,656	80,864
1" Residential Metered	17,330	3.19	55	1	12	61.10	733	788
5/8" Commercial Metered	25,238	3.19	81	4	48	24.44	1,173	1,254
1" Commercial Metered	84,850	3.19	271	1	12	61.10	733	1,004
1.5" Commercial Metered	57,940	3.19	185	1	12	122.20	1,466	1,651
Availability				671	1,342	24.65	33,080	33,080
Total	7,147,257		22,800	878	3,826		95,842	118,642

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 10
Page 4 of 6

Public Staff's Revenue at Present Rates

**Purchased Water
High Vista Estates**

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	10,466,600	3.25	34,016	257	3,084	24.44	75,373	109,389
1" Residential Metered	58,500	3.25	190	1	12	61.10	733	923
5/8" Commercial Metered	20,940	3.25	68	1	12	24.44	293	361
2" Commercial Metered	727,600	3.25	2,365	2	24	195.52	4,692	7,057
Total	11,273,640		36,639	261	3,132		81,092	117,731

Riverpointe

5/8" Residential Metered	14,385,655	6.30	90,630	195	2,340	24.44	57,190	147,819
1" Residential Metered	554	6.30	3	2	24	61.10	1,466	1,470
5/8" Commercial Metered	649,240	6.30	4,090	5	60	24.44	1,466	5,557
Total	15,035,449		94,723	202	2,424		60,122	154,846

Whispering Pines

5/8" Residential Metered	94,454,327	2.23	210,633	1,560	18,720	24.44	457,517	668,150
1" Residential Metered	1,350,099	2.23	3,011	16	192	61.10	11,731	14,742
5/8" Commercial Metered	1,203,630	2.23	2,684	28	336	24.44	8,212	10,896
1" Commercial Metered	3,031,860	2.23	6,761	6	72	61.10	4,399	11,160
1.5" Commercial Metered	840,430	2.23	1,874	5	60	122.20	7,332	9,206
2" Commercial Metered	567,800	2.23	1,266	1	12	195.52	2,346	3,612
4" Commercial Metered	300	2.23	1	1	12	611.00	7,332	7,333
Total	101,448,446		226,230	1,617	19,404		498,869	725,099

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 10
Page 5 of 6

Public Staff's Revenue at Present Rates

Purchased Water

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

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	27,303,660	2.28	62,252	571	6,852	24.44	167,463	229,715
1.5" Commercial Metered	221,000	2.28	504	1	12	122.20	1,466	1,970
Total	27,524,660		62,756	572	6,864		168,929	231,686

Woodrun

5/8" Residential Metered	16,592,047	3.19	52,929	457	5,484	24.44	134,029	186,958
5/8" Commercial Metered	50,360	3.19	161	4	48	24.44	1,173	1,334
1" Commercial Metered	282,424	3.19	901	1	12	61.10	733	1,634
Total	16,924,831		53,990	462	5,544		135,935	189,925
Woodrun (semi annually)				682	1,364	24.65	33,623	33,623
Total	16,924,831		53,990	1,144	6,908		169,558	223,548

Yorktown

5/8" Residential Metered	3,820,510	5.01	19,141	105	1,260	24.44	30,794	49,935
--------------------------	-----------	------	--------	-----	-------	-------	--------	--------

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 10
Page 6 of 6

Public Staff's Revenue at Present Rates

Purchased Water
Zemosa Acres

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	11,902,225	5.27	62,725	240	2,880	24.44	70,387	133,112
3/4" Residential Metered	69,960	5.27	369	1	12	24.44	293	662
1" Residential Metered	92,124	5.27	485	2	24	61.10	1,466	1,952
1" Commercial Metered	83,327	5.27	439	1	12	61.10	733	1,172
Total	12,147,636		64,018	244	2,928		72,880	136,898
TOTAL	1,235,777,319		8,217,213	29,878	345,006		8,713,819	16,931,032

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 11
Page 1 of 5

$\frac{I}{\sqrt{7}} / A$
 $\sqrt{8}$

Public Staff's Revenue at Proposed 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	54.67	337,861	337,861
5/8" Residential Metered	887,699,325	8.87	7,873,893	20,488	245,856	28.16	6,923,305	14,797,198
3/4" Residential Metered	9,129,361	8.87	80,977	309	3,708	28.16	104,417	185,395
1" Residential Metered	3,684,087	8.87	32,678	54	648	70.39	45,613	78,291
1.5" Residential Metered	5,345,940	8.87	47,418	34	408	140.79	57,442	104,861
2" Residential Metered	2,294,929	8.87	20,356	19	228	225.26	51,359	71,715
Total Residential Metered	908,153,642		8,055,323	20,904	250,848		7,182,137	15,237,459
5/8" Commercial Metered	13,187,581	8.87	116,974	291	3,492	28.16	98,335	215,309
1" Commercial Metered	9,631,611	8.87	85,432	47	564	70.39	39,700	125,132
1.5" Commercial Metered	7,621,482	8.87	67,603	27	324	140.79	45,616	113,219
2" Commercial Metered	24,404,587	8.87	216,469	81	972	225.26	218,953	435,421
3" Commercial Metered	10,595,892	8.87	93,986	7	84	422.36	35,478	129,464
4" Commercial Metered	904,300	8.87	8,021	1	12	703.93	8,447	16,468
6" Commercial Metered	3,976,660	8.87	35,273	2	24	1,407.87	33,789	69,062
Total Commercial Metered	70,322,113		623,757	456	5,472		480,318	1,104,075
Total	978,475,755		8,679,080	21,875	262,500		8,000,315	16,679,395

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 11
Page 2 of 5

Public Staff's Revenue at Proposed Rates

CWSNC Water

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Availability								
Linville Ridge (monthly)	-		-	58	696	12.35	8,596	8,596
Sapphire Valley (monthly)				812	9,744	9.10	88,670	88,670
Connestee (monthly)				487	5,844	4.80	28,051	28,051
Total Uniform	978,475,755		8,679,080	23,232	278,784		8,125,632	16,804,712

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	57,731,470	2.21	127,587	1,589	19,068	28.16	536,955	664,541
1" Residential Metered	155,083	2.21	343	2	24	70.39	1,689	2,032
2" Residential Metered	16,200	2.21	36	2	24	225.26	5,406	5,442
5/8" Commercial Metered	1,319,932	2.21	2,917	25	300	28.16	8,448	11,365
1" Commercial Metered	113,540	2.21	251	1	12	70.39	845	1,096
1.5" Commercial Metered	481,600	2.21	1,064	1	12	140.79	1,689	2,754
2" Commercial Metered	2,161,310	2.21	4,776	3	36	225.26	8,109	12,886
Total	61,979,135		136,974	1,623	19,476		563,142	700,116

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 11
Page 3 of 5

Public Staff's Revenue at Proposed 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	6,961,899	3.19	22,208	200	2,400	28.16	67,584	89,792
1" Residential Metered	17,330	3.19	55	1	12	70.39	845	900
5/8" Commercial Metered	25,238	3.19	81	4	48	28.16	1,352	1,432
1" Commercial Metered	84,850	3.19	271	1	12	70.39	845	1,115
1.5" Commercial Metered	57,940	3.19	185	1	12	140.79	1,689	1,874
Availability				671	1,342	24.65	33,080	33,080
Total	7,147,257		22,800	878	3,826		105,395	128,195

High Vista Estates

5/8" Residential Metered	10,466,600	3.25	34,016	257	3,084	28.16	86,845	120,862
1" Residential Metered	58,500	3.25	190	1	12	70.39	845	1,035
5/8" Commercial Metered	20,940	3.25	68	1	12	26.95	323	391
2" Commercial Metered	727,600	3.25	2,365	2	24	225.26	5,406	7,771
Total	11,273,640		36,639	261	3,132		93,420	130,059

Riverpointe

5/8" Residential Metered	14,385,655	6.30	90,630	195	2,340	28.16	65,894	156,524
1" Residential Metered	554	6.30	3	2	24	70.39	1,689	1,693
5/8" Commercial Metered	649,240	6.30	4,090	5	60	28.16	1,690	5,780
Total	15,035,449		94,723	202	2,424		69,273	163,997

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 11
Page 4 of 5

Public Staff's Revenue at Proposed Rates

Purchased water

Whispering Pines

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	94,454,327	2.23	210,633	1,560	18,720	28.16	527,155	737,788
1" Residential Metered	1,350,099	2.23	3,011	16	192	70.39	13,515	16,526
5/8" Commercial Metered	1,203,630	2.23	2,684	28	336	28.16	9,462	12,146
1" Commercial Metered	3,031,860	2.23	6,761	6	72	70.39	5,068	11,829
1.5" Commercial Metered	840,430	2.23	1,874	5	60	140.79	8,447	10,322
2" Commercial Metered	567,800	2.23	1,266	1	12	225.26	2,703	3,969
4" Commercial Metered	300	2.23	1	1	12	703.93	8,447	8,448
Total	101,448,446		226,230	1,617	19,404		574,798	801,028

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

5/8" Residential Metered	27,303,660	2.28	62,252	571	6,852	28.16	192,952	255,205
1.5" Commercial Metered	221,000	2.28	504	1	12	140.79	1,689	2,193
Total	27,524,660		62,756	572	6,864		194,642	257,398

Yorktown

5/8" Residential Metered	3,820,510	5.01	19,141	105	1,260	28.16	35,482	54,622
--------------------------	-----------	------	--------	-----	-------	-------	--------	--------

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 11
Page 5 of 5

Public Staff's Revenue at Proposed Rates

Purchased water

Woodrun

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	16,592,047	3.19	52,929	457	5,484	28.16	154,429	207,358
5/8" Commercial Metered	50,360	3.19	161	4	48	28.16	1,352	1,512
1" Commercial Metered	282,424	3.19	901	1	12	70.39	845	1,746
Total	16,924,831		53,990	462	5,544		156,626	210,616
Woodrun (semi annually)				682	1,364	24.65	33,623	33,623
Total	16,924,831		53,990	1,144	6,908		190,248	244,239

Zemosa Acres

5/8" Residential Metered	11,902,225	5.27	62,725	240	2,880	28.16	81,101	143,826
5/8" Residential Metered	69,960	5.27	369	1	12	28.16	338	707
1" Residential Metered	92,124	5.27	485	2	24	70.39	1,689	2,175
1" Commercial Metered	83,327	5.27	439	1	12	70.39	845	1,284
Total	12,147,636		64,018	244	2,928		83,973	147,991
TOTAL	1,235,777,319		9,396,352	29,878	345,006		10,036,004	19,432,356

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casse berry
Exh bit No. 12
Page 1 of 5

F/A
v7 v8

Public Staff's Revenue at Present Rates

CWSNC Sewer									
Billing Type	Usage	Adjusted Usage CGF 1.01236	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Residential Flat, Sewer			-	-	2,120	25,440	56.57	1,439,141	1,439,141
5/8" Residential Metered	362,376,141	366,855,110	3.11	1,140,919	9,546	114,552	45.97	5,265,955	6,406,875
1" Res Metered	732,140		3.11	2,277	19	228	45.97	10,481	12,758
1.5" Res Metered	-		3.11	-	-	-	45.97	-	-
2" Res Metered	74,200		3.11	231	3	36	45.97	1,655	1,886
Total	363,182,481			1,143,427	9,568	114,816		5,278,092	6,421,519
Commercial Flat Rate			-	-	54	648	56.57	36,657	36,657
5/8" Commercial Metered	25,180,643		3.11	78,312	418	5,016	45.97	230,586	308,897
1" Commercial Metered	4,408,173		3.11	13,709	12	144	114.93	16,550	30,259
1.5" Commercial Metered	4,652,940		3.11	14,471	10	120	229.85	27,582	42,053
2" Commercial Metered	19,407,344		3.11	60,357	48	576	367.76	211,830	272,187
3" Commercial Metered	8,455,966		3.11	26,298	4	48	689.55	33,098	59,396
4" Commercial Metered	904,300		3.11	2,812	1	12	1,149.25	13,791	16,603
6" Commercial Metered	3,922,510		3.11	12,199	2	24	2,298.50	55,164	67,363
Total	66,931,876			208,158	549	6,588		625,258	833,416
Regalwood/White Oaks	-			-	1,061	12,732	56.57	720,249	720,249
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 360
For the 12 Months Ending December 31, 2017

Casse berry
Exh bit No. 12
Page 2 of 5.

Public Staffs Revenue at Present Rates

CWSNC Sewer									
Billing		Adusted							
Type	Usage	Usage	Usage	Usage	EOP	EOP	Base	Base Charge	Total
		CGF 1.01236	Rate	Revenue	Customers	x 12 months	Charge	Revenue	Revenue
Availibility Connestee	-		-	-	260	3,120	4.70	14,664	14,664
Total	430,114,357			1,351,585	13,560	162,720		8,101,284	9,452,869
Purchased Water									
Mount Carmel	15,998,846	16,196,592	5.88	95,236	381	4,572	43.52	198,973	294,209
College Park									
Residential Flat, Sewer only	-		-	-	1	12	56.57	679	679
5/8" Residential Metered	2,230,510	2,258,079	5.70	12,871	51	612	36.75	22,491	35,362
Total	2,230,510			12,871	52	624		23,170	36,041
Kings Grant									
5/8" Residential Metered	8,043,531	8,142,949	3.80	30,943	180	2,160	36.75	79,380	110,323
1" Res Metered	223,570		3.80	850	1	12	36.75	441	1,291
Total	8,267,101			31,793	181	2,172		79,821	111,614
White Oak Plantation/Lee Forest/Winston Pointe									
5/8" Residential Metered	22,212,210	22,486,753	4.82	108,386	478	5,736	36.75	210,798	319,184

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casse berry
Exhibit No. 12
Page 3 of 5

Public Staff's Revenue at Present Rates

CWSNC Sewer

Billing Type	Usage	Adjusted Usage CGF 1.01236	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Fairfield Mountain									
5/8" Res. Collection/Treatm.				-	399	4,788	106.25	508,725	508,725
1" Res Collection/Treatm.				-	12	144	106.25	15,300	15,300
Residential Collection				-	411	4,932		524,025	524,025
ww only fit	-		13.93	-	2	24	106.25	2,550	2,550
Small Commercial	457,920		13.93	6,378.83	7	84	78.50	6,594	12,973
Medium Commercial	2,219,380		13.93	30,915.96	11	132	139.50	18,414	49,330
Large Commercial	370,720		13.93	5,164.13	3	36	219.50	7,902	13,066
Nonresidential Metered	3,048,020.00			42,458.92	23.00	276.00		35,460.00	77,918.92
Total	3,048,020			42,459	434	5,208		559,485	601,944

Billing Type	Usage		Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
CL/MS									
5/8" Residential Sewer	41,941,083	42,459,475	6.62	281,082	781	9,372	52.06	487,906	768,988
1" Residential Sewer	10,117,960		6.62	66,981	90	1,080	130.15	140,562	207,543
Total residential	52,059,043			348,063	871	10,452		628,468	976,531

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casse berry
Exhibit No. 12
Page 4 of 5

Public Staff's Revenue at Present Rates

CWSNC Sewer

Billing Type	Usage	Adjusted Usage CGF 1.01236	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
CL/MS									
5/8" Commercial Sewer	6,965,110		6.62	46,109	67	804	52.06	41,856	87,965
1" Commercial Sewer	3,164,690		6.62	20,950	19	228	130.15	29,674	50,624
1.5" Commercial Sewer	1,000,000		6.62	6,620	3	36	260.31	9,371	15,991
2" Commercial Sewer	1,578,400		6.62	10,449	2	24	416.49	9,996	20,445
3" Commercial Sewer	72,000		6.62	477	1	12	780.92	9,371	9,848
Total	64,839,243			432,668	963	11,556		728,737	1,161,404

Billing Type	Usage	Adjusted Usage CGF 1.01236	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Sapphire valley									
5/8" Residential Sewer	-		3.11	-	645	7,740	56.57	437,852	437,852
1" Residential Sewer	-		3.11	-	2	24	56.57	1,358	1,358
1.5" Residential Sewer	-		3.11	-	128	1,536	56.57	86,892	86,892
2" Residential Sewer	-		3.11	-	68	816	56.57	46,161	46,161
5/8" Commercial Sewer	1,692,720		3.11	5,264	19	228	45.97	10,481	15,746
1" Commercial Sewer	791,279		3.11	2,461	3	36	114.93	4,137	6,598
1.5" Commercial Sewer	877,016		3.11	2,728	2	24	229.85	5,516	8,244

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casse berry
Exh bit No. 12
Page 5 of 5

Public Staff's Revenue at Present Rates

CWSNC Sewer

Billing Type	Usage	Adusted Usage CGF 1.01236	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Sapphire valley									
2" Commercial Sewer	2,401,171		3.11	7,468	6	72	367.76	26,479	33,946
3" Commercial Sewer	1,321,926		3.11	4,111	1	12	689.55	8,275	12,386
Avaiability					91	1,092	8.30	9,064	9,064
Total	7,084,112			22,032	965	11,580		636,214	658,246

Billing Type	Usage	Adusted Usage CGF 1.01236	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Elk River									
5/8" Residential Metered	1,842,376	1,865,148	3.00	5,595	116	1,392	23.38	32,545	38,140
1" Res Residential Metered	110,492		3.00	331	4	48	58.45	2,806	3,137
Total Residential Metered	1,952,868			34	120	1,440		35,351	41,277
5/8" Commercial Metered	201,118		3.00	603	2	24	23.38	561	1,164
1" Commercial Metered	476,855		3.00	1,431	1	12	58.45	701	2,132
2" Commercial Metered	401,259		3.00	1,204	2	24	187.05	4,489	5,693
Total Commercial Metered	1,079,232			3,238	5	60		5,752	8,989
Total	3,032,100			3,272	125	1,500		41,102	50,267

Grand Total	556,826,499			2,100,301	17,139	205,668		10,579,584	12,685,778
--------------------	--------------------	--	--	------------------	---------------	----------------	--	-------------------	-------------------

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 13
Page 1 of 5

✓7/ ✓8

Public Staff's Revenue at Proposed Rates

CWSNC Sewer		Adjusted							
Billing		Usgae	Usage	Usage	EOP	EOP	Base	Base Charge	Total
Type	Usage	CGF 1.01236	Rate	Revenue	Customers	x 12 months	Charge	Revenue	Revenue
Residential Flat, Sewer			-	-	2,120	25,440	61.65	1,568,376	1,568,376
5/8" Res Metered	362,376,141	366,855,110	3.39	1,243,639	9,546	114,552	50.10	5,739,055	6,982,694
1" Res Metered	732,140		3.39	2,482	19	228	50.10	11,423	13,905
1.5" Res Metered	-		3.39	-	-	-	50.10	-	-
2" Res Metered	74,200		3.39	252	3	36	50.10	1,804	2,055
Total	363,182,481			1,246,372	9,568	114,816		5,752,282	6,998,654
Commercial Flat Rate			-	-	54	648	61.65	39,949	39,949
5/8" Commercial Metered	25,180,643		3.39	85,362	418	5,016	50.10	251,302	336,664
1" Commercial Metered	4,408,173		3.39	14,944	12	144	125.25	18,036	32,980
1.5" Commercial Metered	4,652,940		3.39	15,773	10	120	250.50	30,060	45,833
2" Commercial Metered	19,407,344		3.39	65,791	48	576	400.80	230,861	296,652
3" Commercial Metered	8,455,966		3.39	28,666	4	48	751.50	36,072	64,738
4" Commercial Metered	904,300		3.39	3,066	1	12	1,252.50	15,030	18,096
6" Commercial Metered	3,922,510		3.39	13,297	2	24	2,504.99	60,120	73,417
Total	66,931,876			226,899	549	6,588		681,429	908,328
Regalwood/White Oaks	-			-	1,061	12,732	61.65	784,928	784,928
White Oaks School	-			-	1	12	1,929.12	23,149	23,149
Child Castle Daycare	-			-	1	12	239.66	2,876	2,876

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 13
Page 2 of 5

Public Staff's Revenue at Proposed Rates

Billing		Adjusted	Usage	Usage	EOP	EOP	Base	Base Charge	Total
Type	Usage	Usgae CGF 1.01236	Rate	Revenue	Customers	x 12 months	Charge	Revenue	Revenue
Avalability Conneestee	-		-	-	260	3,120	4.70	14,664	14,664
Total	430,114,357			1,473,271	13,560	162,720		8,827,704	10,300,975

Purchased Water

Billing			Usage	Usage	EOP	EOP	Base	Base Charge	Total
Type	Usage		Rate	Revenue	Customers	x 12 months	Charge	Revenue	Revenue
Mount Carmel	15,998,846	16,196,592	5.88	95,236	381	4,572	46.82	214,061	309,297

College Park

Residential Flat, Sewer only	-		-	-	1	12	61.65	740	740
5/8" Residential Metered	2,230,510	2,258,079	5.70	12,871	51	612	40.05	24,511	37,382
Total	2,230,510			12,871	52	624		25,250	38,121

Kings Grant

5/8" Residential Metered	8,043,531	8,142,949	3.80	30,943	180	2,160	40.05	86,508	117,451
1" Res Metered	223,570		3.80	850	1	12	40.05	481	1,330
Total	8,267,101			31,793	181	2,172		86,989	118,781

White Oak Plantation/Lee
Forest/Winston Pointe

5/8" Residential Metered	22,212,210	22,486,753	4.82	108,386	478	5,736	40.05	229,727	338,113
--------------------------	------------	------------	------	---------	-----	-------	-------	---------	---------

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 13
Page 3 of 5

Public Staff's Revenue at Proposed Rates

Billing Type	Usage	Adjusted Usgae CGF 1.01236	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Fairfield Mountain									
5/8" Res. Collection/Treatm.				-	399	4,788	109.55	524,525	524,525
1" Res Collection/Treatm.				-	12	144	109.55	15,775	15,775
Residential Collection				-	411	4,932		540,301	540,301
ww only flt			13.93	-	2	24	109.55	2,629	2,629
Small Commercial	457,920		13.93	6,378.83	7	84	78.50	6,594	12,973
Medium Commercial	2,219,380		13.93	30,915.96	11	132	139.50	18,414	49,330
Large Commercial	370,720		13.93	5,164.13	3	36	219.50	7,902	13,066
Nonresidential Metered	3,048,020			42,458.92	23.00	276.00		35,539.20	77,998.12
Total	3,048,020			42,459	434	5,208		575,840	618,299

Billing Type	Usage		Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
CL/MS									
5/8" Residential Sewer	41,941,083	42,459,475	6.62	281,082	781	9,372	52.06	487,906	768,988
1" Residential Sewer	10,117,960		6.62	66,981	90	1,080	130.15	140,562	207,543
5/8" Commercial Sewer	6,965,110		6.62	46,109	67	804	52.06	41,856	87,965
1" Commercial Sewer	3,164,690		6.62	20,950	19	228	130.15	29,674	50,624
1.5" Commercial Sewer	1,000,000		6.62	6,620	3	36	260.31	9,371	15,991

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 13
Page 4 of 5

Public Staff's Revenue at Proposed Rates

Billing Type	Usage	Adjusted Usgae CGF 1.01236	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
CL/MS									
2" Commercial Sewer	1,578,400		6.62	10,449	2	24	416.49	9,996	20,445
3" Commercial Sewer	72,000		6.62	477	1	12	780.92	9,371	9,848
Total	64,839,243			432,668	963	11,556		728,737	1,161,404

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
Sapphire valley								
5/8" Residential Sewer	-	3.39	-	645	7,740	61.65	477,171	477,171
1" Residential Sewer	-	3.39	-	2	24	61.65	1,480	1,480
1.5" Residential Sewer	-	3.39	-	128	1,536	61.65	94,694	94,694
2" Residential Sewer	-	3.39	-	68	816	61.65	50,306	50,306
5/8" Commercial Sewer	1,692,720	3.39	5,738	19	228	50.10	11,423	17,161
1" Commercial Sewer	791,279	3.39	2,682	3	36	125.25	4,509	7,191
1.5" Commercial Sewer	877,016	3.39	2,973	2	24	250.50	6,012	8,985
2" Commercial Sewer	2,401,171	3.39	8,140	6	72	400.80	28,858	36,998
3" Commercial Sewer	1,321,926	3.39	4,481	1	12	751.50	9,018	13,499
Avaiability				91	1,092	8.30	9,064	9,064
Total	7,084,112		24,015	965	11,580		692,534	716,550

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 13
Page 5 of 5

Public Staff's Revenue at Proposed Rates

Billing		Adjusted	Usage	Usage	EOP	EOP	Base	Base Charge	Total
Type	Usage	Usgae CGF 1.01236	Rate	Revenue	Customers	x 12 months	Charge	Revenue	Revenue
Elk River									
5/8" Residential Metered	1,842,376	1,865,148	3.39	6,323	116	1,392	50.10	69,739	76,062
1" Res Residential Metered	110,492		3.39	375	4	48	50.10	2,405	2,779
Total Residential Metered	1,952,868			34	120	1,440		72,144	78,841
5/8" Commercial Metered	201,118		3.39	682	2	24	50.10	1,202	1,884
1" Commercial Metered	476,855		3.39	1,617	1	12	125.25	1,503	3,120
2" Commercial Metered	401,259		3.39	1,360	2	24	400.80	9,619	10,979
Total Commercial Metered	1,079,232			3,659	5	60		12,325	15,983
Total	3,032,100			3,693	125	1,500		84,469	94,825
Total	556,826,499			2,224,392	17,139	205,668		11,465,310	13,696,365

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months December 31, 2017

Casselberry
Exhibit No. 14
Page 1 of 1

I / A
v7 v8

Public Staff's Revenue at Present Rates

WATER

Treasure Cove/Bradfield Farms/Fairfield Harboour

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	153,145,422	3.36	514,569	3,132	37,584	11.44	429,961	944,530
3/4" Residential Metered	6,101,160	3.36	20,500	99	1,188	11.44	13,591	34,091
1" Residential Metered	261,214	3.36	878	3	36	28.60	1,030	1,907
2" Residential Metered	76,700	3.36	258	1	12	91.52	1,098	1,356
Total Residential Metered	159,584,496		536,204	3,235	38,820		445,680	981,883
5/8" Commercial Metered	1,625,315	3.36	5,461	23	276	11.44	3,157	8,618
1" Commercial Metered	430,353	3.36	1,446	6	72	28.60	2,059	3,505
1.5" Commercial Metered	513,000	3.36	1,724	2	24	57.20	1,373	3,096
2" Commercial Metered	260,890	3.36	877	3	36	91.52	3,295	4,171
Total Commercial Metered	2,829,558		9,507	34	408		9,884	19,391
Availability				1,064	12,762	3.28	41,859	41,859
Total	162,414,054		545,711	4,333	51,990		497,423	1,043,134

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months December 31, 2017

Casselberry
Exhibit No. 15
Page 1 of 1

I/A
v7 v8

Public Staff's Revenue at Proposed Rates

WATER

Treasure Cove/Bradfield Farms/Fairfield Harboour

Billing Type	Usage	Usage Rate	Usage Revenue	EOP Customers	EOP x 12 months	Base Charge	Base Charge Revenue	Total Revenue
5/8" Residential Metered	153,145,422	4.92	753,475	3,132	37,584	18.08	679,519	1,432,994
3/4" Residential Metered	6,101,160	4.92	30,018	99	1,188	18.08	21,479	51,497
1" Residential Metered	261,214	4.92	1,285	3	36	45.21	1,628	2,913
2" Residential Metered	76,700	4.92	377	1	12	144.67	1,736	2,113
Total Residential Metered	159,584,496		785,156	3,235	38,820		704,361	1,489,517
5/8" Commercial Metered	1,625,315	4.92	7,997	23	276	18.08	4,990	12,987
1" Commercial Metered	430,353	4.92	2,117	6	72	45.21	3,255	5,372
1.5" Commercial Metered	513,000	4.92	2,524	2	24	90.42	2,170	4,694
2" Commercial Metered	260,890	4.92	1,284	3	36	144.67	5,208	6,492
Total Commercial Metered	2,829,558		13,921	34	408		15,623	29,545
Availability				1,064	12,762	3.28	41,859	41,859
Total	162,414,054		799,077	4,333	51,990		761,844	1,560,921

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 16
Page 1 of 1

I/A
✓7 ✓8

Public Staff's Revenue at Present Rates

Sewer

Fairfield Harbour and 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				2,910	34,920	41.40	1,445,688	1,445,688
Multiple units				3	36	41.40	1,490	1,490
Bulk Sewer				158	1,896	40.40	76,598	76,598
Apartments				379	4,548	40.40	183,739	183,739
Total Residential				3,450	41,400		1,707,516	1,707,516
5/8" Commercial Metered	1,232,960	6.20	7,644	15	180	11.12	2,002	9,646
1" Commercial Metered	1,919,578	6.20	11,901	3	36	33.36	1,201	13,102
1.5" Commercial Metered	513,000	6.20	3,181	2	24	55.60	1,334	4,515
2" Commercial Metered	86,190	6.20	534	1	12	88.96	1,068	1,602
Total Commercial				21	252		5,604	28,865
Total				3,471	41,652		1,713,120	1,736,381
Availability				1,050	12,594	2.65	33,374	33,374
Total				4,521	54,246		1,746,495	1,769,755

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
For the 12 Months Ending December 31, 2017

Casselberry
Exhibit No. 17
Page 1 of 1

J/A
✓7 ✓8

Public Staff's Revenue at Proposed Rates

Sewer

Fairfield Harbour and 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				2,910	34,920	50.81	1,774,285	1,774,285
Multiple units				3	36	50.81	1,829	1,829
Bulk Sewer				158	1,896	50.81	96,336	96,336
Apartments				379	4,548	49.81	226,536	226,536
Total Residential				3,450	41,400		2,098,986	2,098,986
5/8" Commercial Metered	1,232,960	6.36	7,842	15	180	13.65	2,457	10,299
1" Commercial Metered	1,919,578	6.36	12,209	3	36	40.95	1,474	13,683
1.5" Commercial Metered	513,000	6.36	3,263	2	24	68.24	1,638	4,900
2" Commercial Metered	86,190	6.36	548	1	12	109.18	1,310	1,858
Total Commercial	3,751,728		23,861	21	252		6,879	30,740
Total	3,751,728		23,861	3,471	41,652		2,105,865	2,129,726
Availability				1,050	12,594	2.65	33,374	33,374
Total	3,751,728		23,861	4,521	54,246		2,139,239	2,163,100

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
Test Year Ending December 31, 2017

Casse berry
Exhibit No. 18
Page 1 of 1

I/A
√7 *√8*

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	21,149,345	7,147,257	14,002,088	66.21	8,934,071	1,786,814	12,215,273.75	3.19	38,967
High Vista Estates	17,582,200	11,273,640	6,308,560	35.88	14,092,050	2,818,410	3,490,150.00	3.25	11,343
Riverpointe	15,854,172	15,035,449	818,723	5.16					
Whispering Pines	133,017,887	101,448,446	31,569,441	23.73	126,810,558	25,362,112	6,207,329.50	2.23	13,842
Woodrun	23,641,300	16,924,831	6,716,469	28.41	21,156,039	4,231,208	2,485,261.25	3.19	7,928
Zemosa Acres	16,121,250	12,147,636	3,973,614	24.65	15,184,545	3,036,909	936,705.00	5.27	4,936
Yorktown	4,179,221	3,820,510	358,711	8.58					
White Oak	27,364,610	27,524,660	(160,050)	-0.58					
Carolina Trace	69,032,247	61,979,135	7,053,112	10.22					
						Total Loss			77,016

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
Test Year Ending December 31, 2017

Casselberry
Exhibit No. 19
Page 1 of 1

I / A
v7 v8

Purchased Water Summary

Acct #	Service Area	Public Staff Invoices	Public Staff Adjustments	Public Staff Corrected Invoices	Company Ledger Total	Correction to ledger	Company's Adjustment for Dec Accrual	Public Staff Company Total
182104	The Point	193,721.14	-	193,721.14	236,916.24		43,195.10	193,721.14
114	Zemosa	87,726.17	-	87,726.17	75,241.10	6,485.07	(5,990.00)	87,726.17
125	Willow Brook	3,680.11	-	3,680.11	3,780.11		100.00	3,680.11
132	Vander	54,368.89	-	54,368.89	53,791.34	122.45	(700.00)	54,368.89
133	White oak	63,317.76	-	63,317.76	64,317.76		1,000.00	63,317.76
137	Bent Creek	50,978.12	-	50,978.12	51,278.12		300.00	50,978.12
141	Whispering P	296,628.73	-	296,628.73	291,828.73	(17,800.00)	(22,600.00)	296,628.73
152	C. Forest	59,957.90	-	59,957.90	57,857.90	-	(2,100.00)	59,957.90
153	Woodrun	62,902.87	6,854.35	69,757.22	71,757.22	1,000.00	3,000.00	69,757.22
154	Kings Grant	13,877.74		13,877.74	14,277.74		400.00	13,877.74
170	Yorktown	14,923.95	9,115.03	24,038.98	14,923.95	9,115.03	-	24,038.98
189	Danby	130,727.55	-	130,727.55	112,947.81	8,479.74	(9,300.00)	130,727.55
214	High Vista	56,227.26	-	56,227.26	68,054.09	(17,726.83)	(5,900.00)	56,227.26
235	Riverpoint	100,977.31	-	100,977.31	96,977.31	-	(4,000.00)	100,977.31
187100	Carolina Trace	153,963.72	-	153,963.72	153,963.72	-	-	153,963.72
196100	River Bend	39,913.40	(39,913.38)	-	39,913.40	(39,913.40)	-	-
		1,383,892.62	(23,944.00)	1,359,948.60	1,407,826.54	(50,227.94)		1,359,948.60
	Water loss			(77,016.00)				
	Total Purchased Water			1,282,932.60				

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
Test Year Ending December 31, 2017

Casselberry
Exhibit No. 20
Page 1 of 1

T/A
✓7 ✓8

Purchased Sewer Summary

Acct #	Service Area	Public	Public	Public Staff	Company	Correction	Company's	Public Staff
		Staff	Staff	Corrected	Ledger	to	Adjustment	Company
		Invoices	Adjustments	Invoices	Total	Ledger	for Dec Accrual	Total
182160	Colledge Park	27,070.56	-	27,070.56	27,170.56	-	100.00	27,070.56
182155	Kings Grant	19,183.05	-	19,183.05	19,283.05	-	100.00	19,183.05
183109	Fairfield Mt.	399,692.00	-	399,692.00	399,653.00	139.00	100.00	399,692.00
182140	Mt. Carmel	129,241.68	-	129,241.68	129,841.68	10,800.00	(10,200.00)	129,241.68
182247	Ridges at Mt. H.	9,153.91	573.53	9,727.44	9,552.04	424.60	(600.00)	9,727.44
182134	White Oak	95,827.10	-	95,827.10	97,227.10		1,400.00	95,827.10
Total Purchased Sewer		680,168.30	573.53	680,741.83	682,727.43	11,363.60		680,741.83

I / A
v7 v8

Water Testing Costs

Uniform Service Areas (less Fairfield Harbour, Bradfield Farms and Treasure Cove)

Water Analysis	# of Samples Required	Frequency	Tests Per Year	Cost Per Test	Annual Cost
Bacteriological	14	Monthly	168.00	\$20.00	\$3,360
Bacteriological	12	Monthly	144.00	\$21.00	\$3,024
Bacteriological	40	Monthly	480.00	\$22.00	\$10,560
Bacteriological	33	Monthly	396.00	\$25.00	\$9,900
Bacteriological	15	Monthly	180.00	\$26.25	\$4,725
Bacteriological	7	Monthly	84.00	\$35.00	\$2,940
Bacteriological	7	Monthly	84.00	\$50.00	\$4,200
HPC	4	Monthly	48.00	\$50.00	\$2,400
DBP stage 2	54	Every 3 yrs	18.00	\$153.61	\$2,765
DBP stage 2	44	Annual	44.00	\$153.61	\$6,759
DBP stage 2	27	Quarterly	108.00	\$153.61	\$16,590
Lead/Copper	715	Every 3 yrs	238.33	\$24.25	\$5,780
Lead/Copper	5	Annually	5.00	\$24.25	\$121
Lead/Copper	10	6 months	20.00	\$24.25	\$485
Asbestos	50	Every 9 yrs	5.56	\$123.00	\$683
Inorganics	214	Every 3 yrs	71.33	\$214.62	\$15,310
Chloride	2	Annual	2.00	\$13.00	\$26
Nitrate	205	Annual	205.00	\$13.00	\$2,665
Nitrate	9	Quarterly	36.00	\$13.00	\$468
VOC	182	Every 3 yrs	60.67	\$105.10	\$6,376
VOC	20	Annually	20.00	\$105.10	\$2,102
VOC	12	Quarterly	48.00	\$105.10	\$5,045
SOC - Complete	233	Every 3 yrs	77.67	\$613.72	\$47,666
SOC - Complete	1	annually	1.00	\$613.72	\$614
SOC (505 & 506)	6	annually	6.00	\$86.73	\$520
SOC (550)	1	Quarterly	4.00	\$86.73	\$347
SOC 515	1	Quarterly	4.00	\$93.34	\$373
Rads-Gross Alpha	161	Every 9 yrs	17.89	\$55.00	\$984
Rads-Gross Alpha	40	Every 6 yrs	6.67	\$55.00	\$367
Rads-Gross Alpha	6	Every 3 yrs	2.00	\$55.00	\$110
Rads-Gross Alpha	4	annually	4.00	\$55.00	\$220
Rads-Gross Alpha	2	Quarterly	8.00	\$55.00	\$440
Rads-Uranium	139	Every 9 yrs	15.44	\$50.00	\$772
Rads-Uranium	57	Every 6 yrs	9.50	\$50.00	\$475
Rads-Uranium	9	Every 3 yrs	3.00	\$50.00	\$150
Rads-Uranium	5	annually	5.00	\$50.00	\$250
Rads-Uranium	3	Quarterly	12.00	\$50.00	\$600
Combined Rad (228 & 226)	158	Every 9 yrs	17.56	\$170.00	\$2,984
Combined Rad (228 & 226)	32	Every 6 yrs	5.33	\$170.00	\$907
Combined Rad (228 & 226)	10	Every 3 yrs	3.33	\$170.00	\$567
Combined Rad (228 & 226)	8	annually	8.00	\$170.00	\$1,360
Combined Rad (228 & 226)	5	Quarterly	20.00	\$170.00	\$3,400

Total (All systems on Stage 2 DBP monitoring): \$169,389

Water Testing Costs

Fairfield Harbour

Water Analysis	# of Samples Required	Frequency	Tests Per Year	Cost Per Test	Annual Cost
Bacteriological	5	Monthly	60.00	\$22.00	\$1,320
DBP stage 2	2	Quarterly	8.00	\$153.61	\$1,229
Lead/Copper	20	Every 3 yrs	6.67	\$24.25	\$162
Asbestos	1	Every 9 yrs	0.11	\$123.00	\$14
Inorganics	1	Every 3 yrs	0.33	\$214.62	\$72
Chloride	3	Annual	3.00	\$13.00	\$39
Nitrate	1	Annual	1.00	\$13.00	\$13
VOC	1	Every 3 yrs	0.33	\$105.10	\$35
SOC - Complete	2	Every 3 yrs	0.67	\$613.72	\$409
Rads-Gross Alpha	1	Every 9 yrs	0.11	\$55.00	\$6
Rads-Uranium	1	Every 9 yrs	0.11	\$50.00	\$6
Combined Rad (228 & 226)	1	Every 9 yrs	0.11	\$170.00	\$19

Total Fairfield Harbour: \$3,322

Bradfield Farms

Water Analysis	# of Samples Required	Frequency	Tests Per Year	Cost Per Test	Annual Cost
Bacteriological	3	Monthly	36.00	\$21.00	\$756
DBP stage 2	1	Annual	1.00	\$153.61	\$154
Lead/Copper	10	Every 3 yrs	3.33	\$24.25	\$81
Asbestos	1	Every 9 yrs	0.11	\$123.00	\$14
Inorganics	6	Every 3 yrs	2.00	\$214.62	\$429
Nitrate	6	Annual	6.00	\$13.00	\$78
VOC	6	Every 3 yrs	2.00	\$105.10	\$210
SOC - Complete	6	Every 3 yrs	2.00	\$613.72	\$1,227
Rads-Gross Alpha	4	Every 9 yrs	0.44	\$55.00	\$24
Rads-Gross Alpha	2	Every 6 yrs	0.33	\$55.00	\$18
Rads-Uranium	3	Every 9 yrs	0.33	\$50.00	\$17
Rads-Uranium	3	Every 6 yrs	0.50	\$50.00	\$25
Combined Rad (228 & 226)	5	Every 9 yrs	0.56	\$170.00	\$94
Combined Rad (228 & 226)	1	Every 6 yrs	0.17	\$170.00	\$28

Total Bradfield Farms: \$3,156

Treasure Cove

Water Analysis	# of Samples Required	Frequency	Tests Per Year	Cost Per Test	Annual Cost
Bacteriological	1	Monthly	12.00	\$25.00	\$300
DBP stage 2	1	Annual	1.00	\$153.61	\$154
Lead/Copper	10	Every 3 yrs	3.33	\$24.25	\$81
Asbestos	1	Every 9 yrs	0.11	\$123.00	\$14
Inorganics	2	Every 3 yrs	0.67	\$214.62	\$143
Nitrate	2	Annual	2.00	\$13.00	\$26
VOC	2	Every 3 yrs	0.67	\$105.10	\$70
SOC - Complete	2	Every 3 yrs	0.67	\$613.72	\$409
Rads-Gross Alpha	2	Every 9 yrs	0.22	\$55.00	\$12
Rads-Uranium	2	Every 9 yrs	0.22	\$50.00	\$11
Combined Rad (228 & 226)	2	Every 9 yrs	0.22	\$170.00	\$38

Total Treasure Cove \$1,258

Total Non-Uniform

\$7,736

	Testing Costs 10	# of Samples Required	Frequency	Tests Per Year	Cost Per Test	Annual Cost
	Wastewater Analysis					
Abington	BOD	1	Weekly	52	\$ 25.00	\$ 1,300
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 15.00	\$ 780
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 15.00	\$ 780
	Fecal Coliform	1	Weekly	52	\$ 10.00	\$ 520
	Total Nitrogen (NN/TKN) (Qtrly)	4	Annually	4	\$ 40.00	\$ 160
	Total Phosphorus (Qtrly)	4	Annually	4	\$ 15.00	\$ 60
Amherst	BOD	1	Weekly	52	\$ 22.31	\$ 1,160
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 12.61	\$ 656
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 17.46	\$ 908
	Fecal Coliform	1	Weekly	52	\$ 18.43	\$ 958
	Total Nitrogen (NN/TKN)	2	Monthly	24	\$ 33.95	\$ 815
	Total Phosphorus	2	Monthly	24	\$ 17.46	\$ 419
	Sludge Testing (for land application)	1	Annually	1	\$ 1,953.34	\$ 1,953
Ashley Hills	BOD (3/week effluent)	3	Weekly	156	\$ 22.31	\$ 3,480
	BOD (1 @ each of 3 plants once per month)	3	Monthly	36	\$ 22.31	\$ 803
	Total Suspended Solids (TSS)	3	Weekly	156	\$ 12.61	\$ 1,967
	Ammonia Nitrogen (NH ₃ as N)	3	Weekly	156	\$ 17.46	\$ 2,724
	Fecal Coliform	3	Weekly	156	\$ 18.43	\$ 2,875
	Total Nitrogen (NN/TKN)	1	Weekly	52	\$ 33.95	\$ 1,765
	Total Phosphorus	2	Monthly	24	\$ 17.46	\$ 419
Bear Paw	BOD	1	Weekly	52	\$ 25.00	\$ 1,300
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 15.00	\$ 780
	Ammonia Nitrogen (NH ₃ as N)	2	Monthly	24	\$ 20.00	\$ 480
	Total Nitrogen (NN/TKN)	2	Annually	2	\$ 50.00	\$ 100
	Total Phosphorus	2	Annually	2	\$ 30.00	\$ 60
Belvedere	WWTF Effluent: BOD (2/wk)	2	Weekly	104	\$ 25.00	\$ 2,600
	WWTF Effluent: Fecal Coliform (2/wk)	2	Weekly	104	\$ 25.00	\$ 2,600
	WWTF Effluent: Ammonia Nitrogen (2/wk)	2	Weekly	104	\$ 20.00	\$ 2,080
	WWTF Effluent: Total Nitrogen (NN/TKN) (2/wk)	2	Weekly	104	\$ 55.00	\$ 5,720
	WWTF Effluent: Total Phosphorus (2/wk)	2	Weekly	104	\$ 20.00	\$ 2,080
	WWTF Effluent: TSS (2/wk)	2	Weekly	104	\$ 20.00	\$ 2,080
	WWTF Effluent: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	WWTF Effluent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	GWLS Eff: BOD (1/wk)	1	Weekly	52	\$ 25.00	\$ 1,300
	GWLS Eff: Fecal Coliform (1/wk)	1	Weekly	52	\$ 25.00	\$ 1,300
	GWLS Eff: Ammonia Nitrogen (1/wk)	1	Weekly	52	\$ 20.00	\$ 1,040
	GWLS Eff: Total Nitrogen (NN/TKN) (1/wk)	1	Weekly	52	\$ 55.00	\$ 2,860
	GWLS Eff: Total Phosphorus (1/wk)	1	Weekly	52	\$ 20.00	\$ 1,040
	GWLS Eff: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	GWLS Eff: TDS (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Lab (Env Chemists) Sample Pick up fee (2/wk)	2	Weekly	104	\$ 10.00	\$ 1,040
	Monitoring Wells (9 total - 3/yr) Depth, Ammonia Nitrogen, Gallons, Odor, TDS, Temp, Chloride, pH, Total Phosphorus, Fecal Coliform, Nitrate Nitrogen	27	Annually	27	\$ 230.00	\$ 6,210
	Sludge Resting	1	Annually	1	\$ 375.00	\$ 375
Bent Creek	BOD	1	Weekly	52	\$ 25.00	\$ 1,300
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 10.00	\$ 520
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 18.00	\$ 936
	Fecal Coliform	1	Weekly	52	\$ 25.00	\$ 1,300
	Total Nitrogen (NN/TKN)	2	Annually	2	\$ 40.00	\$ 80
	Total Phosphorus	2	Annually	2	\$ 18.00	\$ 36
Brandywine Bay	Effluent: BOD (2/mth)	2	Monthly	24	\$ 25.00	\$ 600
	Effluent: Fecal Coliform (2/mth)	2	Monthly	24	\$ 25.00	\$ 600
	Effluent: Ammonia Nitrogen (2/mth)	2	Monthly	24	\$ 20.00	\$ 480
	Effluent: Nitrate Nitrogen (2/mth)	2	Monthly	24	\$ 25.00	\$ 600
	Effluent: TSS (2/mth)	2	Monthly	24	\$ 20.00	\$ 480
	Effluent: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Effluent: TOC (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Effluent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: TOC (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Monitoring Wells (6 total - 3/yr) Depth, Gallons, Temp, pH, Color, Odor, TDS, Chloride, Total Phosphorus, TOC, Fecal Coliform, Nitrate Nitrogen	18	Annually	18	\$ 230.00	\$ 4,140
	VOC (Monitoring Wells; 6 total - 1/yr)	6	Annually	6	\$ 110.00	\$ 660
	Lab (Env Chemists) Sample Pick up fee	2	Monthly	24	\$ 10.00	\$ 240
	Field Lab Certification Testing (July)	1	Annually	1	\$ 683.29	\$ 683
	Field Lab Certification Testing (Sept) Low level TRC only	1	Annually	1	\$ 170.10	\$ 170
	Sludge Testing	1	Annually	1	\$ 375.00	\$ 375
Carolina Pines	BOD	1	Weekly	52	\$ 22.31	\$ 1,160
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 12.61	\$ 656
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 17.46	\$ 908
	Total Nitrogen (NN/TKN)	1	Weekly	52	\$ 33.95	\$ 1,765
	Total Phosphorus	1	Weekly	52	\$ 17.46	\$ 908
	Enterococci	1	Weekly	52	\$ 32.01	\$ 1,665

✓ I / A
✓ 7 ✓ 8

	Testing Costs 10	# of Samples		Tests	Cost		Annual
	Wastewater Analysis	Required	Frequency	Per Year	Per Test		Cost
	Sludge Testing (for land application)	1	Annually	1	\$ 375.00	\$	375
Danby/Lamplighter South	BOD	1	Weekly	52	\$ 38.00	\$	1,976
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 11.00	\$	572
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 28.00	\$	1,456
	E. Coli	2	Weekly	104	\$ 55.00	\$	5,720
	Total Phosphorus (permit change from 1/wk to 1/mth)	1	Monthly	12	\$ 28.00	\$	336
	Lab (Prism) Environmental Fee for Sample Disposal	1	Weekly	52	\$ 3.00	\$	156
	Field Lab Certification (SC)	1	Annually	1	\$ 395.64	\$	396
	Instream Biological Assessment	1	Every 5 yrs	0.2	\$ 1,680.00	\$	336
Hemby	BOD	1	Weekly	52	\$ 20.00	\$	1,040
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 12.00	\$	624
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 19.00	\$	988
	Fecal Coliform (Effluent, Upstream & Downstream)	3	Weekly	156	\$ 25.00	\$	3,900
	Total Nitrogen (NN/TKN) (Qtrly)	4	Annually	4	\$ 52.00	\$	208
	Total Phosphorus (Qtrly)	4	Annually	4	\$ 26.00	\$	104
	Field Lab Certification Testing	1	Annually	1	\$ 395.64	\$	396
	Effluent: BOD (1/mth)	1	Monthly	12	\$ 25.00	\$	300
Hestron Park	Effluent: Fecal Coliform (1/mth)	1	Monthly	12	\$ 25.00	\$	300
	Effluent: Ammonia Nitrogen (1/mth)	1	Monthly	12	\$ 20.00	\$	240
	Effluent: Nitrate Nitrogen (1/mth)	1	Monthly	12	\$ 25.00	\$	300
	Effluent: TSS (1/mth)	1	Monthly	12	\$ 20.00	\$	240
	Effluent: TDS (3/yr)	3	Annually	36	\$ 20.00	\$	720
	Effluent: Chloride (3/yr)	3	Annually	36	\$ 20.00	\$	720
	Influent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$	60
	Influent: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$	60
	Monitoring Wells (5 total - 3/yr) Depth, Gallons, Temp, pH, Odor, TDS, Chloride, TOC, Fecal Coliform, Nitrate Nitrogen, Ammonia Nitrogen (Mar, Jul, Nov)	15	Annually	15	\$ 230.00	\$	3,450
	VOC (Monitoring wells; 5 total - 1/yr November)	5	Annually	5	\$ 110.00	\$	550
	Sludge Testing (for land application)	1	Annually	1	\$ 375.00	\$	375
	Lab (Env Chemists) Sample Pick up fee	1	Monthly	12	\$ 10.00	\$	120
	BOD	1	Weekly	52	\$ 16.00	\$	832
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 9.60	\$	499
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 14.40	\$	749
Hound Ears	Fecal Coliform	1	Weekly	52	\$ 13.60	\$	707
	Oil and Grease (2/mth)	2	Monthly	24	\$ 35.00	\$	840
	Total Kjeldahl Nitrogen (TKN)	2	Annually	2	\$ 44.00	\$	88
	Total Phosphorus	2	Annually	2	\$ 35.00	\$	70
	BOD	1	Weekly	52	\$ 22.31	\$	1,160
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 12.61	\$	656
Kings Grant (Raleigh)	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 17.46	\$	908
	Fecal Coliform	1	Weekly	52	\$ 18.43	\$	958
	Total Nitrogen (NN/TKN)	1	Weekly	52	\$ 33.95	\$	1,765
	Total Phosphorus	2	Monthly	24	\$ 17.46	\$	419
	Chronic Toxicity (Qtrly)	4	Annually	4	\$ 400.00	\$	1,600
	Sludge Testing (for land application)	1	Annually	1	\$ 1,953.34	\$	1,953
	Effluent: BOD (2/mth Apr-Oct)	2	Monthly	14	\$ 25.00	\$	350
	Effluent: BOD (1/mth Nov-Mar)	1	Monthly	5	\$ 25.00	\$	125
Olde Point	Effluent: TSS (2/mth Apr-Oct)	2	Monthly	14	\$ 20.00	\$	280
	Effluent: TSS (1/mth Nov-Mar)	1	Monthly	5	\$ 20.00	\$	100
	Effluent: Ammonia Nitrogen (2/mth Apr-Oct)	2	Monthly	14	\$ 20.00	\$	280
	Effluent: Ammonia Nitrogen (1/mth Nov-Mar)	1	Monthly	5	\$ 20.00	\$	100
	Effluent: Fecal Coliform (2/mth Apr-Oct)	2	Monthly	14	\$ 25.00	\$	350
	Effluent: Fecal Coliform (1/mth Nov-Mar)	1	Monthly	5	\$ 25.00	\$	125
	Effluent: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$	60
	Effluent: Nitrate Nitrogen (3/yr)	3	Annually	3	\$ 25.00	\$	75
	Effluent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$	60
	Effluent: TOC (3/yr)	3	Annually	3	\$ 20.00	\$	60
	Influent: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$	60
	Influent: Nitrate Nitrogen (3/yr)	3	Annually	3	\$ 25.00	\$	75
	Influent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$	60
	Influent: TOC (3/yr)	3	Annually	3	\$ 20.00	\$	60
	Influent: Enterococci (3/yr)	3	Annually	3	\$ 40.00	\$	120
	Monitoring Wells (3 total - 3/yr) Depth, Gallons, Temp, pH, Color, Odor, TDS, Chloride, Orthophosphate, TOC, Fecal Coliform, Nitrate Nitrogen, Ammonia Nitrogen	9	Annually	9	\$ 270.00	\$	2,430
	VOC (Monitoring wells; 3 total - 1/yr)	3	Annually	3	\$ 110.00	\$	330
	Lab (Env Chemists) Sample Pick up fee (2/mth Apr-Oct)	2	Monthly	14	\$ 10.00	\$	140
	Lab (Env Chemists) Sample Pick up fee (1/mth Nov-Mar)	1	Monthly	5	\$ 10.00	\$	50
	Sludge Testing (for land application)	1	Annually	1	\$ 375.00	\$	375
The Harbour/The Point	Chloride (1/mth per discharge)	3	Monthly	36	\$ 19.80	\$	713
	Lead (1/mth per discharge)	3	Monthly	36	\$ 11.00	\$	396
	Manganese (1/mth per discharge)	3	Monthly	36	\$ 11.00	\$	396
	Turbidity (1/mth per discharge)	3	Monthly	36	\$ 19.80	\$	713

Testing Costs 10		# of Samples Required	Frequency	Tests Per Year	Cost Per Test	Annual Cost
Wastewater Analysis						
	Effluent: Total Nitrogen (NN/TKN) (1/wk) May-Aug	1	Weekly	16	\$ 50.00	\$ 800
	Effluent: Total Nitrogen (NN/TKN) (2/mth) Sep-Apr	2	Monthly	16	\$ 50.00	\$ 800
	Effluent: TSS (1/wk) May-Aug	1	Weekly	16	\$ 20.00	\$ 320
	Effluent: TSS (2/mth) Sep-Apr	2	Monthly	16	\$ 20.00	\$ 320
	Effluent: Total Phosphorus (1/wk) May-Aug	1	Weekly	16	\$ 25.00	\$ 400
	Effluent: Total Phosphorus (2/mth) Sep-Apr	2	Monthly	16	\$ 25.00	\$ 400
	Effluent: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Effluent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Effluent: TOC (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: Chlorides (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: TOC (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: Nitrate Nitrogen (3/yr)	3	Annually	3	\$ 25.00	\$ 75
	Monitoring Wells (4 total - 3/yr) Color, Depth, Ammonia Nitrogen, Gallons, Odor, TOC, TDS, Chloride, fecal Coliform, Nitrate Nitrogen, Temp, pH	12	Annually	12	\$ 215.00	\$ 2,580
	VOC (4 Monitoring wells - 1/yr)	4	Annually	4	\$ 110.00	\$ 440
	Sludge Testing (for land application)	1	Annually	1	\$ 1,700.00	\$ 1,700
Corolla Light	*Plant #1 Effluent: BOD, Fecal Coliform, Ammonia Nitrogen, Total Nitrogen, Total Phosphorus, TSS (1/week May-Aug)	1	Weekly	16	\$ 165.00	\$ 2,640
	**Plant #1 Effluent: BOD, Fecal Coliform, Ammonia Nitrogen, Total Nitrogen, Total Phosphorus, TSS (2/month Sept-April)	2	Monthly	16	\$ 165.00	\$ 2,640
	***Plant #1 Effluent: TOC, Chlorides, TDS (3/yr)	3	Annually	3	\$ 60.00	\$ 180
	Plant #1 Influent: TOC, Chlorides, Nitrate Nitrogen, TDS (3/yr) (decrease from 4/yr. Added Nitrates, dropped Total Phosphorus)	3	Annually	3	\$ 85.00	\$ 255
	Monitoring Wells (Plant #1) (7 total - 3/yr) Color, Depth, Gallons, TDS, Temperature, Chloride, pH, TOC, Ammonia Nitrogen, Fecal Coliform, Odor (decrease from 4/yr)	21	Annually	21	\$ 240.00	\$ 5,040
	VOC (Monitoring wells; Plant #1; 7 total - 1/yr)	7	Annually	7	\$ 110.00	\$ 770
	Plant #1 Sludge Testing (for land application)	1	Annually	1	\$ 375.00	\$ 375
	Monitoring Wells (Plant #2) (5 total - 2/yr) Color, Depth, Gallons, TDS, Temperature, Chloride, pH, TOC, Ammonia Nitrogen, Total Coliforms, Nitrate Nitrogen, Orthophosphate, TSS	10	Annually	10	\$ 225.00	\$ 2,250
	Monitoring Wells (Plant #2) (5 total - 1/yr November only) Color, Depth, Gallons, TDS, Temperature, Chloride, pH, TOC, Ammonia Nitrogen, Total Coliforms, Nitrate Nitrogen, Orthophosphate TSS TOX	5	Annually	5	\$ 335.00	\$ 1,675
	*Effluent: BOD, Ammonia Nitrogen, Total Nitrogen, Total Phosphorous, TSS, Fecal Coliform	1	Weekly	52	\$ 165.00	\$ 8,580
Monterey Shores	Effluent: Chlorides, TDS	3	Annually	3	\$ 40.00	\$ 120
	Influent: TOC, TDS, Chlorides, Nitrate Nitrogen	3	Annually	3	\$ 85.00	\$ 255
	GWLS Effluent: BOD, Ammonia Nitrogen, Fecal Coliform, Total Nitrogen, Total Phosphorous	1	Weekly	52	\$ 145.00	\$ 7,540
	GWLS Effluent: TDS, Chlorides, TOC	3	Annually	3	\$ 60.00	\$ 180
	Monitoring Wells (2 total - 3 per yr) Color, Depth, Ammonia Nitrogen, Gallons, TDS, Temp, Chloride, pH, Total Phosphorus, TOC, Nitrate Nitrogen, Fecal Coliform	6	Annually	6	\$ 250.00	\$ 1,500
	VOC (Monitoring wells; Plant #1; 2 total - 1/yr)	2	Annually	2	\$ 110.00	\$ 220
	Sludge testing (for land application)	1	Annually	1	\$ 375.00	\$ 375
					Total OBX	\$ 45,030
Fairfield Sapphire Valley	BOD	1	Weekly	52	\$ 235.00	\$ 2,820
	Total Suspended Solids (TSS)	1	Weekly	52		
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52		
	Fecal Coliform	1	Weekly	52		
	Total Nitrogen (NN/TKN)	2	Annually	2	\$ 35.00	\$ 70
	Total Phosphorus	2	Annually	2	\$ 18.00	\$ 36
				Total BU 183 (less Fairfield Harbour)	\$ 2,926	
Carolina Trace	BOD	3	Weekly	156	\$ 22.31	\$ 3,480
	Total Suspended Solids (TSS)	3	Weekly	156	\$ 12.61	\$ 1,967
	Ammonia Nitrogen (NH ₃ as N)	3	Weekly	156	\$ 17.46	\$ 2,724
	Fecal Coliform	3	Weekly	156	\$ 18.43	\$ 2,875
	Total Nitrogen (NN/TKN)	1	Quarterly	4	\$ 33.95	\$ 136
	Total Phosphorus	1	Quarterly	4	\$ 17.46	\$ 70
	Chronic Toxicity (Qtrly)	1	Annually	4	\$ 400.00	\$ 1,600
	Field Lab Certification Testing	1	Annually	1	\$ 506.37	\$ 506
					Total 187	\$ 13,358
Conestee Falls	Plant #1: BOD (1/wk)	1	Weekly	52	\$ 25.00	\$ 1,300
	Plant #1: TSS (1/wk)	1	Weekly	52	\$ 10.00	\$ 520
	Plant #1: Fecal Coliform (1/wk)	1	Weekly	52	\$ 25.00	\$ 1,300
	Plant #1: Ammonia Nitrogen (2/mth)	2	Monthly	24	\$ 18.00	\$ 432
	Plant #1: Total Phosphorus (2/yr)	2	Annually	2	\$ 18.00	\$ 36
	Plant #1: Total Nitrogen (NN/TKN) (2/yr)	2	Annually	2	\$ 40.00	\$ 80
	Plant #2: BOD (1/wk)	1	Weekly	52	\$ 25.00	\$ 1,300

Testing Costs 10		# of Samples Required	Frequency	Tests Per Year	Cost Per Test	Annual Cost
Wastewater Analysis						
Plant #2: TSS (1/wk)		1	Weekly	52	\$ 10.00	\$ 520
Plant #2: Fecal Coliform (1/wk)		1	Weekly	52	\$ 25.00	\$ 1,300
Plant #2: Ammonia Nitrogen (2/mth)		2	Monthly	24	\$ 18.00	\$ 432
					Total 188	\$ 7,220
Elk River	BOD	1	Weekly	52	\$ 16.00	\$ 832
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 9.60	\$ 499
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 14.40	\$ 749
	Fecal Coliform	1	Weekly	52	\$ 13.60	\$ 707
	Total Nitrogen (NN/TKN)	2	Annually	2	\$ 44.00	\$ 88
	Total Phosphorus	2	Annually	2	\$ 35.00	\$ 70
					Total 181	\$ 2,945

Fairfield Harbor and Bradfield Farms						
Testing Costs 10		# of Samples Required	Frequency	Tests Per Year	Cost Per Test	Annual Cost
Wastewater Analysis						
Fairfield Harbor	BOD	3	Weekly	156	\$ 22.31	\$ 3,480
	Total Suspended Solids (TSS)	3	Weekly	156	\$ 12.61	\$ 1,967
	Ammonia Nitrogen (NH ₃ as N)	3	Weekly	156	\$ 17.46	\$ 2,724
	Enterococci	3	Weekly	156	\$ 32.01	\$ 4,994
	Total Nitrogen (NN/TKN)	1	Weekly	52	\$ 33.95	\$ 1,765
	Total Phosphorus (Qtrly)	1	Weekly	52	\$ 17.46	\$ 908
					Total Fairfield Harbour	\$ 15,838
Bradfield Farms	BOD	1	Weekly	52	\$ 20.00	\$ 1,040
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 12.00	\$ 624
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 19.00	\$ 988
	Fecal Coliform	3	Weekly	156	\$ 20.00	\$ 3,120
	Total Nitrogen (NN/TKN)	1	Quarterly	4	\$ 52.00	\$ 208
	Total Phosphorus	1	Quarterly	4	\$ 26.00	\$ 104
					Total 191	\$ 6,084

Grand total \$ 300,876

Totals:
Uniform \$ 278,954
FH & BF \$ 21,922

✓ I ✓ A
✓ 4 ✓ 8

	Testing Costs 10	# of Samples Required	Frequency	Tests Per Year	Cost Per Test	Annual Cost
Abington	Wastewater Analysis					
	BOD	1	Weekly	52	\$ 25.00	\$ 1,300
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 15.00	\$ 780
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 15.00	\$ 780
	Fecal Coliform	1	Weekly	52	\$ 10.00	\$ 520
	Total Nitrogen (NN/TKN) (GrH)	4	Annually	4	\$ 40.00	\$ 160
	Total Phosphorus (GrH)	4	Annually	4	\$ 15.00	\$ 60
	BOD	1	Weekly	52	\$ 22.31	\$ 1,160
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 12.61	\$ 656
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 17.46	\$ 908
Ashley Hills	Fecal Coliform	1	Weekly	52	\$ 18.43	\$ 958
	Total Nitrogen (NN/TKN)	2	Monthly	24	\$ 33.95	\$ 815
	Total Phosphorus	2	Monthly	24	\$ 17.46	\$ 419
	Sludge Testing (for land application)	1	Annually	1	\$ 1,953.34	\$ 1,953
	BOD (3/week effluent)	3	Weekly	156	\$ 22.31	\$ 3,480
	BOD (1 @ each of 3 plants once per month)	3	Monthly	36	\$ 22.31	\$ 803
	Total Suspended Solids (TSS)	3	Weekly	156	\$ 12.61	\$ 1,967
	Ammonia Nitrogen (NH ₃ as N)	3	Weekly	156	\$ 17.46	\$ 2,724
	Fecal Coliform	3	Weekly	156	\$ 18.43	\$ 2,875
	Total Nitrogen (NN/TKN)	1	Weekly	52	\$ 33.95	\$ 1,765
Bear Paw	Total Phosphorus	2	Monthly	24	\$ 17.46	\$ 419
	BOD	1	Weekly	52	\$ 25.00	\$ 1,300
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 15.00	\$ 780
	Ammonia Nitrogen (NH ₃ as N)	2	Monthly	24	\$ 20.00	\$ 480
	Total Nitrogen (NN/TKN)	2	Annually	2	\$ 50.00	\$ 100
	Total Phosphorus	2	Annually	2	\$ 30.00	\$ 60
	WWTF Effluent: BOD (2/wk)	2	Weekly	104	\$ 25.00	\$ 2,600
	WWTF Effluent: Fecal Coliform (2/wk)	2	Weekly	104	\$ 25.00	\$ 2,600
	WWTF Effluent: Ammonia Nitrogen (2/wk)	2	Weekly	104	\$ 20.00	\$ 2,080
	WWTF Effluent: Total Nitrogen (NN/TKN) (2/wk)	2	Weekly	104	\$ 55.00	\$ 5,720
Belvedere	WWTF Effluent: Total Phosphorus (2/wk)	2	Weekly	104	\$ 20.00	\$ 2,080
	WWTF Effluent: TSS (2/wk)	2	Weekly	104	\$ 20.00	\$ 2,080
	WWTF Effluent: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	WWTF Effluent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	GWLS Eff: BOD (1/wk)	1	Weekly	52	\$ 25.00	\$ 1,300
	GWLS Eff: Fecal Coliform (1/wk)	1	Weekly	52	\$ 25.00	\$ 1,300
	GWLS Eff: Ammonia Nitrogen (1/wk)	1	Weekly	52	\$ 20.00	\$ 1,040
	GWLS Eff: Total Nitrogen (NN/TKN) (1/wk)	1	Weekly	52	\$ 55.00	\$ 2,860
	GWLS Eff: Total Phosphorus (1/wk)	1	Weekly	52	\$ 20.00	\$ 1,040
	GWLS Eff: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$ 60
Bent Creek	GWLS Eff: TDS (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Lab (Env Chemists) Sample Pick up fee (2/wk)	2	Weekly	104	\$ 10.00	\$ 1,040
	Monitoring Wells (9 total - 3/yr) Depth, Ammonia Nitrogen, Gallons, Odor, TDS, Temp, Chloride, pH, Total Phosphorus, Fecal Coliform, Nitrate Nitrogen	27	Annually	27	\$ 230.00	\$ 6,210
	Sludge Resting	1	Annually	1	\$ 375.00	\$ 375
	BOD	1	Weekly	52	\$ 25.00	\$ 1,300
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 10.00	\$ 520
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 18.00	\$ 936
	Fecal Coliform	1	Weekly	52	\$ 25.00	\$ 1,300
	Total Nitrogen (NN/TKN)	2	Annually	2	\$ 40.00	\$ 80
	Total Phosphorus	2	Annually	2	\$ 18.00	\$ 36
Brandywine Bay	Effluent: BOD (2/mth)	2	Monthly	24	\$ 25.00	\$ 600
	Effluent: Fecal Coliform (2/mth)	2	Monthly	24	\$ 25.00	\$ 600
	Effluent: Ammonia Nitrogen (2/mth)	2	Monthly	24	\$ 20.00	\$ 480
	Effluent: Nitrate Nitrogen (2/mth)	2	Monthly	24	\$ 25.00	\$ 600
	Effluent: TSS (2/mth)	2	Monthly	24	\$ 20.00	\$ 480
	Effluent: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Effluent: TOC (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Effluent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: TOC (3/yr)	3	Annually	3	\$ 20.00	\$ 60
Carolina Pines	Influent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Monitoring Wells (6 total - 3/yr) Depth, Gallons, Temp, pH, Color, Odor, TDS, Chloride, Total Phosphorus, TOC, Fecal Coliform, Nitrate Nitrogen	18	Annually	18	\$ 230.00	\$ 4,140
	VOC (Monitoring Wells: 6 total - 3/yr)	6	Annually	6	\$ 110.00	\$ 660
	Lab (Env Chemists) Sample Pick up fee	2	Monthly	24	\$ 10.00	\$ 240
	Field Lab Certification Testing (luby)	1	Annually	1	\$ 683.29	\$ 683
	Field Lab Certification Testing (Step) Low level TRC only	1	Annually	1	\$ 170.10	\$ 170
	Sludge Testing	1	Annually	1	\$ 375.00	\$ 375
	BOD	1	Weekly	52	\$ 22.31	\$ 1,160
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 12.61	\$ 656
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 17.46	\$ 908
Total Nitrogen (NN/TKN)	1	Weekly	52	\$ 33.95	\$ 1,765	
Total Phosphorus	1	Weekly	52	\$ 17.46	\$ 908	
Enterococci	1	Weekly	52	\$ 32.01	\$ 1,665	

	Testing Costs 10	# of Samples	Frequency	Tests	Cost	Annual
	Wastewater Analysis	Required		Per Year	Per Test	Cost
	Sludge Testing (for land application)	1	Annually	1	\$ 375.00	\$ 375
Danby/Lamplighter South	BOD	1	Weekly	52	\$ 38.00	\$ 1,976
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 11.00	\$ 572
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 28.00	\$ 1,456
	E. Coli	2	Weekly	104	\$ 55.00	\$ 5,720
	Total Phosphorus (permit change from 1/wk to 1/mth)	1	Monthly	12	\$ 28.00	\$ 336
	Lab (Prism) Environmental Fee for Sample Disposal	1	Weekly	52	\$ 3.00	\$ 156
	Field Lab Certification (SC)	1	Annually	1	\$ 395.64	\$ 396
	Instream Biological Assessment	1	Every 5 yrs	0.2	\$ 1,680.00	\$ 336
Hemby	BOD	1	Weekly	52	\$ 20.00	\$ 1,040
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 12.00	\$ 624
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 19.00	\$ 988
	Fecal Coliform (Effluent, Upstream & Downstream)	3	Weekly	156	\$ 25.00	\$ 3,900
	Total Nitrogen (NN/TKN) (Qtrly)	4	Annually	4	\$ 52.00	\$ 208
	Total Phosphorus (Qtrly)	4	Annually	4	\$ 26.00	\$ 104
	Field Lab Certification Testing	1	Annually	1	\$ 395.64	\$ 396
Hestron Park	Effluent: BOD (1/mth)	1	Monthly	12	\$ 25.00	\$ 300
	Effluent: Fecal Coliform (1/mth)	1	Monthly	12	\$ 25.00	\$ 300
	Effluent: Ammonia Nitrogen (1/mth)	1	Monthly	12	\$ 20.00	\$ 240
	Effluent: Nitrate Nitrogen (1/mth)	1	Monthly	12	\$ 25.00	\$ 300
	Effluent: TSS (1/mth)	1	Monthly	12	\$ 20.00	\$ 240
	Effluent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$ 720
	Effluent: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$ 720
	Influent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Monitoring Wells (5 total - 3/yr) Depth, Gallons, Temp, pH, Odor, TDS, Chloride, TOC, Fecal Coliform, Nitrate Nitrogen, Ammonia Nitrogen (Mar, Jul, Nov)	15	Annually	15	\$ 230.00	\$ 3,450
	VOC (Monitoring wells; 5 total - 1/yr November)	5	Annually	5	\$ 110.00	\$ 550
	Sludge Testing (for land application)	1	Annually	1	\$ 375.00	\$ 375
	Lab (Env Chemists) Sample Pick up fee	1	Monthly	12	\$ 10.00	\$ 120
Mound Ears	BOD	1	Weekly	52	\$ 16.00	\$ 832
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 9.60	\$ 499
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 14.40	\$ 749
	Fecal Coliform	1	Weekly	52	\$ 13.60	\$ 707
	Oil and Grease (2/mth)	2	Monthly	24	\$ 35.00	\$ 840
	Total Kjeldahl Nitrogen (TKN)	2	Annually	2	\$ 44.00	\$ 88
	Total Phosphorus	2	Annually	2	\$ 35.00	\$ 70
Kings Grant (Raleigh)	BOD	1	Weekly	52	\$ 22.31	\$ 1,160
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 12.61	\$ 656
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 17.46	\$ 908
	Fecal Coliform	1	Weekly	52	\$ 18.43	\$ 958
	Total Nitrogen (NN/TKN)	1	Weekly	52	\$ 33.95	\$ 1,765
	Total Phosphorus	2	Monthly	24	\$ 17.46	\$ 419
	Chronic Toxicity (Qtrly)	4	Annually	4	\$ 400.00	\$ 1,600
	Sludge Testing (for land application)	1	Annually	1	\$ 1,953.34	\$ 1,953
Olde Point	Effluent: BOD (2/mth Apr-Oct)	2	Monthly	14	\$ 25.00	\$ 350
	Effluent: BOD (1/mth Nov-Mar)	1	Monthly	5	\$ 25.00	\$ 125
	Effluent: TSS (2/mth Apr-Oct)	2	Monthly	14	\$ 20.00	\$ 280
	Effluent: TSS (1/mth Nov-Mar)	1	Monthly	5	\$ 20.00	\$ 100
	Effluent: Ammonia Nitrogen (2/mth Apr-Oct)	2	Monthly	14	\$ 20.00	\$ 280
	Effluent: Ammonia Nitrogen (1/mth Nov-Mar)	1	Monthly	5	\$ 20.00	\$ 100
	Effluent: Fecal Coliform (2/mth Apr-Oct)	2	Monthly	14	\$ 25.00	\$ 350
	Effluent: Fecal Coliform (1/mth Nov-Mar)	1	Monthly	5	\$ 25.00	\$ 125
	Effluent: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Effluent: Nitrate Nitrogen (3/yr)	3	Annually	3	\$ 25.00	\$ 75
	Effluent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Effluent: TOC (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: Nitrate Nitrogen (3/yr)	3	Annually	3	\$ 25.00	\$ 75
	Influent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: TOC (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: Enterococci (3/yr)	3	Annually	3	\$ 40.00	\$ 120
	Monitoring Wells (3 total - 3/yr) Depth, Gallons, Temp, pH, Color, Odor, TDS, Chloride, Orthophosphate, TOC, Fecal Coliform, Nitrate Nitrogen, Ammonia Nitrogen	9	Annually	9	\$ 270.00	\$ 2,430
The Harbour/The Point	VOC (Monitoring wells; 3 total - 1/yr)	3	Annually	3	\$ 110.00	\$ 330
	Lab (Env Chemists) Sample Pick up fee (2/mth Apr-Oct)	2	Monthly	14	\$ 10.00	\$ 140
	Lab (Env Chemists) Sample Pick up fee (1/mth Nov-Mar)	1	Monthly	5	\$ 10.00	\$ 50
	Sludge Testing (for land application)	1	Annually	1	\$ 375.00	\$ 375
	Chloride (1/mth per discharge)	3	Monthly	36	\$ 19.80	\$ 713
	Lead (1/mth per discharge)	3	Monthly	36	\$ 11.00	\$ 396
	Manganese (1/mth per discharge)	3	Monthly	36	\$ 11.00	\$ 396
	Turbidity (1/mth per discharge)	3	Monthly	36	\$ 19.80	\$ 713

Testing Costs 10		# of Samples	Frequency	Tests	Cost	Annual
Wastewater Analysis		Required		Per Year	Per Test	Cost
	Salinity (1/mth per discharge)	3	Monthly	36	\$ 19.00	\$ 684
	Conductivity (1/mth per discharge)	3	Monthly	36	\$ 18.00	\$ 648
	Courier fee (1/mth per discharge)	3	Monthly	36	\$ 15.00	\$ 540
	TDS (2/mth per discharge)	6	Monthly	72	\$ 11.00	\$ 792
	TSS (2/mth per discharge)	6	Monthly	72	\$ 11.00	\$ 792
	Processing & Disposal Fee (2/month per discharge)	6	Monthly	72	\$ 3.00	\$ 216
	Copper (1/qtr per discharge)	12	Annually	12	\$ 22.00	\$ 264
	Iron (1/qtr per discharge)	12	Annually	12	\$ 22.00	\$ 264
	Zinc (1/qtr per discharge)	12	Annually	12	\$ 11.00	\$ 132
	Chronic Toxicity (1/qtr per discharge) (cost includes \$50/sample courier fee)	12	Annually	12	\$ 484.50	\$ 5,814
Queens Harbor	BOD	1	Weekly	52	\$ 20.00	\$ 1,040
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 12.00	\$ 624
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 19.00	\$ 988
	Fecal Coliform	1	Weekly	52	\$ 20.00	\$ 1,040
	Total Nitrogen (NN/TKN) (Qtrly)	4	Annually	4	\$ 52.00	\$ 208
	Total Phosphorus (Qtrly)	4	Annually	4	\$ 26.00	\$ 104
	Sample Pick-up Fee (Weekly)	1	Weekly	52	\$ 15.00	\$ 780
Regalwood	BOD	3	Weekly	156		
	Total Suspended Solids (TSS)	3	Weekly	156		
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 1,300.00	\$ 15,600
	Enterococci	3	Weekly	156		
	Total Nitrogen (NN/TKN) (Qtrly)	4	Annually	4		
	Total Phosphorus	1	Weekly	52		
	Sludge Testing (for land application)	1	Annually	1	\$ 375.00	\$ 375
River Pointe Estates	BOD	1	Weekly	52	\$ 20.00	\$ 1,040
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 12.00	\$ 624
	Ammonia Nitrogen (NH ₃ as N)	2	Monthly	24	\$ 19.00	\$ 456
	Fecal Coliform	1	Weekly	52	\$ 20.00	\$ 1,040
	Total Nitrogen (NN/TKN) (Qtrly)	4	Annually	4	\$ 52.00	\$ 208
	Total Phosphorus (Qtrly)	4	Annually	4	\$ 26.00	\$ 104
Saddlewood	BOD	1	Weekly	52	\$ 20.00	\$ 1,040
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 12.00	\$ 624
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 19.00	\$ 988
	Fecal Coliform	1	Weekly	52	\$ 20.00	\$ 1,040
Sugar Mountain	BOD	3	Weekly	156	\$ 16.00	\$ 2,496
	Total Suspended Solids (TSS)	3	Weekly	156	\$ 9.60	\$ 1,498
	Ammonia Nitrogen (NH ₃ as N)	3	Weekly	156	\$ 14.40	\$ 2,246
	Fecal Coliform	9	Weekly	156	\$ 13.60	\$ 2,122
	Total Nitrogen (NN/TKN) (2/yr)	2	Annually	2	\$ 44.00	\$ 88
	Total Phosphorus (2/yr)	2	Annually	2	\$ 35.00	\$ 70
	Chronic Toxicity (Qtrly)	4	Annually	4	\$ 375.00	\$ 1,500
	Field Lab Certification Testing	1	Annually	1	\$ 349.45	\$ 349
White Oak Est	BOD	3	Weekly	156		
	Total Suspended Solids (TSS)	3	Weekly	156		
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 1,300.00	\$ 15,600
	Enterococci	3	Weekly	156		
	Total Nitrogen (NN/TKN) (Qtrly)	4	Annually	4		
	Total Phosphorus	1	Weekly	52		
	Sludge Testing (for land application)	1	Annually	1	\$ 375.00	\$ 375
Willowbrook	BOD	1	Weekly	52	\$ 22.31	\$ 1,160
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 12.61	\$ 656
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 17.46	\$ 908
	Fecal Coliform	1	Weekly	52	\$ 18.43	\$ 958
	Total Nitrogen (NN/TKN)	1	Weekly	52	\$ 33.95	\$ 1,765
	Total Phosphorus	2	Monthly	24	\$ 17.46	\$ 419
	Chronic Toxicity (Qtrly)	4	Annually	4	\$ 400.00	\$ 1,600
	Gross Alpha (Qtrly)	4	Annually	4	\$ 450.00	\$ 1,800
	Combined Radium (Qtrly)					
	Gross Beta (Qtrly)					
	Uranium (Qtrly)					
	Sludge Testing (for land application)	1	Annually	1	\$ 1,932.00	\$ 1,932
Wolf Laurel	BOD	1	Weekly	52	\$ 16.00	\$ 832
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 9.60	\$ 499
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 14.40	\$ 749
	Fecal Coliform	1	Weekly	52	\$ 13.50	\$ 707
	Turbidity (Effluent)	1	Weekly	52	\$ 10.00	\$ 520
	Turbidity (upstream)	1	Weekly	52	\$ 10.00	\$ 520
	Turbidity (downstream)	1	Weekly	52	\$ 10.00	\$ 520
II					Total 182	\$ 207,474
Nags Head	Effluent: BOD (1/wk, May-Aug)	1	Weekly	16	\$ 25.00	\$ 400
	Effluent: BOD (2/mth) Sep-Apr	2	Monthly	16	\$ 25.00	\$ 400
	Effluent: Fecal Coliform (1/wk) May-Aug	1	Weekly	16	\$ 25.00	\$ 400
	Effluent: Fecal Coliform (2/mth) Sep-Apr	2	Monthly	16	\$ 25.00	\$ 400
	Effluent: Ammonia Nitrogen (1/wk) May-Aug	1	Weekly	16	\$ 20.00	\$ 320
	Effluent: Ammonia Nitrogen (2/mth) Sep-Apr	2	Monthly	16	\$ 20.00	\$ 320

	Testing Costs 10	# of Samples Required	Frequency	Tests Per Year	Cost Per Test	Annual Cost
	Wastewater Analysis					
	Effluent: Total Nitrogen (NN/TKN) (1/wk) May-Aug	1	Weekly	16	\$ 50.00	\$ 800
	Effluent: Total Nitrogen (NN/TKN) (2/mth) Sep-Apr	2	Monthly	16	\$ 50.00	\$ 800
	Effluent: TSS (1/wk) May-Aug	1	Weekly	16	\$ 20.00	\$ 320
	Effluent: TSS (2/mth) Sep-Apr	2	Monthly	16	\$ 20.00	\$ 320
	Effluent: Total Phosphorus (1/wk) May-Aug	1	Weekly	16	\$ 25.00	\$ 400
	Effluent: Total Phosphorus (2/mth) Sep-Apr	2	Monthly	16	\$ 25.00	\$ 400
	Effluent: Chloride (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Effluent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Effluent: TOC (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: Chlorides (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: TDS (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: TOC (3/yr)	3	Annually	3	\$ 20.00	\$ 60
	Influent: Nitrate Nitrogen (3/yr)	3	Annually	3	\$ 25.00	\$ 75
	Monitoring Wells (4 total - 3/yr) Color, Depth, Ammonia Nitrogen, Gallons, Odor, TOC, TDS, Chloride, fecal Coliform, Nitrate Nitrogen, Temp, pH	12	Annually	12	\$ 215.00	\$ 2,580
	VOC (4 Monitoring wells - 1/yr)	4	Annually	4	\$ 110.00	\$ 440
	Sludge Testing (for land application)	1	Annually	1	\$ 1,700.00	\$ 1,700
Corolla Light	*Plant #1 Effluent: BOD, Fecal Coliform, Ammonia Nitrogen, Total Nitrogen, Total Phosphorus, TSS (1/week May-Aug)	1	Weekly	16	\$ 165.00	\$ 2,640
	**Plant #1 Effluent: BOD, Fecal Coliform, Ammonia Nitrogen, Total Nitrogen, Total Phosphorus, TSS (2/month Sept-April)	2	Monthly	16	\$ 165.00	\$ 2,640
	***Plant #1 Effluent: TOC, Chlorides, TDS (3/yr)	3	Annually	3	\$ 60.00	\$ 180
	Plant #1 Influent: TOC, Chlorides, Nitrate Nitrogen, TDS (3/yr) (decrease from 4/yr. Added Nitrates, dropped Total Phosphorus)	3	Annually	3	\$ 85.00	\$ 255
	Monitoring Wells (Plant #1) (7 total - 3/yr) Color, Depth, Gallons, TDS, Temperature, Chloride, pH, TOC, Ammonia Nitrogen, Fecal Coliform, Odor (decrease from 4/yr)	21	Annually	21	\$ 240.00	\$ 5,040
	VOC (Monitoring wells; Plant #1; 7 total - 1/yr)	7	Annually	7	\$ 110.00	\$ 770
	Plant #1 Sludge Testing (for land application)	1	Annually	1	\$ 375.00	\$ 375
	Monitoring Wells (Plant #2) (5 total - 2/yr) Color, Depth, Gallons, TDS, Temperature, Chloride, pH, TOC, Ammonia Nitrogen, Total Coliforms, Nitrate Nitrogen, Orthophosphate, TSS	10	Annually	10	\$ 225.00	\$ 2,250
	Monitoring Wells (Plant #2) (5 total - 1/yr November only) Color, Depth, Gallons, TDS, Temperature, Chloride, pH, TOC, Ammonia Nitrogen, Total Coliforms, Nitrate Nitrogen, Orthophosphate TSS TOX	5	Annually	5	\$ 335.00	\$ 1,675
Monterey Shores	*Effluent: BOD, Ammonia Nitrogen, Total Nitrogen, Total Phosphorus, TSS, Fecal Coliform	1	Weekly	52	\$ 165.00	\$ 8,580
	Effluent: Chlorides, TDS	3	Annually	3	\$ 40.00	\$ 120
	Influent: TOC, TDS, Chlorides, Nitrate Nitrogen	3	Annually	3	\$ 85.00	\$ 255
	GWLS Effluent: BOD, Ammonia Nitrogen, Fecal Coliform, Total Nitrogen, Total Phosphorus	1	Weekly	52	\$ 145.00	\$ 7,540
	GWLS Effluent: TDS, Chlorides, TOC	3	Annually	3	\$ 60.00	\$ 180
	Monitoring Wells (2 total - 3 per yr) Color, Depth, Ammonia Nitrogen, Gallons, TDS, Temp, Chloride, pH, Total Phosphorus, TOC, Nitrate Nitrogen, Fecal Coliform	6	Annually	6	\$ 250.00	\$ 1,500
	VOC (Monitoring wells; Plant #1; 2 total - 1/yr)	2	Annually	2	\$ 110.00	\$ 220
	Sludge testing (for land application)	1	Annually	1	\$ 375.00	\$ 375
					Total OBX	\$ 45,030
Fairfield Sapphire Valley	BOD	1	Weekly	52		
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 235.00	\$ 2,820
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52		
	Fecal Coliform	1	Weekly	52		
	Total Nitrogen (NN/TKN)	2	Annually	2	\$ 35.00	\$ 70
	Total Phosphorus	2	Annually	2	\$ 18.00	\$ 36
					Total BU 183 (less Fairfield Harbour)	\$ 2,926
Carolina Trace	BOD	3	Weekly	156	\$ 22.31	\$ 3,480
	Total Suspended Solids (TSS)	3	Weekly	156	\$ 12.61	\$ 1,967
	Ammonia Nitrogen (NH ₃ as N)	3	Weekly	156	\$ 17.46	\$ 2,724
	Fecal Coliform	3	Weekly	156	\$ 18.43	\$ 2,875
	Total Nitrogen (NN/TKN)	1	Quarterly	4	\$ 33.95	\$ 136
	Total Phosphorus	1	Quarterly	4	\$ 17.46	\$ 70
	Chronic Toxicity (Qtrly)	1	Annually	4	\$ 400.00	\$ 1,600
	Field Lab Certification Testing	1	Annually	1	\$ 506.37	\$ 506
					Total 187	\$ 13,358
Connestee Falls	Plant #1: BOD (1/wk)	1	Weekly	52	\$ 25.00	\$ 1,300
	Plant #1: TSS (1/wk)	1	Weekly	52	\$ 10.00	\$ 520
	Plant #1: Fecal Coliform (1/wk)	1	Weekly	52	\$ 25.00	\$ 1,300
	Plant #1: Ammonia Nitrogen (2/mth)	2	Monthly	24	\$ 18.00	\$ 432
	Plant #1: Total Phosphorus (2/yr)	2	Annually	2	\$ 18.00	\$ 36
	Plant #1: Total Nitrogen (NN/TKN) (2/yr)	2	Annually	2	\$ 40.00	\$ 80
	Plant #2: BOD (1/wk)	1	Weekly	52	\$ 25.00	\$ 1,300

Testing Costs 10		# of Samples	Frequency	Tests	Cost	Annual
Wastewater Analysis		Required		Per Year	Per Test	Cost
	Plant #2: TSS (1/wk)	1	Weekly	52	\$ 10.00	\$ 520
	Plant #2: Fecal Coliform (1/wk)	1	Weekly	52	\$ 25.00	\$ 1,300
	Plant #2: Ammonia Nitrogen (2/mth)	2	Monthly	24	\$ 18.00	\$ 432
					Total 188	\$ 7,220
Elk River	BOD	1	Weekly	52	\$ 16.00	\$ 832
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 9.60	\$ 499
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 14.40	\$ 749
	Fecal Coliform	1	Weekly	52	\$ 13.60	\$ 707
	Total Nitrogen (NN/TKN)	2	Annually	2	\$ 44.00	\$ 88
	Total Phosphorus	2	Annually	2	\$ 35.00	\$ 70
					Total 181	\$ 2,945

Fairfield Harbor and Bradfield Farms						
Testing Costs 10		# of Samples	Frequency	Tests	Cost	Annual
Wastewater Analysis		Required		Per Year	Per Test	Cost
Fairfield Harbor	BOD	3	Weekly	156	\$ 22.31	\$ 3,480
	Total Suspended Solids (TSS)	3	Weekly	156	\$ 12.61	\$ 1,967
	Ammonia Nitrogen (NH ₃ as N)	3	Weekly	156	\$ 17.46	\$ 2,724
	Enterococci	3	Weekly	156	\$ 32.01	\$ 4,994
	Total Nitrogen (NN/TKN)	1	Weekly	52	\$ 33.95	\$ 1,765
	Total Phosphorus (Qtrly)	1	Weekly	52	\$ 17.46	\$ 908
					Total Fairfield Harbour	\$ 15,838
Bradfield Farms	BOD	1	Weekly	52	\$ 20.00	\$ 1,040
	Total Suspended Solids (TSS)	1	Weekly	52	\$ 12.00	\$ 624
	Ammonia Nitrogen (NH ₃ as N)	1	Weekly	52	\$ 19.00	\$ 988
	Fecal Coliform	3	Weekly	156	\$ 20.00	\$ 3,120
	Total Nitrogen (NN/TKN)	1	Quarterly	4	\$ 52.00	\$ 208
	Total Phosphorus	1	Quarterly	4	\$ 26.00	\$ 104
					Total 191	\$ 6,084

Grand total \$ 300,876

Totals:
Uniform \$ 278,954
FH & BF \$ 21,922

I /A
v7 v8

Carolina Water Service, Inc. of North Carolina
Docket No. W-354, Sub 360
Test year Ending December 31, 2017

Casselberry
Exhibit No. 23
Page 1 of 2

Sludge Hauling

CWSNC

Bus. Unit	Service Area	Sub 336 2011/2012	Sub 344 2014	Sub 356 2015	Sub 360 2016	Sub 360 2017	Adjusted average
		Amount	Amount	Amount	Amount	Amount	
182101	Kynwood Abington	15,056	15,712	24,436	14,436	22,333	20,402
102	Brandywine Bay/Spooners Cr.	10,558	13,500	14,580	9,030	28,380	a 17,330
107	Sugar Mountain	14,455	14,560	10,640	15,120	18,410	14,723
110	Saddlewood	1,120	1,996	432	756	5,262	2,150
115	Ashely Hills	19,273	44,013	43,446	49,313	52,643	48,467
117	Corolla Light	18,525	13,500	17,450	7,390	13,350	12,730
120	Hestron Park	6,570	3,780	4,320	3,090	4,320	3,910
123	Hounds Ear	2,240	-	-	2,800	500	1,100
126	Willowbrook	5,736	5,856	9,150	9,516	9,846	9,504
130	Wolf Laurel	720	920	3,920	3,000	1,080	2,667
136	Kings Grant - Raleigh	4,312	2,186	5,876	1,830	2,562	3,423
138	Bent Creek	9,470	12,950	12,630	30,410	14,000	19,013
149	Bear Paw Resort		-	-	200	4,500	1,567
155	Kings Grant Charlotte	9,572	-	-	370	-	123
160	College Park	2,135	1,890	-	-	-	-
173	Monteray Shores	27,900	35,815	32,850	28,650	51,850	b 37,783
176	Olde Point	1,033	1,575	1,960	875	1,575	1,470
178	Independent/Hemby	17,935	11,687	22,045	22,121	28,162	24,109
190	Danby	41,116	25,797	17,819	31,190	40,422	29,810
197	Queens harbor	2,120	16,153	4,050	6,048	3,100	4,399
209	Nags head	22,000	29,800	40,065	46,120	15,845	1,c 34,010
217	Regalwood	20,391	9,720	10,260	9,180	9,270	9,570
218	White Oak Estates	15,450	21,450	22,680	23,250	25,380	23,770
233	Belvedere Middle Point	13,170	9,981	18,130	25,166	24,570	2 24,868
236	Riverpointe	4,345	9,652	3,348	5,805	5,373	4,842

Sludge Hauling

Bus. Unit	Service Area	Sub 336 2011/2012	Sub 344 2014	Sub 356 2015	Sub 360 2016	2017	Adjusted average
		Amount	Amount	Amount	Amount		
241	Carolina Pines	3,922	11,340	12,960	12,960	11,430	12,450
243	Nero	6,055	6,605	5,124	3,680	4,372	4,392
2247	Ridges at Mountain Harbor (new)		-	-	555	-	185
181101	Elk River	n/a	5,315	10,080	10,018	5,160	3 8,419
183102	Sapphire valley	n/a	10,099	4,665	5,829	17,377	d 9,290
183109	Fairfield Mountain	n/a	425	-	-	-	-
187101	Carolina Trace	n/a	47,239	38,641	44,796	41,732	41,723
188101	Transylvania	n/a	14,960	15,050	19,600	17,325	17,325
Total CWSNC			400,491	408,622	445,120	482,146	445,526

Bradfield Farms/Fairfield Harbor

Bus. Unit	Service Area	Sub 336 2011/2012	Sub 344 2014	Sub 356 2015	Sub 360 2016	2017	Adjusted average
		Amount	Amount	Amount	Amount		
191101	Bradfield Farms	n/a	29,014	33,122	31,037	57,935	40,698
183106	Fairfield harbor	n/a	19,844	24,664	25,067	22,498	24,076
Total BF/FH			48,858	57,786	56,104		64,774

Notes

- 1 New treatment process three year average
- 2 New treatment process two year average
- 3 New treatment process three year average

- a reclassified \$16,500 from sewer rodding to sludge removal to clean trains 1,2 3 & 4 at WWTP
- b reclassified \$4,500 from sewer rodding to sludge removal to clean membrane tanks 1-5 at WWTP
- c reclassified \$3,825 from sewer rodding to sludge removal to clean trains 1 and 2 at WWTP
- d reclassified \$8,850 from sewer rodding to sludge removal for cleaning ponds

I/A
vol. 8

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
RETURN ON ORIGINAL COST RATE BASE
For The Test Year Ended December 31, 2017

Public Staff
Feasibility Exhibit I
Schedule 1(a)

Adopted by
Windley Henry

CWSNC WATER OPERATIONS

Line No.	Item	Capitalization Ratio (a)	Original Cost Rate Base (b)	Embedded Cost (c)	Overall Cost Rate (d)	Net Operating Income (e)
Present Rates:						
1	Debt	54.92%	\$33,262,174 [2]	5.87% [1]	3.22%	\$1,952,490 [8]
2	Equity	45.08%	27,302,600 [2]	9.18% [6]	4.14%	2,507,726 [9]
3	Total	100.00%	\$60,564,774 [3]		7.36%	\$4,460,216 [10]
Company Proposed Rates:						
4	Debt	54.92%	\$33,262,174 [4]	5.87% [1]	3.22%	\$1,952,490 [8]
5	Equity	45.08%	27,302,600 [4]	16.17% [6]	7.29%	4,415,873 [11]
6	Total	100.00%	\$60,564,774 [3]		10.51%	\$6,368,363 [12]
Public Staff Recommended Rates:						
7	Debt	54.92%	\$33,262,174 [5]	5.87% [1]	3.22%	\$1,952,490 [8]
8	Equity	45.08%	27,302,600 [5]	9.20% [1]	4.15%	2,511,839 [13]
9	Total	100.00%	\$60,564,774 [3]		7.37%	\$4,464,329 [14]

- [1] Per Public Staff Financial Analyst Hilton.
[2] Column (a) multiplied by Line 3, Column (b).
[3] Feasibility Exhibit I, Schedule 2(a), Column (c), Line 17.
[4] Column (a) multiplied by Line 6, Column (b).
[5] Column (a) multiplied by Line 9, Column (b).
[6] Column (e) divided by Column (b).
[7] Column (a) multiplied by Column (c).

- [8] Column (b) multiplied by Column (c).
[9] Line 3 minus Line 1, Column (e).
[10] Feasibility Exhibit I, Schedule 3(a), Column (c), Line 38.
[11] Line 6 minus Line 4, Column (e).
[12] Feasibility Exhibit I, Schedule 3(a), Column (e), Line 38.
[13] Line 9 minus Line 7, Column (e).
[14] Feasibility Exhibit I, Schedule 3(a), Column (g), Line 38.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
RETURN ON ORIGINAL COST RATE BASE
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 1(b)

CWSNC SEWER OPERATIONS

Line No.	Item	Capitalization Ratio (a)	Original Cost Rate Base (b)	Embedded Cost (c)	Overall Cost Rate (d) [7]	Net Operating Income (e)
Present Rates:						
1	Debt	54.92%	\$23,732,479 [2]	5.87% [1]	3.22%	\$1,393,097 [8]
2	Equity	45.08%	19,480,339 [2]	9.92% [6]	4.47%	1,932,707 [9]
3	Total	100.00%	\$43,212,818 [3]		7.69%	\$3,325,804 [10]
Company Proposed Rates:						
4	Debt	54.92%	\$23,732,479 [4]	5.87% [1]	3.22%	\$1,393,097 [8]
5	Equity	45.08%	19,480,339 [4]	13.88% [6]	6.26%	2,703,638 [11]
6	Total	100.00%	\$43,212,818 [3]		9.48%	\$4,096,735 [12]
Public Staff Recommended Rates:						
7	Debt	54.92%	\$23,732,479 [5]	5.87% [1]	3.22%	\$1,393,097 [8]
8	Equity	45.08%	19,480,339 [5]	9.20% [1]	4.15%	1,792,191 [13]
9	Total	100.00%	\$43,212,818 [3]		7.37%	\$3,185,288 [14]

- [1] Per Public Staff Financial Analyst Hilton.
[2] Column (a) multiplied by Line 3, Column (b).
[3] Feasel Exhibit I, Schedule 2(b), Column (c), Line 17.
[4] Column (a) multiplied by Line 6, Column (b).
[5] Column (a) multiplied by Line 9, Column (b).
[6] Column (e) divided by Column (b).
[7] Column (a) multiplied by Column (c).

- [8] Column (b) multiplied by Column (c).
[9] Line 3 minus Line 1, Column (e).
[10] Feasel Exhibit I, Schedule 3(b), Column (c), Line 38.
[11] Line 6 minus Line 4, Column (e).
[12] Feasel Exhibit I, Schedule 3(b), Column (e), Line 38.
[13] Line 9 minus Line 7, Column (e).
[14] Feasel Exhibit I, Schedule 3(b), Column (g), Line 38.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 380
RETURN ON ORIGINAL COST RATE BASE
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 1(c)

BRADFIELD/FAIRFIELD WATER OPERATIONS

Line No.	Item	Capitalization Ratio (a) [1]	Original Cost Rate Base (b)	Embedded Cost (c)	Overall Cost Rate (d) [7]	Net Operating Income (e)
Present Rates:						
1	Debt	54.92%	\$1,905,536 [2]	5.87% [1]	3.22%	\$111,855 [8]
2	Equity	45.08%	1,564,122 [2]	-2.98% [6]	-1.34%	(46,632) [9]
3	Total	100.00%	\$3,469,658 [3]		1.88%	\$65,223 [10]
Company Proposed Rates:						
4	Debt	54.92%	\$1,905,536 [4]	5.87% [1]	3.22%	\$111,855 [8]
5	Equity	45.08%	1,564,122 [4]	22.02% [6]	9.93%	344,481 [11]
6	Total	100.00%	\$3,469,658 [3]		13.15%	\$456,336 [12]
Public Staff Recommended Rates:						
7	Debt	54.92%	\$1,905,536 [5]	5.87% [1]	3.22%	\$111,855 [8]
8	Equity	45.08%	1,564,122 [5]	9.20% [1]	4.15%	143,899 [13]
9	Total	100.00%	\$3,469,658 [3]		7.37%	\$255,754 [14]

- [1] Per Public Staff Financial Analyst Hilton.
[2] Column (a) multiplied by Line 3, Column (b).
[3] Feasel Exhibit I, Schedule 2(c), Column (c), Line 17.
[4] Column (a) multiplied by Line 6, Column (b).
[5] Column (a) multiplied by Line 9, Column (b).
[6] Column (e) divided by Column (b).
[7] Column (a) multiplied by Column (c).

- [8] Column (b) multiplied by Column (c).
[9] Line 3 minus Line 1, Column (e).
[10] Feasel Exhibit I, Schedule 3(c), Column (c), Line 38.
[11] Line 6 minus Line 4, Column (e).
[12] Feasel Exhibit I, Schedule 3(c), Column (e), Line 38.
[13] Line 9 minus Line 7, Column (e).
[14] Feasel Exhibit I, Schedule 3(c), Column (g), Line 38.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
RETURN ON ORIGINAL COST RATE BASE
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 1(d)

BRADFIELD/FAIRFIELD SEWER OPERATIONS

Line No.	Item	Capitalization Ratio (a) [1]	Original Cost Rate Base (b) [2]	Embedded Cost (c) [3]	Overall Cost Rate (d) [7]	Net Operating Income (e) [8]
Present Rates:						
1	Debt	54.92%	\$3,952,356 [2]	5.87% [1]	3.22%	\$232,003 [8]
2	Equity	45.08%	3,244,214 [2]	2.62% [6]	1.18%	84,904 [9]
3	Total	100.00%	\$7,196,570 [3]		4.40%	\$316,907 [10]
Company Proposed Rates:						
4	Debt	54.92%	\$3,952,356 [4]	5.87% [1]	3.22%	\$232,003 [8]
5	Equity	45.08%	3,244,214 [4]	11.78% [6]	5.31%	382,019 [11]
6	Total	100.00%	\$7,196,570 [3]		8.53%	\$614,022 [12]
Public Staff Recommended Rates:						
7	Debt	54.92%	\$3,952,356 [5]	5.87% [1]	3.22%	\$232,003 [8]
8	Equity	45.08%	3,244,214 [5]	9.20% [1]	4.15%	288,468 [13]
9	Total	100.00%	\$7,196,570 [3]		7.37%	\$530,471 [14]

- [1] Per Public Staff Financial Analyst Hilton.
[2] Column (a) multiplied by Line 3, Column (b).
[3] Feasel Exhibit I, Schedule 2(d), Column (c), Line 17.
[4] Column (a) multiplied by Line 6, Column (b).
[5] Column (a) multiplied by Line 9, Column (b).
[6] Column (e) divided by Column (b).
[7] Column (a) multiplied by Column (c).

- [8] Column (b) multiplied by Column (c).
[9] Line 3 minus Line 1, Column (e).
[10] Feasel Exhibit I, Schedule 3(d), Column (c), Line 38.
[11] Line 6 minus Line 4, Column (e).
[12] Feasel Exhibit I, Schedule 3(d), Column (e), Line 38.
[13] Line 9 minus Line 7, Column (e).
[14] Feasel Exhibit I, Schedule 3(d), Column (g), Line 38.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ORIGINAL COST RATE BASE
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2(a)

CWSNC WATER OPERATIONS

Line No.	Item	Amount Per Application (a)	Public Staff Adjustments (b)	Amount Per Public Staff (c)	
1	Plant in service	\$105,659,424	\$3,722,070	\$ 109,381,494	[3]
2	Accumulated depreciation	(26,572,384)	(898,573)	(27,470,957)	[4]
3	Net plant in service (L1 + L2)	79,087,040	2,823,497	81,910,537	
4	Cash working capital	1,131,235	(117,741)	1,013,494	[5]
5	Contributions in aid of construction	(18,714,027)	354,774	(18,359,254)	[6]
6	Advances in aid of construction	(23,760)	0	(23,760)	
7	Accumulated deferred income taxes	(2,922,461)	804,972	(2,117,489)	[7]
8	Customer deposits	(173,055)	(18,614)	(191,669)	[8]
9	Gain on sale and flow back taxes	(286,987)	90,040	(196,947)	[9]
10	Plant acquisition adjustment	(2,336,007)	63,513	(2,272,494)	[10]
11	Excess book value	(448)	(8)	(456)	[11]
12	Cost-free capital	(121,791)	0	(121,791)	
13	Average tax accruals	64,607	(136,558)	(71,951)	[12]
14	Regulatory liability for excess deferred taxes	(144,323)	144,323	0	[13]
15	Deferred charges	1,322,290	(325,736)	996,554	[14]
16	Pro forma plant	3,214,455	(3,214,455)	0	[15]
17	Original cost rate base (Sum of L3 thru L16)	\$60,096,768	\$468,006	\$60,564,774	

- [1] Column (c) minus Column (a).
[2] Column (a) plus Column (b), unless otherwise footnoted.
[3] Feasel Exhibit I, Schedule 2-1(a), Column (c), Line 4.
[4] Feasel Exhibit I, Schedule 2-1(a), Column (c), Line 8.
[5] Feasel Exhibit I, Schedule 2-3, Column (a), Line 4.
[6] Feasel Exhibit I, Schedule 2-4, Column (c), Line 6.
[7] Feasel Exhibit I, Schedule 2-5(a), Column (d), Line 27.
[8] Feasel Exhibit I, Schedule 2-6, Column (a), Line 3.
[9] Feasel Exhibit I, Schedule 2-7, Column (a), Line 6.
[10] Feasel Exhibit I, Schedule 2-8, Column (c), Line 5.
[11] Feasel Exhibit I, Schedule 2-9, Column (d), Line 7.
[12] Feasel Exhibit I, Schedule 2-3, Column (a), Line 9.
[13] To remove excess deferred income taxes.
[14] Feasel Exhibit I, Schedule 2-10, Column (a), Line 4.
[15] To remove estimated plant cost in the future.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ORIGINAL COST RATE BASE

For The Test Year Ended December 31, 2017

Public Staff

Feasel Exhibit I

Schedule 2(b)

CWSNC SEWER OPERATIONS

Line No.	Item	Amount Per Application (a)	Public Staff Adjustments (b)	[1]	Amount Per Public Staff (c)	[2]
1	Plant in service	\$82,208,113	\$2,126,887		\$ 84,335,000	[3]
2	Accumulated depreciation	(20,517,737)	(836,191)		(21,353,928)	[4]
3	Net plant in service (L1 + L2)	61,690,376	1,290,696		62,981,072	
4	Cash working capital	815,643	(15,820)		799,823	[5]
5	Contributions in aid of construction	(18,672,446)	430,286		(18,242,160)	[6]
6	Advances in aid of construction	(9,180)	0		(9,180)	
7	Accumulated deferred income taxes	(1,731,139)	(611,655)		(2,342,794)	[7]
8	Customer deposits	(103,024)	(11,081)		(114,105)	[8]
9	Gain on sale and flow back taxes	(138,550)	45,869		(92,681)	[9]
10	Plant acquisition adjustment	261,581	4,752		266,333	[10]
11	Excess book value	0	0		0	
12	Cost-free capital	(139,708)	0		(139,708)	
13	Average tax accruals	39,084	(82,406)		(43,322)	[11]
14	Regulatory liability for excess deferred taxes	(85,491)	85,491		0	[12]
15	Deferred charges	940,307	(790,767)		149,540	[13]
16	Pro forma plant	1,753,909	(1,753,909)		0	[14]
17	Original cost rate base (Sum of L3 thru L16)	<u>\$44,621,362</u>	<u>(\$1,408,544)</u>		<u>\$43,212,818</u>	

[1] Column (c) minus Column (a).

[2] Column (a) plus Column (b), unless otherwise footnoted.

[3] Feasel Exhibit I, Schedule 2-1(b), Column (c), Line 4.

[4] Feasel Exhibit I, Schedule 2-1(b), Column (c), Line 8.

[5] Feasel Exhibit I, Schedule 2-3, Column (b), Line 4.

[6] Feasel Exhibit I, Schedule 2-4, Column (f), Line 6.

[7] Feasel Exhibit I, Schedule 2-5(a), Column (e), Line 27.

[8] Feasel Exhibit I, Schedule 2-6, Column (b), Line 3.

[9] Feasel Exhibit I, Schedule 2-7, Column (b), Line 6.

[10] Feasel Exhibit I, Schedule 2-8, Column (f), Line 5.

[11] Feasel Exhibit I, Schedule 2-3, Column (b), Line 9.

[12] To remove excess deferred income taxes.

[13] Feasel Exhibit I, Schedule 2-10, Column (b), Line 4.

[14] To remove estimated plant cost in the future.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ORIGINAL COST RATE BASE

For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2(c)**BRADFIELD/FAIRFIELD WATER OPERATIONS**

Line No.	Item	Amount Per Application (a)	Public Staff Adjustments (b)	[1]	Amount Per Public Staff (c)	[2]
1	Plant in service	\$5,815,265	\$108,811		\$5,924,076	[3]
2	Accumulated depreciation	(1,903,826)	278,501		(1,625,325)	[4]
3	Net plant in service (L1 + L2)	3,911,439	387,312		4,298,751	
4	Cash working capital	117,808	(6,686)		111,122	[5]
5	Contributions in aid of construction	(1,127,502)	24,031		(1,103,471)	[6]
6	Advances in aid of construction	0	0		0	
7	Accumulated deferred income taxes	(251,858)	318,874		67,016	[7]
8	Customer deposits	(15,137)	(2,926)		(18,063)	[8]
9	Gain on sale and flow back taxes	0	0		0	
10	Plant acquisition adjustment	31,423	(7,161)		24,262	[9]
11	Excess book value	0	0		0	
12	Cost-free capital	0	0		0	
13	Average tax accruals	4,164	(9,288)		(5,124)	[10]
14	Regulatory liability for excess deferred taxes	(10,756)	10,756		0	[11]
15	Deferred charges	198,042	(102,877)		95,165	[12]
16	Pro forma plant	0	0		0	
17	Original cost rate base (Sum of L3 thru L16)	\$2,857,623	\$612,035		\$3,469,658	

[1] Column (c) minus Column (a).

[2] Column (a) plus Column (b), unless otherwise footnoted.

[3] Feasel Exhibit I, Schedule 2-1(c), Column (c), Line 3.

[4] Feasel Exhibit I, Schedule 2-1(c), Column (c), Line 6.

[5] Feasel Exhibit I, Schedule 2-3, Column (c), Line 4.

[6] Feasel Exhibit I, Schedule 2-4, Column (i), Line 6.

[7] Feasel Exhibit I, Schedule 2-5(b), Column (d), Line 27.

[8] Feasel Exhibit I, Schedule 2-6, Column (c), Line 3.

[9] Feasel Exhibit I, Schedule 2-8, Column (i), Line 5.

[10] Feasel Exhibit I, Schedule 2-3, Column (c), Line 9.

[11] To remove excess deferred income taxes.

[12] Feasel Exhibit I, Schedule 2-10, Column (c), Line 4.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ORIGINAL COST RATE BASE

For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2(d)**BRADFIELD/FAIRFIELD SEWER OPERATIONS**

Line No.	Item	Amount Per Application (a)	Public Staff Adjustments (b)	[1]	Amount Per Public Staff (c)	[2]
1	Plant in service	\$12,932,107	\$401,431		\$13,333,538	[3]
2	Accumulated depreciation	(2,504,941)	348		(2,504,593)	[4]
3	Net plant in service (L1 + L2)	10,427,166	401,779		10,828,945	
4	Cash working capital	157,683	(11,058)		146,625	[5]
5	Contributions in aid of construction	(4,299,941)	109,156		(4,190,785)	[6]
6	Advances in aid of construction	0	0		0	
7	Accumulated deferred income taxes	(262,243)	(315,492)		(577,735)	[7]
8	Customer deposits	(15,758)	(3,045)		(18,803)	[8]
9	Gain on sale and flow back taxes	0	0		0	
10	Plant acquisition adjustment	980,236	(27,539)		952,697	[9]
11	Excess book value	0	0		0	
12	Cost-free capital	0	0		0	
13	Average tax accruals	4,472	(9,984)		(5,512)	[10]
14	Regulatory liability for excess deferred taxes	(11,200)	11,200		0	[11]
15	Deferred charges	78,188	(17,050)		61,138	[12]
16	Pro forma plant	181,300	(181,300)		0	[13]
17	Original cost rate base (Sum of L3 thru L16)	\$7,239,903	(\$43,333)		\$7,196,570	

[1] Column (c) minus Column (a).

[2] Column (a) plus Column (b), unless otherwise footnoted.

[3] Feasel Exhibit I, Schedule 2-1(d), Column (c), Line 3.

[4] Feasel Exhibit I, Schedule 2-1(d), Column (c), Line 6.

[5] Feasel Exhibit I, Schedule 2-3, Column (d), Line 4.

[6] Feasel Exhibit I, Schedule 2-4, Column (l), Line 6.

[7] Feasel Exhibit I, Schedule 2-5(b), Column (e), Line 27.

[8] Feasel Exhibit I, Schedule 2-6, Column (d), Line 3.

[9] Feasel Exhibit I, Schedule 2-8, Column (l), Line 5.

[10] Feasel Exhibit I, Schedule 2-3, Column (d), Line 9.

[11] To remove excess deferred income taxes.

[12] Feasel Exhibit I, Schedule 2-10, Column (d), Line 4.

[13] To remove estimated plant cost in the future.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
**CALCULATION OF PLANT IN SERVICE AND
ACCUMULATED DEPRECIATION**
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2-1(a)

CWSNC WATER OPERATIONS

Line No.	Item	Amount Per Application (a)	Public Staff Adjustments [1] (b)	Amount Per Public Staff [2] (c)
	<u>Plant In Service:</u>			
1	Direct plant in service	\$98,867,930	\$3,398,963	\$102,266,893 [3]
2	Allocation of common plant in service:			
	WSC cost center, Regional and NC	6,791,492	343,494	7,134,986 [4]
3	Riverbend adjustment--2017 and 2018	0	(20,385)	(20,385) [4]
4	Total plant in service (Sum of L1 thru L3)	<u>\$105,659,422</u>	<u>\$3,722,072</u>	<u>\$109,381,494</u>
	<u>Accumulated Depreciation:</u>			
5	Direct accumulated depreciation	(\$21,524,143)	(\$796,949)	(\$22,321,092) [5]
6	Allocation of common accumulated depreciation:			
	WSC cost center, Regional and NC	(5,048,241)	(116,427)	(5,164,668) [4]
7	Riverbend adjustment--2017 and 2018	0	14,803	14,803 [4]
8	Total accumulated depr. (Sum of L5 thru L7)	<u>(\$26,572,384)</u>	<u>(\$898,573)</u>	<u>(\$27,470,957)</u>

[1] Column (c) minus Column (a), unless otherwise footnoted.

[2] Column (a) plus Column (b), unless otherwise footnoted.

[3] Feasel Exhibit I, Schedule 2-1(a)(1), Column (d), Line 46.

[4] Calculated based on information provided by the Company.

[5] Feasel Exhibit I, Schedule 2-2, Column (a), Line 7.

Docket No. W-354, Sub 360
**CALCULATION OF PLANT IN SERVICE AND
ACCUMULATED DEPRECIATION**
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2-1(b)

CWSNC SEWER OPERATIONS

Line No.	Item	Amount Per Application (a)	Public Staff Adjustments (b)	[1]	Amount Per Public Staff (c)	[2]
	<u>Plant In Service:</u>					
1	Direct plant in service	\$78,901,230	\$1,958,542		\$80,859,772	[3]
2	Allocation of common plant in service: WSC cost center	3,306,883	178,339		3,485,222	[4]
3	Riverbend adjustment--2017 and 2018	0	(9,994)		(9,994)	[4]
4	Total plant in service (Sum of L1 thru L3)	<u>\$82,208,113</u>	<u>\$2,126,887</u>		<u>\$84,335,000</u>	
	<u>Accumulated Depreciation:</u>					
5	Direct accumulated depreciation	(\$17,836,073)	(\$779,810)		(\$18,615,883)	[5]
6	Allocation of common accumulated depreciation: WSC cost center	(2,681,664)	(64,271)		(2,745,935)	[4]
7	Riverbend adjustment--2017 and 2018	0	7,889		7,889	[4]
8	Total accumulated depr. (Sum of L5 thru L7)	<u>(\$20,517,737)</u>	<u>(\$836,191)</u>		<u>(\$21,353,928)</u>	

[1] Column (c) minus Column (a), unless otherwise footnoted.

[2] Column (a) plus Column (b), unless otherwise footnoted.

[3] Feasel Exhibit I, Schedule 2-1(b)(1), Column (d), Line 58.

[4] Calculated based on information provided by the Company.

[5] Feasel Exhibit I, Schedule 2-2, Column (b), Line 7.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

**CALCULATION OF PLANT IN SERVICE AND
ACCUMULATED DEPRECIATION**

For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2-1(c)**BRADFIELD/FAIRFIELD WATER OPERATIONS**

Line No.	Item	Amount Per Application (a)	Public Staff Adjustments [1] (b)	Amount Per Public Staff [2] (c)
	<u>Plant In Service:</u>			
1	Direct plant in service	\$5,062,815	\$71,101	\$5,133,916 [3]
2	Allocation of common plant in service: WSC cost center	752,451	37,709	790,160 [4]
3	Total plant in service (L1+ L2)	<u>\$5,815,266</u>	<u>\$108,810</u>	<u>\$5,924,076</u>
	<u>Accumulated Depreciation:</u>			
4	Direct accumulated depreciation	(\$1,355,807)	\$291,118	(\$1,064,689) [5]
5	Allocation of common accumulated depreciation: WSC cost center	(548,019)	(12,617)	(560,636) [4]
6	Total accumulated depr. (L4 + L5)	<u>(\$1,903,826)</u>	<u>\$278,501</u>	<u>(\$1,625,325)</u>

[1] Column (c) minus Column (a), unless otherwise footnoted.

[2] Column (a) plus Column (b), unless otherwise footnoted.

[3] Feasel Exhibit I, Schedule 2-1(c)(1), Column (d), Line 46.

[4] Calculated based on information provided by the Company.

[5] Feasel Exhibit I, Schedule 2-2, Column (c), Line 7.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

**CALCULATION OF PLANT IN SERVICE AND
ACCUMULATED DEPRECIATION**

For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2-1(d)**BRADFIELD/FAIRFIELD SEWER OPERATIONS**

Line No.	Item	Amount Per Application (a)	Public Staff Adjustments (b)	[1]	Amount Per Public Staff (c)	[2]
	<u>Plant in Service:</u>					
1	Direct plant in service	\$12,322,875	\$368,386		\$12,691,261	[3]
2	Allocation of common plant in service: WSC cost center	609,232	33,045		642,277	[4]
3	Total plant in service (L1+ L2)	<u>\$12,932,107</u>	<u>\$401,431</u>		<u>\$13,333,538</u>	
	<u>Accumulated Depreciation:</u>					
4	Direct accumulated depreciation	(\$2,011,003)	\$12,308		(\$1,998,695)	[5]
5	Allocation of common accumulated depreciation: WSC cost center	(493,938)	(11,960)		(505,898)	[4]
6	Total accumulated depr. (L4 + L5)	<u>(\$2,504,941)</u>	<u>\$348</u>		<u>(\$2,504,593)</u>	

[1] Column (c) minus Column (a), unless otherwise footnoted.

[2] Column (a) plus Column (b), unless otherwise footnoted.

[3] Feasel Exhibit I, Schedule 2-1(d)(1), Column (d), Line 58.

[4] Calculated based on information provided by the Company.

[5] Feasel Exhibit I, Schedule 2-2, Column (d), Line 7.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
CALCULATION OF DIRECT PLANT IN SERVICE
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2-1(a)(1)

CWSNC WATER OPERATIONS

Line No.	Account No.	Item	Amount Per Application (a)	Public Staff Adjustments (b)	Actual Plant Additions (c)	Amount Per Public Staff (d)
			[1]	[2]	[1]	[3]
1	1020	Organization	\$458,055	\$0	\$0	\$458,055
2	1025	Franchises	111,898	0	0	111,898
3	1030	Land & land rights pump	71,187	0	250	71,437
4	1035	Land & land rights water tr.	357,109	0	0	357,109
5	1040	Land & land rights trans.	3,194	0	0	3,194
6	1045	Land & land rights gen. plt.	543,502	0	(30,000)	513,502
7	1050	Struct & improv. src. supply	4,278,791	0	22,852	4,301,643
8	1055	Struct & improv. wtr. trt. plt.	1,330,956	0	18,554	1,349,510
9	1060	Struct & improv. trans. dist.	227,921	0	19,488	247,389
10	1065	Struct & improv. gen. plt.	323,370	0	8,010	331,380
11	1070	Collecting reservoirs	13,139	0	0	13,139
12	1080	Wells & springs	13,750,997	0	2,501	13,753,498
13	1085	Infiltration gallery	45,185	0	0	45,185
14	1090	Supply mains	450,301	0	4,576	464,877
15	1095	Power generation equip.	158,288	0	0	158,288
16	1100	Electric pump equip. src. plt.	2,453,593	0	50,548	2,504,141
17	1105	Electric pump equip. wtp.	8,146,927	0	76,238	8,223,165
18	1110	Electric pump equip. trans.	2,241,609	0	662,855	2,904,464
19	1115	Water treatment equip.	3,818,288	0	496,870	4,315,158
20	1120	Dist. resv. & standpipes	7,652,096	0	264,935	7,917,031
21	1125	Trans. & distr. mains	30,306,733	0	1,416,088	31,722,821
22	1130	Service lines	11,416,974	(1,700)	375,195	11,789,469
23	1135	Meters	5,234,293	0	55,251	5,289,544
24	1140	Meter installations	1,167,483	0	15,913	1,183,396
25	1145	Hydrants	1,191,074	0	8,818	1,199,892
26	1150	Backflow prevention devic.	24,617	0	2,625	27,242
27	1160	Other plt. & misc. equip. src. su.	260	0	0	260
28	1165	Other plt. & misc. equip. wtp.	6,262	0	0	6,262
29	1175	Office struct & improv.	97,514	0	1,294	98,808
30	1180	Office furn. & equip.	358,961	0	3,820	362,781
31	1185	Stores equipment	3,691	0	364	4,055
32	1190	Tool shop & misc. equip.	1,351,355	0	13,847	1,365,202
33	1195	Laboratory equipment	152,134	0	2,240	154,374
34	1200	Power operated equip.	311,229	0	3,007	314,236
35	1205	Communication equip.	321,304	0	30	321,334
36	1210	Misc. equipment	183,506	0	42	183,548
37	1215	Water plant allocated	207,809	0	0	207,809
38	1220	Other tangible plt. water	36,650	0	0	36,650
39	1555	Transportation equip.	0	0	0	0
40	1580	Mainframe computer - wtr	0	0	0	0
41	1585	Mini computer - wtr	(7,016)	0	0	(7,016)
42	1590	Comp. system cost - wtr	59,691	0	0	59,691
43	1595	Micro system cost - wtr	0	0	0	0
44	1805	Plt. held for future use	0	(95,528)	0	(95,528)
45		Pro forma plant additions	0	0	0	0
46		Total plant in service (Sum of L1 thru L45)	<u>\$98,867,930</u>	<u>(\$97,228)</u>	<u>\$3,496,191</u>	<u>\$102,266,893</u>

[1] Per examination of Company's financial records.

[2] Feasel Exhibit I, Schedule 2-1(a)(2), column (d).

[3] Sum of Column (a) through Column (c).

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
CALCULATION OF DIRECT PLANT IN SERVICE
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2-1(b)(1)

CWSNC SEWER OPERATIONS

Line No.	Account No.	Item	Amount Per Application (a)	Public Staff Adjustments (b)	Actual Plant Additions (c)	Amount Per Public Staff (d)
			[1]	[2]	[1]	[3]
1	1245	Organization	\$907,534	\$0	\$0	\$907,534
2	1250	Franchises intang. pit.	127,476	0	0	127,476
3	1270	Land & land rights trmnt pit	39,167	0	0	39,167
4	1275	Land & land rights reclaim.	1,150	0	0	1,150
5	1285	Land & land rights gen. pit.	213,811	0	0	213,811
6	1290	Struct/improv. coll. pit.	67,180	0	83	67,263
7	1295	Struct/improv. pump pit. ls.	6,297,794	0	841,667	7,139,461
8	1300	Struct/improv. treat. pit.	19,093,156	8,022	586,734	19,687,912
9	1305	Struct/improv. reclaim. wtr.	3,271	0	0	3,271
10	1310	Struct/improv. reclaim. wtr.	179,730	0	0	179,730
11	1315	Struct/improv. gen. pit.	1,655,397	0	7,965	1,663,362
12	1320	Power gen. equip. coll. pit.	0	0	215,248	215,248
13	1325	Power gen. equip. pump pit.	52,159	0	0	52,159
14	1330	Power gen. equip. treat. pit.	209,654	0	75	209,729
15	1345	Sewer force main/serv. lin.	3,522,930	0	32,562	3,555,492
16	1350	Sewer gravity main	16,279,148	0	342,523	16,621,671
17	1353	Manholes	730,097	0	8,672	738,769
18	1355	Special coll. structures	6,502	0	421	6,923
19	1360	Services to customers	1,389,914	0	116,382	1,506,296
20	1365	Flow measure devices	106,936	0	15,346	122,282
21	1370	Flow measure install	1,010	0	0	1,010
22	1375	Receiving wells	89,127	0	317	89,444
23	1380	Pumping equipment pump pit.	3,535,514	0	186,137	3,721,651
24	1385	Pumping equipment reclaim.	27,636	0	2,465	30,101
25	1390	Pumping equipment rcl. wtr.	36,108	0	8,205	44,313
26	1395	Treat./disp. equip. lagoon	579,636	0	(1,816)	577,820
27	1400	Treat./disp. equip. trt. pit.	18,738,569	0	80,445	18,819,014
28	1405	Treat./disp. equip. rcl. wtr.	13,251	0	209	13,460
29	1410	Plant sewers treat. pit.	3,335,980	0	1,207	3,337,197
30	1415	Plant sewers reclaim wtr.	5,155	0	0	5,155
31	1420	Outfall lines	98,563	0	0	98,563
32	1425	Other pit. tangible	3,676	0	0	3,676
33	1430	Other pit. collection	21,142	0	0	21,142
34	1435	Other pit. pump	48,131	0	0	48,131
35	1440	Other pit. treatment	36,998	0	0	36,998
36	1445	Other pit. reclaim wtr. trt.	650	0	0	650
37	1450	Other pit. reclaim wtr. dis.	460	0	0	460
38	1455	Office struct & improv.	30,218	0	4,000	34,218
39	1460	Office furn. & equip.	28,965	0	589	29,554
40	1465	Stores equipment	4,341	0	0	4,341
41	1470	Tool shop & misc. equip.	185,673	0	4,209	189,882
42	1475	Laboratory equipment	125,332	0	7,131	132,463
43	1480	Power operated equip.	360,651	0	4,352	365,003
44	1485	Communication equip.	73,595	0	0	73,595
45	1490	Misc equip. sewer	19,105	0	0	19,105
46	1495	Sewer plant allocated	526,952	0	0	526,952
47	1500	Other tangible pit. sewer	1,776	0	0	1,776
48	1535	Reuse dist. reservoirs	3,417	0	0	3,417
49	1540	Reuse transmission & dist.	55,225	0	0	55,225
50	1555	Transportation equip.	0	0	0	0
51	1575	Desktop computer - wtr	0	0	0	0
52	1580	Mainframe computer - wtr	0	0	0	0
53	1585	Mini computer - wtr	(4,177)	0	0	(4,177)
54	1590	Comp. system cost - wtr	35,535	0	0	35,535
55	1595	Micro system cost - wtr	0	0	0	0
56	1805	Pit. held for future use	0	(514,608)	0	(514,608)
57		Pro forma plant additions	0	0	0	0
58		Total plant in service (Sum of L1 thru L57)	<u>\$78,901,230</u>	<u>(\$506,586)</u>	<u>\$2,465,128</u>	<u>\$80,859,772</u>

- [1] Per examination of Company's financial records.
[2] Feasel Exhibit I, Schedule 2-1(b)(2), column (d).
[3] Sum of Column (a) through Column (c).

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
CALCULATION OF DIRECT PLANT IN SERVICE
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2-1(c)(1)

BRADFIELD/FAIRFIELD WATER OPERATIONS

Line No.	Account No.	Item	Amount Per Application [1] (a)	Public Staff Adjustments (b)	Actual Plant Additions [1] (c)	Amount Per Public Staff [2] (d)
1	1020	Organization	\$100,321	\$0	\$0	\$100,321
2	1025	Franchises	29,653	0	0	29,653
3	1030	Land & land rights pump	0	0	0	0
4	1035	Land & land rights water tr.	0	0	0	0
5	1040	Land & land rights trans.	0	0	0	0
6	1045	Land & land rights gen. plt.	431	0	0	431
7	1050	Struct & improv. src. supply	162,909	0	0	162,909
8	1055	Struct & improv. wtr. int. plt.	82,609	0	131	82,740
9	1060	Struct & improv. trans. dist.	461	0	0	461
10	1065	Struct & improv. gen. plt.	1,671	0	0	1,671
11	1070	Collecting reservoirs	0	0	0	0
12	1080	Wells & springs	497,704	0	125	497,829
13	1085	Infiltration gallery	0	0	0	0
14	1090	Supply mains	839	0	0	839
15	1095	Power generation equip.	0	0	0	0
16	1100	Electric pump equip. src. plt.	37,211	0	2,784	39,995
17	1105	Electric pump equip. wtp.	346,128	0	83	346,211
18	1110	Electric pump equip. trans.	15,204	0	15,884	31,088
19	1115	Water treatment equip.	123,563	0	4,276	127,839
20	1120	Dist. resv. & standpipes	745,820	0	4,613	750,433
21	1125	Trans. & distr. mains	1,764,241	0	3,942	1,768,183
22	1130	Service lines	604,042	0	29,195	633,237
23	1135	Meters	118,048	0	4,137	122,185
24	1140	Meter installations	131,945	0	2,920	134,865
25	1145	Hydrants	161,575	0	0	161,575
26	1150	Backflow prevention devic.	98	0	0	98
27	1160	Other plt. & misc. equip. src. su.	0	0	0	0
28	1165	Other plt. & misc. equip. wtp.	0	0	0	0
29	1175	Office struct & improv.	6,790	0	0	6,790
30	1180	Office furn. & equip.	3,731	0	182	3,913
31	1185	Stores equipment	235	0	0	235
32	1190	Tool shop & misc. equip.	90,038	0	2,720	92,758
33	1195	Laboratory equipment	11,419	0	0	11,419
34	1200	Power operated equip.	3,355	0	109	3,464
35	1205	Communication equip.	22,756	0	0	22,756
36	1210	Misc. equipment	18	0	0	18
37	1215	Water plant allocated	0	0	0	0
38	1220	Other tangible plt. water	0	0	0	0
39	1555	Transportation equip.	0	0	0	0
40	1580	Mainframe computer - wtr	0	0	0	0
41	1585	Mini computer - wtr	0	0	0	0
42	1590	Comp. system cost - wtr	0	0	0	0
43	1595	Micro system cost - wtr	0	0	0	0
44	1805	Plt. held for future use	0	0	0	0
45		Pro forma plant additions	0	0	0	0
46		Total plant in service (Sum of L1 thru L45)	\$5,062,815	\$0	\$71,101	\$5,133,916

[1] Per examination of Company's financial records.

[2] Sum of Column (a) through Column (c).

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
CALCULATION OF DIRECT PLANT IN SERVICE
For The Test Year Ended December 31, 2017

Public Staff
Feasit Exhibit I
Schedule 2-1(d)(1)

BRADFIELD/FAIRFIELD SEWER OPERATIONS

Line No.	Account No.	Item	Amount Per Application (a) [1]	Public Staff Adjustments (b)	Actual Plant Additions (c) [1]	Amount Per Public Staff (d) [2]
1	1245	Organization	\$16,686	\$0	\$0	\$16,686
2	1250	Franchises intang. plt.	20,351	0	0	20,351
3	1270	Land & land rights trmnt plt	0	0	0	0
4	1275	Land & land rights reclaim.	0	0	0	0
5	1285	Land & land rights gen. plt.	0	0	0	0
6	1290	Struct/improv. coll. plt.	0	0	0	0
7	1295	Struct/improv. pump plt. ls.	618,795	0	271,910	890,705
8	1300	Struct/improv. treat. plt.	1,982,728	0	2,379	1,985,107
9	1305	Struct/improv. reclaim. wtp.	0	0	0	0
10	1310	Struct/improv. reclaim. wtr.	2,477	0	0	2,477
11	1315	Struct/improv. gen. plt.	239,935	0	5,603	245,538
12	1320	Power gen. equip. coll. plt.	0	0	0	0
13	1325	Power gen. equip. pump plt.	41,076	0	0	41,076
14	1330	Power gen. equip. treat. plt.	0	0	0	0
15	1345	Sewer force main/serv. lin.	178,168	0	15,830	193,998
16	1350	Sewer gravity main	5,210,150	0	2,368	5,212,518
17	1353	Manholes	9,008	0	7,244	16,252
18	1355	Special coll. structures	775	0	0	775
19	1360	Services to customers	36,615	0	725	37,341
20	1365	Flow measure devices	17,011	0	0	17,011
21	1370	Flow measure install	0	0	0	0
22	1375	Receiving wells	0	0	0	0
23	1380	Pumping equipment pump plt.	687,495	0	42,473	729,968
24	1385	Pumping equipment reclaim.	234	0	0	234
25	1390	Pumping equipment rcl. wtr.	0	0	0	0
26	1395	Treat./disp. equip. lagoon	56	0	0	56
27	1400	Treat./disp. equip. trt. plt.	2,770,519	0	11,614	2,782,133
28	1405	Treat./disp. equip. rcl. wtp.	0	0	0	0
29	1410	Plant sewers treat. plt.	379,833	0	5,535	385,368
30	1415	Plant sewers reclaim wtp.	0	0	0	0
31	1420	Outfall lines	15,379	0	0	15,379
32	1425	Other plt. tangible	0	0	0	0
33	1430	Other plt. collection	(224)	0	0	(224)
34	1435	Other plt. pump	2,873	0	0	2,873
35	1440	Other plt. treatment	0	0	0	0
36	1445	Other plt. reclaim wtr. trt.	5,189	0	0	5,189
37	1450	Other plt. reclaim wtr. dis.	0	0	0	0
38	1455	Office struct & improv.	10,136	0	0	10,136
39	1460	Office furn. & equip.	448	0	251	699
40	1465	Stores equipment	2,752	0	0	2,752
41	1470	Tool shop & misc. equip.	10,232	0	1,910	12,142
42	1475	Laboratory equipment	6,227	0	0	6,227
43	1480	Power operated equip.	47,069	0	0	47,069
44	1485	Communication equip.	993	0	0	993
45	1490	Misc equip. sewer	8,603	0	0	8,603
46	1495	Sewer plant allocated	0	0	0	0
47	1500	Other tangible plt. sewer	0	0	0	0
48	1535	Reuse dist. reservoirs	2,763	0	0	2,763
49	1540	Reuse transmission & dist.	(1,477)	0	543	(934)
50	1555	Transportation equip.	0	0	0	0
51	1575	Desktop computer - wtr	0	0	0	0
52	1580	Mainframe computer - wtr	0	0	0	0
53	1585	Mini computer - wtr	0	0	0	0
54	1590	Comp. system cost - wtr	0	0	0	0
55	1595	Micro system cost - wtr	0	0	0	0
56	1805	Plt. held for future use	0	0	0	0
57		Pro forma plant additions	0	0	0	0
58		Total plant in service (Sum of L1 thru L57)	\$12,322,875	\$0	\$368,386	\$12,691,261

[1] Per examination of Company's financial records.
[2] Sum of Column (a) through Column (c).

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO DIRECT PLANT IN SERVICE
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2-1(a)(2)

CWSNC WATER OPERATIONS

Line No.	Account No.	Item	Plant Held For Future Use (1) (a)	Capitalized Legal Fees (b)	Riverbend Adjustments (1) (c)	Adjustments Amount Per Public Staff (2) (d)
1	1020	Organization	\$0	\$0	\$0	\$0
2	1025	Franchises	0	0	0	0
3	1030	Land & land rights pump	0	0	0	0
4	1035	Land & land rights water tr.	0	0	0	0
5	1040	Land & land rights trans.	0	0	0	0
6	1045	Land & land rights gen. plt.	0	0	0	0
7	1050	Struct & improv. src. supply	0	0	0	0
8	1055	Struct & improv. wtr. trt. plt.	0	0	0	0
9	1060	Struct & improv. trans. dist.	0	0	0	0
10	1065	Struct & improv. gen. plt.	0	0	0	0
11	1070	Collecting reservoirs	0	0	0	0
12	1080	Wells & springs	0	0	0	0
13	1085	Infiltration gallery	0	0	0	0
14	1090	Supply mains	0	0	0	0
15	1095	Power generation equip.	0	0	0	0
16	1100	Electric pump equip. src. plt.	0	0	0	0
17	1105	Electric pump equip. wtp.	0	0	0	0
18	1110	Electric pump equip. trans.	0	0	0	0
19	1115	Water treatment equip.	0	0	0	0
20	1120	Dist. resv. & standpipes	0	0	0	0
21	1125	Trans. & distr. mains	0	0	0	0
22	1130	Service lines	0	0	(1,700)	(1,700)
23	1135	Meters	0	0	0	0
24	1140	Meter installations	0	0	0	0
25	1145	Hydrants	0	0	0	0
26	1150	Backflow prevention devic.	0	0	0	0
27	1160	Other plt. & misc. equip. src. su.	0	0	0	0
28	1165	Other plt. & misc. equip. wtp.	0	0	0	0
29	1175	Office struct & improv.	0	0	0	0
30	1180	Office furn. & equip.	0	0	0	0
31	1185	Stores equipment	0	0	0	0
32	1190	Tool shop & misc. equip.	0	0	0	0
33	1195	Laboratory equipment	0	0	0	0
34	1200	Power operated equip.	0	0	0	0
35	1205	Communication equip.	0	0	0	0
36	1210	Misc. equipment	0	0	0	0
37	1215	Water plant allocated	0	0	0	0
38	1220	Other tangible plt. water	0	0	0	0
39	1555	Transportation equip.	0	0	0	0
40	1580	Mainframe computer - wtr	0	0	0	0
41	1585	Mini computer - wtr	0	0	0	0
42	1590	Comp. system cost - wtr	0	0	0	0
43	1595	Micro system cost - wtr	0	0	0	0
44	1805	Plt. held for future use	(95,528)	0	0	(95,528)
45		Pro forma plant additions	0	0	0	0
46		Total plant in service (Sum of L1 thru L45)	(\$95,528)	\$0	(\$1,700)	(\$97,228)

[1] Per examination of Company's financial records.

[2] Sum of Column (a) through Column (c)

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO DIRECT PLANT IN SERVICE
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2-1(b)(2)

CWSNC SEWER OPERATIONS

Line No.	Account No.	Item	Plant Held For Future Use [1] (a)	Capitalized Legal Fees [1] (b)	Riverbend Adjustments (c)	Adjustments Amount Per Public Staff [2] (d)
1	1245	Organization	\$0	\$0	\$0	\$0
2	1250	Franchises intang. plt.	0	0	0	0
3	1270	Land & land rights trmnt plt	0	0	0	0
4	1275	Land & land rights reclaim.	0	0	0	0
5	1285	Land & land rights gen. plt.	0	0	0	0
6	1290	Struct/improv. coll. plt.	0	0	0	0
7	1295	Struct/improv. pump plt. ls.	0	0	0	0
8	1300	Struct/improv. treat. plt.	0	8,022	0	8,022
9	1305	Struct/improv. reclaim. wtp.	0	0	0	0
10	1310	Struct/improv. reclaim. wtr.	0	0	0	0
11	1315	Struct/improv. gen. plt.	0	0	0	0
12	1320	Power gen. equip. coll. plt.	0	0	0	0
13	1325	Power gen. equip. pump plt.	0	0	0	0
14	1330	Power gen. equip. treat. plt.	0	0	0	0
15	1345	Sewer force main/serv. ln.	0	0	0	0
16	1350	Sewer gravity main	0	0	0	0
17	1353	Manholes	0	0	0	0
18	1355	Special coll. structures	0	0	0	0
19	1360	Services to customers	0	0	0	0
20	1365	Flow measure devices	0	0	0	0
21	1370	Flow measure install	0	0	0	0
22	1375	Receiving wells	0	0	0	0
23	1380	Pumping equipment pump plt.	0	0	0	0
24	1385	Pumping equipment reclaim.	0	0	0	0
25	1390	Pumping equipment rd. wtr.	0	0	0	0
26	1395	Treat./disp. equip. lagoon	0	0	0	0
27	1400	Treat./disp. equip. trl. plt.	0	0	0	0
28	1405	Treat./disp. equip. rct. wtp.	0	0	0	0
29	1410	Plant sewers treat. plt.	0	0	0	0
30	1415	Plant sewers reclaim wtp.	0	0	0	0
31	1420	Outfall lines	0	0	0	0
32	1425	Other plt. tangible	0	0	0	0
33	1430	Other plt. collection	0	0	0	0
34	1435	Other plt. pump	0	0	0	0
35	1440	Other plt. treatment	0	0	0	0
36	1445	Other plt. reclaim wtr. trl.	0	0	0	0
37	1450	Other plt. reclaim wtr. dis.	0	0	0	0
38	1455	Office struct & improv.	0	0	0	0
39	1460	Office furn. & equip.	0	0	0	0
40	1465	Stores equipment	0	0	0	0
41	1470	Tool shop & misc. equip.	0	0	0	0
42	1475	Laboratory equipment	0	0	0	0
43	1480	Power operated equip.	0	0	0	0
44	1485	Communication equip.	0	0	0	0
45	1490	Misc equip. sewer	0	0	0	0
46	1495	Sewer plant allocated	0	0	0	0
47	1500	Other tangible plt. sewer	0	0	0	0
48	1535	Reuse dist. reservoirs	0	0	0	0
49	1540	Reuse transmission & dist.	0	0	0	0
50	1555	Transportation equip.	0	0	0	0
51	1575	Desktop computer - wtr	0	0	0	0
52	1580	Mainframe computer - wtr	0	0	0	0
53	1585	Mini computer - wtr	0	0	0	0
54	1590	Comp. system cost - wtr	0	0	0	0
55	1595	Micro system cost - wtr	0	0	0	0
56	1805	Plt. held for future use	(514,608)	0	0	(514,608)
57		Pro forma plant additions	0	0	0	0
58		Total plant in service (Sum of L1 thru L57)	<u>(514,608)</u>	<u>\$8,022</u>	<u>\$0</u>	<u>(\$506,586)</u>

[1] Per examination of Company's financial records.
[2] Sum of Column (a) through Column (c)

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO DIRECT PLANT IN SERVICE
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2-1(c)(2)

BRADFIELD/FAIRFIELD WATER OPERATIONS

Line No.	Account No.	Item	Plant Held For Future Use [1] (a)	Capitalized Legal Fees (b)	Riverbend Adjustments [1] (c)	Adjustments Amount Per Public Staff [2] (d)
1	1020	Organization	\$0	\$0	\$0	\$0
2	1025	Franchises	0	0	0	0
3	1030	Land & land rights pump	0	0	0	0
4	1035	Land & land rights water tr.	0	0	0	0
5	1040	Land & land rights trans.	0	0	0	0
6	1045	Land & land rights gen. plt.	0	0	0	0
7	1050	Struct & improv. src. supply	0	0	0	0
8	1055	Struct & improv. wtr. trt. plt.	0	0	0	0
9	1060	Struct & improv. trans. dist.	0	0	0	0
10	1065	Struct & improv. gen. plt.	0	0	0	0
11	1070	Collecting reservoirs	0	0	0	0
12	1080	Wells & springs	0	0	0	0
13	1085	Infiltration gallery	0	0	0	0
14	1090	Supply mains	0	0	0	0
15	1095	Power generation equip.	0	0	0	0
16	1100	Electric pump equip. src. plt.	0	0	0	0
17	1105	Electric pump equip. wtp.	0	0	0	0
18	1110	Electric pump equip. trans.	0	0	0	0
19	1115	Water treatment equip.	0	0	0	0
20	1120	Dist. resv. & standpipes	0	0	0	0
21	1125	Trans. & distr. mains	0	0	0	0
22	1130	Service lines	0	0	0	0
23	1135	Meters	0	0	0	0
24	1140	Meter installations	0	0	0	0
25	1145	Hydrants	0	0	0	0
26	1150	Backflow prevention devic.	0	0	0	0
27	1160	Other plt. & misc. equip. src. su.	0	0	0	0
28	1165	Other plt. & misc. equip. wtp.	0	0	0	0
29	1175	Office struct & improv.	0	0	0	0
30	1180	Office furn. & equip.	0	0	0	0
31	1185	Stores equipment	0	0	0	0
32	1190	Tool shop & misc. equip.	0	0	0	0
33	1195	Laboratory equipment	0	0	0	0
34	1200	Power operated equip.	0	0	0	0
35	1205	Communication equip.	0	0	0	0
36	1210	Misc. equipment	0	0	0	0
37	1215	Water plant allocated	0	0	0	0
38	1220	Other tangible plt. water	0	0	0	0
39	1555	Transportation equip.	0	0	0	0
40	1580	Mainframe computer - wtr	0	0	0	0
41	1585	Mini computer - wtr	0	0	0	0
42	1590	Comp. system cost - wtr	0	0	0	0
43	1595	Micro system cost - wtr	0	0	0	0
44	1805	Plt. held for future use	0	0	0	0
45		Pro forma plant additions	0	0	0	0
46		Total plant in service (Sum of L1 thru L45)	\$0	\$0	\$0	\$0

[1] Per examination of Company's financial records.

[2] Sum of Column (a) through Column (c)

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO DIRECT PLANT IN SERVICE
For The Test Year Ended December 31, 2017

Public Staff
Feasit Exhibit I
Schedule 2-1(d)(2)

BRADFIELD/FAIRFIELD SEWER OPERATIONS

Line No.	Account No.	Item	Plant Held For Future Use [1] (a)	Capitalized Legal Fees (b)	Riverbend Adjustments [1] (c)	Adjustments Amount Per Public Staff [2] (d)
1	1245	Organization	\$0	\$0	\$0	\$0
2	1250	Franchises intang. plt.	0	0	0	0
3	1270	Land & land rights trmnt plt	0	0	0	0
4	1275	Land & land rights reclaim.	0	0	0	0
5	1285	Land & land rights gen. plt.	0	0	0	0
6	1290	Struct/improv. coll. plt.	0	0	0	0
7	1295	Struct/improv. pump plt. ls.	0	0	0	0
8	1300	Struct/improv. treat. plt.	0	0	0	0
9	1305	Struct/improv. reclaim. wtp.	0	0	0	0
10	1310	Struct/improv. reclaim. wtr.	0	0	0	0
11	1315	Struct/improv. gen. plt.	0	0	0	0
12	1320	Power gen. equip. coll. plt.	0	0	0	0
13	1325	Power gen. equip. pump plt.	0	0	0	0
14	1330	Power gen. equip. treat. plt.	0	0	0	0
15	1345	Sewer force main/serv. lin.	0	0	0	0
16	1350	Sewer gravity main	0	0	0	0
17	1353	Manholes	0	0	0	0
18	1355	Special coll. structures	0	0	0	0
19	1360	Services to customers	0	0	0	0
20	1365	Flow measure devices	0	0	0	0
21	1370	Flow measure install	0	0	0	0
22	1375	Receiving wells	0	0	0	0
23	1380	Pumping equipment pump plt.	0	0	0	0
24	1385	Pumping equipment reclaim.	0	0	0	0
25	1390	Pumping equipment rcl. wtr.	0	0	0	0
26	1395	Treat./disp. equip. lagoon	0	0	0	0
27	1400	Treat./disp. equip. trt. plt.	0	0	0	0
28	1405	Treat./disp. equip. rct. wtp.	0	0	0	0
29	1410	Plant sewers treat. plt.	0	0	0	0
30	1415	Plant sewers reclaim wtp.	0	0	0	0
31	1420	Outfall lines	0	0	0	0
32	1425	Other plt. tangible	0	0	0	0
33	1430	Other plt. collection	0	0	0	0
34	1435	Other plt. pump	0	0	0	0
35	1440	Other plt. treatment	0	0	0	0
36	1445	Other plt. reclaim wtr. trt.	0	0	0	0
37	1450	Other plt. reclaim wtr. dis.	0	0	0	0
38	1455	Office struct & improv.	0	0	0	0
39	1460	Office furn. & equip.	0	0	0	0
40	1465	Stores equipment	0	0	0	0
41	1470	Tool shop & misc. equip.	0	0	0	0
42	1475	Laboratory equipment	0	0	0	0
43	1480	Power operated equip.	0	0	0	0
44	1485	Communication equip.	0	0	0	0
45	1490	Misc equip. sewer	0	0	0	0
46	1495	Sewer plant allocated	0	0	0	0
47	1500	Other tangible plt. sewer	0	0	0	0
48	1535	Reuse dist. reservoirs	0	0	0	0
49	1540	Reuse transmission & dist.	0	0	0	0
50	1555	Transportation equip.	0	0	0	0
51	1575	Desktop computer - wtr	0	0	0	0
52	1580	Mainframe computer - wtr	0	0	0	0
53	1585	Mini computer - wtr	0	0	0	0
54	1590	Comp. system cost - wtr	0	0	0	0
55	1595	Micro system cost - wtr	0	0	0	0
56	1605	Plt. held for future use	0	0	0	0
57		Pro forma plant additions	0	0	0	0
58		Total plant in service (Sum of L1 thru L57)	\$0	\$0	\$0	\$0

[1] Per examination of Company's financial records.
[2] Sum of Column (a) through Column (c)

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO DIRECT ACCUMULATED DEPRECIATION
For The Test Year Ended December 31, 2017.

Public Staff
Feasel Exhibit I
Schedule 2-2

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)
1	Direct accumulated depreciation per application	<u>(\$21,524,143)</u>	<u>(\$17,836,073)</u>	<u>(\$1,355,807)</u>	<u>(\$2,011,003)</u>
2	Adjustment to include actual general ledger A/D additions through 6/30/2018	(793,413) [1]	(671,783) [1]	(25,322) [1]	(81,738) [1]
3	Adjustments to include A/D for additional capitalized fees	0	(201) [1]	0	0
4	Adjustment to remove riverbend accumulated depreciation	3 [1]	0	0	0
5	Adjustment to reflect annual level of depreciation	<u>(3,539) [1]</u>	<u>(107,826) [1]</u>	<u>316,440 [1]</u>	<u>94,046 [1]</u>
6	Adjustment to accumulated depreciation (Sum of L2 thru L5)	<u>(796,949)</u>	<u>(779,810)</u>	<u>291,118</u>	<u>12,308</u>
7	Direct accumulated depreciation per Public Staff (L1 + L6)	<u>(\$22,321,092)</u>	<u>(\$18,615,883)</u>	<u>(\$1,064,689)</u>	<u>(\$1,998,695)</u>

[1] Per examination of Company's financial records.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
CALCULATION OF CASH WORKING CAPITAL
For The Test Year Ended December 31, 2017

Public Staff
Feasibel Exhibit I
Schedule 2-3

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BFF/FFH Water (c)	BFF/FFH Sewer (d)
Cash Working Capital:					
1	Maintenance expenses, less purchased water and sewer	\$5,127,749 [1]	\$4,622,623 [5]	\$530,192 [9]	\$799,492 [13]
2	General expenses	2,980,201 [2]	1,775,963 [6]	358,786 [10]	373,507 [14]
3	Total cash working capital expenses (L1 + L2)	<u>\$ 8,107,950</u>	<u>\$6,398,586</u>	<u>\$888,978</u>	<u>\$1,172,999</u>
4	Cash working capital (L3 x 1/8)	<u>1,013,494</u>	<u>799,823</u>	<u>111,122</u>	<u>146,625</u>
Average Tax Accruals:					
5	Property taxes	134,370 [3]	79,520 [7]	9,645 [11]	10,040 [15]
6	Average accrual (L5 x 1/2)	<u>67,185</u>	<u>39,760</u>	<u>4,823</u>	<u>5,020</u>
7	Regulatory fee	23,831 [4]	17,609 [8]	1,504 [12]	2,462 [16]
8	Average accrual (L7 x 1/5)	<u>4,766</u>	<u>3,562</u>	<u>301</u>	<u>492</u>
9	Total tax accrual (L6 + L8)	<u>71,951</u>	<u>43,322</u>	<u>5,124</u>	<u>5,512</u>
10	Total cash working capital (L4 - L9)	<u>\$941,543</u>	<u>\$756,501</u>	<u>\$105,998</u>	<u>\$141,113</u>

- [1] Feasibel Exhibit I, Schedule 3(a), Column (c), Line 15 minus Line 7.
[2] Feasibel Exhibit I, Schedule 3(a), Column (c), Line 24.
[3] Feasibel Exhibit I, Schedule 3(a), Column (c), Line 30.
[4] Feasibel Exhibit I, Schedule 3(a), Column (c), Line 32.
[5] Feasibel Exhibit I, Schedule 3(b), Column (c), Line 15 minus Line 7.
[6] Feasibel Exhibit I, Schedule 3(b), Column (c), Line 24.
[7] Feasibel Exhibit I, Schedule 3(b), Column (c), Line 30.
[8] Feasibel Exhibit I, Schedule 3(b), Column (c), Line 32.
[9] Feasibel Exhibit I, Schedule 3(c), Column (c), Line 15 minus Line 7.

- [10] Feasibel Exhibit I, Schedule 3(c), Column (c), Line 24.
[11] Feasibel Exhibit I, Schedule 3(c), Column (c), Line 30.
[12] Feasibel Exhibit I, Schedule 3(c), Column (c), Line 32.
[13] Feasibel Exhibit I, Schedule 3(d), Column (c), Line 15 minus Line 7.
[14] Feasibel Exhibit I, Schedule 3(d), Column (c), Line 24.
[15] Feasibel Exhibit I, Schedule 3(d), Column (c), Line 30.
[16] Feasibel Exhibit I, Schedule 3(d), Column (c), Line 32.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
**ADJUSTMENT TO CONTRIBUTIONS IN AID OF
CONSTRUCTION, NET OF AMORTIZATION**
For The Test Year Ended December 31, 2017

Public Staff
Feasibility Exhibit I
Schedule 2-4

Line No.	Item	CWSNC Water Operations			[2]	CWSNC Sewer Operations			[3]
		CIAC (a)	Accumulated Amortization (b)	CIAC, Net of Amortization (c)		CIAC (d)	Accumulated Amortization (e)	CIAC, Net of Amortization (f)	
1	CIAC and accumulated amortization per application	(\$28,522,560)	\$9,808,533	(\$18,714,027)		(\$28,121,121)	\$9,448,675	(\$18,672,446)	
2	Adjustment to include actual general ledger additions through 6/30/2018	(76,719) [1]	341,221 [1]	264,502		(36,793) [1]	309,789 [1]	272,996	
3	Adjustment to remove riverbend accumulated amortization	2,250 [1]	(38) [1]	2,213		0	0	0	
4	Adjustment to reflect annual level of amortization	0	88,059 [1]	88,059		0	157,290 [1]	157,290	
5	Adjustment to CIAC (Sum of L2 thru L4)	(74,469)	429,243	354,774		(36,793)	467,079	430,286	
6	CIAC per Public Staff (L1 + L5)	(\$28,597,029)	\$10,237,776	(\$18,359,254)		(\$28,157,914)	\$9,915,754	(\$18,242,160)	

[1] Per examination of Company's financial records.

[2] Column (a) plus Column (b).

[3] Column (d) plus Column (e).

[4] Column (a) plus Column (h).

[5] Column (i) plus Column (k).

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
**ADJUSTMENT TO CONTRIBUTIONS IN AID OF
CONSTRUCTION, NET OF AMORTIZATION**
For The Test Year Ended December 31, 2017

Public Staff
Feasibility Exhibit I
Schedule 2-4

Line No.	Item	BF/FH Water Operations			[4]	BF/FH Sewer Operations			[5]
		CIAC (g)	Accumulated Amortization (h)	CIAC, Net of Amortization (i)		CIAC (j)	Accumulated Amortization (k)	CIAC, Net of Amortization (l)	
1	CIAC and accumulated amortization per application	(\$2,221,481)	\$1,093,979	(\$1,127,502)		(\$7,088,979)	\$2,789,038	(\$4,299,941)	
2	Adjustment to include actual general ledger additions through 6/30/2018	(5,795) [1]	19,343 [1]	13,548		0	72,322 [1]	72,322	
3	Adjustment to remove riverbend accumulated amortization	0	0	0		0	0	0	
4	Adjustment to reflect annual level of amortization	0	10,483 [1]	10,483		0	36,834 [1]	36,834	
5	Adjustment to CIAC (Sum of L2 thru L4)	(5,795)	29,826	24,031		0	109,156	109,156	
6	CIAC per Public Staff (L1 + L5)	(\$2,227,276)	\$1,123,805	(\$1,103,471)		(\$7,088,979)	\$2,898,194	(\$4,190,785)	

[1] Per examination of Company's financial records.

[2] Column (a) plus Column (b).

[3] Column (d) plus Column (e).

[4] Column (g) plus Column (h).

[5] Column (j) plus Column (k).

CAROLINA WATER SERVICE, INC. OF NC
Docket No. W-354, Sub 360
**CALCULATION OF ACCUMULATED DEFERRED
INCOME TAXES**
For The Test Year Ended December 31, 2017
CWSNC UNIFORM OPERATIONS

Public Staff
Fessel Exhibit I
Schedule 2-5(a)

Line No.	Item	Total ADIT Per Application [1]	Public Staff Adjustments [2]	Amount To Be Allocated Per Public Staff [5]	CWS Uniform Water [8]	CWS Uniform Sewer [8]
		(a)	(b)	(c)	(d)	(e)
1	ACCUM DEF INCOME TAX-FED	\$610,658	\$0	\$610,658	\$382,760	\$227,898
2	DEF FED TAX - CIAC PRE 19	287,638	0	287,638	180,329	107,309
3	DEF FED TAX - TAP FEE POS	2,198,816	0	2,198,816	1,378,218	820,598
4	DEF FED TAX - RATE CASE	(101,593)	23,829	(78,169) [8]	(48,896) [9]	(29,173) [9]
5	DEF FED TAX - DEF MAINT	(258,893)	203,602	(155,291) [6]	(154,002) [10]	(1,289) [10]
6	DEF FED TAX - ORGN EXP	(208,987)	0	(208,987)	(130,993)	(77,994)
7	DEF FED TAX - BAD DEBT	135,427	0	135,427	84,886	50,541
8	DEF FED TAX - CAB WOODS GOS	27,685	0	27,685	17,353	10,332
9	DEF FED TAX - DEPRECIATIO	(10,596,669)	0	(10,596,669)	(5,982,679) [11]	(4,613,790) [11]
10	DEF FED TAX - NOL	2,878,421	0	3,876,421	2,429,741	1,446,680
11	Total Federal ADIT (Sum of L1 thru L10)	<u>(4,128,842)</u>	<u>227,431</u>	<u>(3,902,411)</u>	<u>(1,843,583)</u>	<u>(2,058,828)</u>
12	ACCUM DEF INCOME TAX - ST	(310,632)	0	(310,632)	(194,704)	(115,928)
13	DEF ST TAX - CIAC PRE 198	312,312	0	312,312	195,757	116,555
14	DEF ST TAX - TAP FEE POS	703,756	0	703,756	441,114	262,642
15	DEF ST TAX - RATE CASE	(15,022)	3,510	(11,512) [7]	(7,216) [9]	(4,296) [9]
16	DEF ST TAX - DEF MAINT	(52,856)	29,986	(22,870) [7]	(22,880) [10]	(180) [10]
17	DEF ST TAX - ORGN EXP	(111,524)	0	(111,524)	(69,603)	(41,921)
18	DEF ST TAX - BAD DEBT	9,011	0	9,011	5,648	3,363
19	DEF ST TAX - CAB WOODS GOS	4,077	0	4,077	2,555	1,522
20	DEF ST TAX - DEPRECIATION	(1,352,312)	0	(1,352,312)	(763,515) [11]	(588,797) [11]
21	DEF ST TAX - NOL	289,432	0	289,432	181,418	108,018
22	Total State ADIT (Sum of L12 thru L21)	<u>(523,758)</u>	<u>33,496</u>	<u>(490,262)</u>	<u>(231,526)</u>	<u>(258,734)</u>
23	Total Direct ADIT (L11 + L22)	<u>(4,653,600)</u>	<u>260,927</u>	<u>(4,392,673)</u>	<u>(2,075,111)</u>	<u>(2,317,562)</u>
24	ADIT allocated from WSC	0	(67,810) [3]	(67,810)	(42,378)	(25,232)
25	Total ADIT (L23 + L24)	<u>(4,653,600)</u>	<u>193,117</u>	<u>(4,460,283)</u>	<u>(2,117,489)</u>	<u>(2,342,794)</u>
26	Excess deferred income tax	0	0 [4]	0	0	0
27	ADIT per Public Staff (L25 + L26)	<u>(\$4,653,600)</u>	<u>\$193,117</u>	<u>(\$4,460,283)</u>	<u>(\$2,117,489)</u>	<u>(\$2,342,794)</u>

- [1] Form W-1, Item 10, Supplemental Schedules.
[2] Column (c) minus Column (a), unless otherwise footnoted.
[3] Calculated by Public Staff per examination of the Company's records.
[4] Provided by Public Staff Accountant Boswell.
[5] Column (a) plus Column (b), unless otherwise footnoted.
[6] Total unamortized balance per Public Staff multiplied by federal income tax rate of 21%.
[7] Total unamortized balance per Public Staff multiplied by state income tax rate of 3%.
[8] Column (c) allocated based on customers, unless otherwise footnoted.
[9] Column (c) allocated based on unamortized rate case expense.
[10] Column (c) allocated based on unamortized deferred maintenance.
[11] Column (c) allocated based on plant in service.

CAROLINA WATER SERVICE, INC. OF NC
Docket No. W-354, Sub 360
CALCULATION OF ACCUMULATED DEFERRED
INCOME TAXES
For The Test Year Ended December 31, 2017
BRADFELD/FAIRFIELD

Public Staff
Feasible Exhibit I
Schedule 2-5(b)

Line No.	Item	Total ADIT Per Application (1)	Public Staff Adjustments (2)	Amount To Be Allocated Per Public Staff (5)	BF/FH Water (8)	BF/FH Sewer (8)
		(a)	(b)	(c)	(d)	(e)
1	ACCUM DEF INCOME TAX-FED	\$175,721	\$0	\$175,721	\$88,086	\$89,635
2	DEF FED TAX - CIAC PRE 19	7,050	0	7,050	3,473	3,577
3	DEF FED TAX - TAP FEE POS	236,691	0	236,691	115,855	120,736
4	DEF FED TAX - RATE CASE	(12,695)	610	(12,085) [8]	(5,820) [9]	(6,185) [9]
5	DEF FED TAX - DEF MAINT	(31,059)	11,305	(19,754) [8]	(13,454) [10]	(6,290) [10]
6	DEF FED TAX - ORGN EXP	(25,425)	0	(25,425)	(12,456)	(12,969)
7	DEF FED TAX - BAD DEBT	183,210	0	183,210	94,654	88,556
8	DEF FED TAX - CAB WOODS GOS	0	0	0	0	0
9	DEF FED TAX - DEPRECIATIO	(1,585,489)	0	(1,585,489)	(487,699) [11]	(1,097,793) [11]
10	DEF FED TAX - NOL	540,266	0	540,266	264,676	275,590
11	Total Federal ADIT (Sum of L1 thru L10)	<u>(501,690)</u>	<u>11,915</u>	<u>(489,775)</u>	<u>45,308</u>	<u>(835,093)</u>
12	ACCUM DEF INCOME TAX - ST	28,465	0	28,465	12,965	13,500
13	DEF ST TAX - CIAC PRE 188	5,942	0	5,942	2,911	3,031
14	DEF ST TAX - TAP FEE POS	75,517	0	75,517	36,996	38,521
15	DEF ST TAX - RATE CASE	(2,264)	464	(1,780) [7]	(872) [9]	(908) [9]
16	DEF ST TAX - DEF MAINT	(6,023)	3,114	(2,909) [7]	(1,983) [10]	(926) [10]
17	DEF ST TAX - ORGN EXP	(6,365)	0	(6,365)	(3,118)	(3,247)
18	DEF ST TAX - BAD DEBT	2,358	0	2,358	1,155	1,203
19	DEF ST TAX - CAB WOODS GOS	0	0	0	0	0
20	DEF ST TAX - DEPRECIATION	(178,423)	0	(178,423)	(54,883) [11]	(123,540) [11]
21	DEF ST TAX - NOL	70,380	0	70,380	34,479	35,901
22	Total State ADIT (Sum of L12 thru L21)	<u>(12,413)</u>	<u>3,568</u>	<u>(8,845)</u>	<u>27,650</u>	<u>(38,485)</u>
23	Total Direct ADIT (L11 + L22)	<u>(514,103)</u>	<u>15,483</u>	<u>(498,620)</u>	<u>72,958</u>	<u>(571,548)</u>
24	ADIT allocated from WSC	0	(12,129) [3]	(12,129)	(5,842)	(6,187)
25	Total ADIT (L23 + L24)	<u>(514,103)</u>	<u>3,354</u>	<u>(510,749)</u>	<u>67,016</u>	<u>(577,735)</u>
26	Excess deferred income tax	0	0 [4]	0	0	0
27	ADIT per Public Staff (L25 + L26)	<u>(514,103)</u>	<u>\$3,354</u>	<u>(510,749)</u>	<u>\$67,016</u>	<u>(577,735)</u>

- [1] Form W-1, item 10, Supplemental Schedules.
[2] Column (c) minus Column (a), unless otherwise footnoted.
[3] Calculated by Public Staff per examination of the Company's records.
[4] Provided by Public Staff Accountant Boswell.
[5] Column (a) plus Column (b), unless otherwise footnoted.
[6] Total unamortized balance per Public Staff multiplied by federal income tax rate of 21%.
[7] Total unamortized balance per Public Staff multiplied by state income tax rate of 3%.
[8] Column (c) allocated based on customers, unless otherwise footnoted.
[9] Column (c) allocated based on unamortized rate case expense.
[10] Column (c) allocated based on unamortized deferred maintenance.
[11] Column (c) allocated based on plant in service.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO CUSTOMER DEPOSITS
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2-6

<u>Line No.</u>	<u>Item</u>	<u>CWSNC Water (a)</u>	<u>CWSNC Sewer (b)</u>	<u>BF/FH Water (c)</u>	<u>BF/FH Sewer (d)</u>
1	Customer deposits per application	(\$173,055)	(\$103,024)	(\$15,137)	(\$15,758)
2	Adjustment to update customer deposits to 6/30/2018	<u>(18,614) [1]</u>	<u>(11,081) [1]</u>	<u>(2,926) [1]</u>	<u>(3,045) [1]</u>
3	Customer deposits per Public Staff (L1 + L2)	<u>(\$191,669)</u>	<u>(\$114,105)</u>	<u>(\$18,063)</u>	<u>(\$18,803)</u>

[1] Per examination of Company's financial records.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ADJUSTMENT TO GAIN ON SALE

For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2-7

<u>Line No.</u>	<u>Item</u>	<u>CWSNC Water (a)</u>	<u>CWSNC Sewer (b)</u>
1	Gain on sale per application	<u>(\$286,987)</u>	<u>(\$138,550)</u>
2	Gain on sale of systems sold to CMUD	(500,264) [1]	(254,849) [1]
3	Less: accumulated amortization	<u>500,264 [2]</u>	<u>254,849 [2]</u>
4	Gain on sale of systems, net of amortization (L2 + L3)	0	0
5	Gain on sale and flow back of taxes	<u>(196,947) [1]</u>	<u>(92,681) [1]</u>
6	Gain on sale per Public Staff (L4 + L5)	<u>(196,947)</u>	<u>(92,681)</u>
7	Adjustment to gain on sale (L6 - L1)	<u>\$90,040</u>	<u>\$45,869</u>
8	Gain on sale amortization expense per application	(\$50,953) [1]	(\$25,957) [1]
9	Gain on sale amortization expense per Public Staff	0 [3]	0 [3]
10	Adjustment to gain on sale amortization expense (L9 - L8)	<u>\$50,953</u>	<u>\$25,957</u>

[1] Per examination of Company's financial records.

[2] Line 2 divided by 36 months times 36 months (12/7/2015 thru 12/1/2018).

[3] Line 4 divided by 3 year reamortization period.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO PURCHASE ACQUISITION
ADJUSTMENT, NET OF AMORTIZATION
For The Test Year Ended December 31, 2017

Public Staff
Feasit Exhibit 1
Schedule 2-8

Line No.	Item	CWSNC Water Operations			CWSNC Sewer Operations		
		PAA (a)	Accumulated Amortization (b)	PAA, Net of Amortization [2] (c)	PAA (d)	Accumulated Amortization (e)	PAA, Net of Amortization [3] (f)
1	PAA and accumulated amortization per application	<u>(\$4,278,312)</u>	<u>\$1,942,206</u>	<u>(\$2,336,006)</u>	<u>(\$627,070)</u>	<u>\$888,651</u>	<u>\$261,581</u>
2	Adjustment to include actual general ledger additions through 6/30/2018	<u>0</u>	<u>51,988 [1]</u>	<u>51,988</u>	<u>0</u>	<u>12,492 [1]</u>	<u>12,492</u>
3	Adjustment to reflect annual level of amortization	<u>0</u>	<u>11,524 [1]</u>	<u>11,524</u>	<u>0</u>	<u>(7,740) [1]</u>	<u>(7,740)</u>
4	Adjustment to PAA (Sum of L2 + L3)	<u>0</u>	<u>63,512</u>	<u>63,512</u>	<u>0</u>	<u>4,752</u>	<u>4,752</u>
5	PAA per Public Staff (L1 + L4)	<u>(\$4,278,312)</u>	<u>\$2,005,818</u>	<u>(\$2,272,494)</u>	<u>(\$627,070)</u>	<u>\$893,403</u>	<u>\$266,333</u>

- [1] Per examination of Company's financial records.
[2] Column (a) plus Column (b).
[3] Column (d) plus Column (e).
[4] Column (g) plus Column (h).
[5] Column (i) plus Column (k).

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO PURCHASE ACQUISITION
ADJUSTMENT, NET OF AMORTIZATION
For The Test Year Ended December 31, 2017

Public Staff
Feesel Exhibit I
Schedule 2-8

Line No.	Item	BF/H Water Operations			[4]	BF/H Sewer Operations			[5]
		PAA (g)	Accumulated Amortization (h)	PAA, Net of Amortization (i)		PAA (j)	Accumulated Amortization (k)	PAA, Net of Amortization (l)	
1	PAA and accumulated amortization per application	\$603,123	(\$571,700)	\$31,423		\$1,658,577	(\$678,341)	\$980,236	
2	Adjustment to include actual general ledger additions through 6/30/2018	0	(5,790) [1]	(5,790)		0	(14,921) [1]	(14,921)	
3	Adjustment to reflect annual level of amortization	0	(1,371) [1]	(1,371)		0	(12,618) [1]	(12,618)	
4	Adjustment to PAA (Sum of L2 + L3)	0	(7,161)	(7,161)		0	(27,539)	(27,539)	
5	PAA per Public Staff (L1 + L4)	\$603,123	(\$578,861)	\$24,262		\$1,658,577	(\$705,880)	\$952,697	

- [1] Per examination of Company's financial records.
[2] Column (a) plus Column (b).
[3] Column (d) plus Column (e).
[4] Column (g) plus Column (h).
[5] Column (j) plus Column (k).

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF EXCESS BOOK VALUE

For The Test Year Ended December 31, 2017

Public Staff
Feasibility Exhibit I
Schedule 2-9

Line No.	Item	Unamortized Balance 12/31/17 (a)	[1]	Annual Amortization (b)	[1]	Accumulated Amortization To 12/31/18 (c)	[2]	Unamortized Balance At 12/31/18 (d)	[3]
<u>CWSNC Uniform Water:</u>									
1	Sugar Mountain	\$0		\$0		\$0		\$0	
2	Carolina Forest, Woodrun	0		0		0		0	
3	Brandywine Bay	10,721		3,139		10,721		0	
4	Queens Harbor	13,800		2,679		13,800		0	
5	Riverpointe	40,361		6,052		40,361		0	
6	Watauga Vista	1,556		100		1,100		456	
7	Total excess book value (Sum of L1 thru L6)	<u>\$66,438</u>		<u>\$11,970</u>		<u>\$65,982</u>		<u>\$456</u>	
<u>CWSNC Uniform Sewer:</u>									
8	Sugar Mountain	\$0		\$0		\$0		\$0	
9	Brandywine Bay	16,214		4,748		16,214		0	
10	Queens Harbor	20,880		4,052		20,880		0	
11	Riverpointe	61,050		9,154		61,050		0	
12	Total excess book value (Sum of L8 thru L11)	<u>\$98,144</u>		<u>\$17,954</u>		<u>\$98,144</u>		<u>\$0</u>	

[1] Based on prior rate cases, unless otherwise footnoted.

[2] Column (b) multiplied by 11.0 years, unless fully amortized.

[3] Column (a) minus Column (c).

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF DEFERRED CHARGES

For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2-10

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)
1	Unamortized deferred maintenance - water	\$756,010 [1]	\$0	\$66,100 [5]	\$0
2	Unamortized deferred maintenance - sewer	0	6,339 [3]	0	30,876 [7]
3	Unamortized rate case expense per Public Staff	<u>240,544 [2]</u>	<u>143,201 [4]</u>	<u>29,065 [6]</u>	<u>30,262 [8]</u>
4	Unamortized deferred charges per Public Staff (L1 + L2 + L3)	<u>\$996,554</u>	<u>\$149,540</u>	<u>\$95,165</u>	<u>\$61,138</u>

[1] Feasel Exhibit I, Schedule 2-10(a), Column (f), Line 4.

[2] Feasel Exhibit I, Schedule 3-10, Column (d), Line 10.

[3] Feasel Exhibit I, Schedule 2-10(a), Column (f), Line 6.

[4] Feasel Exhibit I, Schedule 3-10, Column (e), Line 10.

[5] Feasel Exhibit I, Schedule 2-10(a), Column (f), Line 11.

[6] Feasel Exhibit I, Schedule 3-10, Column (f), Line 10.

[7] Feasel Exhibit I, Schedule 2-10(a), Column (f), Line 12.

[8] Feasel Exhibit I, Schedule 3-10, Column (g), Line 10.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
CALCULATION OF DEFERRED MAINTENANCE
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 2-10(a)

Line No.	Item	Total Cost Per Public Staff	[1]	Amortization Period In Years	[1]	Date Amortization Began	[1]	Annual Amortization	[2]	Accumulated Amortization	[3]	Unamortized Balance	[4]
		(a)		(b)		(c)		(d)		(e)		(f)	
	<u>Deferred maintenance - CWSNC Uniform Water</u>												
1	Deferred elevated storage tank painting	\$779,037		10		Various		\$77,904		\$236,555		\$542,482	
2	Deferred hydro storage tank painting	439,670		5		Various		87,934		368,244		71,426	
3	Deferred hydro storage tank inspection	539,687		5		Various		107,937		397,585		142,102	
4	Total deferred maintenance - water (Sum of L1 thru L3)	<u>1,758,394</u>						<u>273,775</u>		<u>1,002,384</u>		<u>756,010</u>	
	<u>Deferred maintenance - CWSNC Uniform Sewer</u>												
5	Belvedere pump and haul	3,424,838		10		Various		342,484		2,191,485		1,233,354	
6	WWTP	200,327		5		Various		40,065		193,988		6,339	
7	Total deferred maintenance - sewer (L5 + L6)	<u>3,625,166</u>						<u>382,549</u>		<u>2,385,473</u>		<u>1,239,693</u>	
	<u>Deferred maintenance - BF/FF Water</u>												
8	Deferred elevated storage tank painting	66,028		10		Various		6,603		9,354		56,674	
9	Deferred hydro storage tank painting	38,500		5		Various		7,300		32,242		4,258	
10	Deferred hydro storage tank inspection	24,622		5		Various		4,924		19,455		5,167	
11	Total deferred maintenance - sewer (Sum of L8 thru L10)	<u>127,150</u>						<u>18,827</u>		<u>61,050</u>		<u>66,100</u>	
	<u>Deferred maintenance - BF/FF Sewer</u>												
12	WWTP	110,492		5		Various		22,098		79,616		30,876	
13	Total deferred maintenance (L4 + L7 + L11 + L12)	<u>\$5,621,201</u>						<u>\$697,249</u>		<u>\$3,528,523</u>		<u>\$2,092,678</u>	

[1] Per examination of Company's financial records.

[2] Column (a) divided by Column (b).

[3] Total monthly amortization through December 31, 2018.

[4] Column (a) minus Column (e).

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
NET OPERATING INCOME FOR A RETURN
For The Test Year Ended December 31, 2017

Public Staff
Feasal Exhibit I
Schedule 3(a)
Page 1 of 2

CWSNC WATER OPERATIONS

		Present Rates		Company Proposed Rates		Public Staff Recommended Rates		
Line No.	Item	Amount Per Application (a)	Public Staff Adjustments (1) (b)	Amount Per Public Staff (2) (c)	Net Company Increase (28) (d)	Operations After Rate Increase (29) (e)	Public Staff Increase (35) (f)	Operations After Rate Increase (36) (g)
Operating Revenues:								
1	Service revenues	\$16,603,068	\$27,964	\$16,631,032 [3]	\$2,501,324	\$19,432,356 [3]	\$5,393	\$16,936,425 [37]
2	Miscellaneous revenues	164,766	24,459	189,225 [4]	6,753	195,978 [30]	14	189,239 [38]
3	Uncollectible accounts	(89,151)	(10,049)	(99,200) [5]	(14,508)	(112,708) [31]	(31)	(98,231) [39]
4	Total operating revenues	16,579,683	42,374	17,022,057	2,493,569	19,515,626	5,376	17,027,433
Maintenance Expenses:								
5	Salaries and wages	2,670,865	(83,739)	2,587,126 [6]	0	2,587,126	0	2,587,126
6	Purchased power	959,790	(1,910)	957,880 [7]	0	957,880	0	957,880
7	Purchased water	1,407,626	(124,853)	1,282,773 [3]	0	1,282,933	0	1,282,933
8	Maintenance and repair	1,164,143	(365,957)	826,186 [8]	0	826,186	0	826,186
9	Maintenance testing	149,525	59,440	208,965 [9]	0	208,965	0	208,965
10	Meter reading	197,658	(96)	197,562 [9]	0	197,562	0	197,562
11	Chemicals	356,307	(131,663)	224,644 [3]	0	224,644	0	224,644
12	Transportation	240,269	(1,462)	238,807 [10]	0	238,827	0	238,827
13	Operating expenses charged to plant	(389,286)	18,996	(370,289) [11]	0	(370,288)	0	(370,288)
14	Outside services - other	273,381	(18,534)	254,847 [12]	0	254,847	0	254,847
15	Total maintenance expenses	7,060,493	(649,816)	6,410,682	0	6,410,682	0	6,410,682
General Expenses:								
16	Salaries and wages	1,149,101	(145,073)	1,004,028 [6]	0	1,004,028	0	1,004,028
17	Office supplies and other office expense	306,987	(2,642)	306,345 [13]	0	306,345	0	306,345
18	Regulatory commission expense	238,950	(177,814)	60,136 [14]	0	60,136	0	60,136
19	Pension and other benefits	734,430	(3,143)	731,287 [8]	0	731,287	0	731,287
20	Rent	127,278	(5,896)	121,378 [15]	0	121,378	0	121,378
21	Insurance	304,639	(71,567)	233,072 [16]	0	233,072	0	233,072
22	Office utilities	415,060	(1,394)	413,666 [17]	0	413,666	0	413,666
23	Miscellaneous	119,644	(9,375)	110,269 [18]	0	110,269	0	110,269
24	Total general expenses	3,397,207	(417,006)	2,980,201	0	2,980,201	0	2,980,201
Depreciation and Taxes:								
25	Depreciation expense	2,891,781	(14,118)	2,877,663 [19]	0	2,877,663	0	2,877,663
26	Amortization of CIAC	(681,010)	(91,751)	(772,761) [20]	0	(772,761)	0	(772,761)
27	Amortization of PAA	(103,967)	(11,547)	(115,514) [21]	0	(115,514)	0	(115,514)
28	Amortization of ITC	(287)	0	(287) [22]	0	(287)	0	(287)
29	Franchise and other taxes	(21,941)	(2)	(21,943) [22]	0	(21,943)	0	(21,943)
30	Property taxes	133,847	523	134,370 [23]	0	134,370	0	134,370
31	Payroll taxes	293,160	(12,347)	280,813 [6]	0	280,813	0	280,813
32	Regulatory fee	27,251	(3,420)	23,831 [24]	3,461	27,322 [32]	7	23,838 [40]
33	Deferred Income Tax	0	0	0 [25]	0	0	0	0
34	State income tax	143,102	(44,827)	98,275 [26]	74,703	172,878 [33]	161	98,336 [41]
35	Federal income tax	971,681	(305,050)	666,631 [27]	587,228	1,173,839 [34]	1,093	667,704 [42]
36	Total depreciation and taxes	3,653,597	(462,639)	3,170,958	585,422	3,756,380	1,261	3,172,219
37	Total operating revenue deductions	14,111,302	(1,549,461)	12,561,841	585,422	13,147,263	1,261	12,563,102
38	Net operating income for a return	\$2,868,381	\$1,591,835	\$4,460,216	\$1,908,147	\$6,368,363	\$4,115	\$4,464,331

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
NET OPERATING INCOME FOR A RETURN
For The Test Year Ended December 31, 2017

Public Staff
Feasibility Exhibit I
Schedule 3(b)
Page 1 of 2

CWSNC SEWER OPERATIONS

		Present Rates		Company Proposed Rates		Public Staff Recommended Rates		
Line No.	Item	Amount Per Application (a)	Public Staff Adjustments (1) (b)	Amount Per Public Staff (2) (c)	Net Company Increase (25) (d)	Operations After Rate Increase (26) (e)	Net Public Staff Increase (32) (f)	Operations After Rate Increase (33) (g)
Operating Revenues:								
1	Service revenues	\$12,731,248	(\$45,470)	\$12,685,778 [3]	\$1,010,587	\$13,696,365 [3]	(\$184,197)	\$12,501,581 [34]
2	Miscellaneous revenues	127,307	(17,169)	110,138 [4]	2,630	112,968 [27]	(516)	109,622 [35]
3	Uncollectible accounts	(71,480)	(3,366)	(74,846) [5]	(5,963)	(80,809) [28]	1,087	(73,759) [36]
4	Total operating revenues	12,787,075	(66,005)	12,721,070	1,007,454	13,728,524	(183,626)	12,537,444
Maintenance Expenses:								
5	Salaries and wages	1,532,288	(42,106)	1,540,179 [6]	0	1,540,179	0	1,540,179
6	Purchased power	748,068	0	748,068	0	748,068	0	748,068
7	Purchased sewer	682,727	(1,985)	680,742 [3]	0	680,742	0	680,742
8	Maintenance and repair	1,509,870	6,760	1,606,630 [7]	0	1,606,630	0	1,606,630
9	Maintenance testing	293,181	12,380	302,561 [3]	0	302,581	0	302,581
10	Meter reading	0	0	0	0	0	0	0
11	Chemicals	212,118	135,868	347,986 [3]	0	347,986	0	347,986
12	Transportation	143,050	(410)	142,640 [8]	0	142,640	0	142,640
13	Operating expenses charged to plant	(231,754)	11,885	(219,769) [9]	0	(219,769)	0	(219,769)
14	Outside services - other	152,817	(8,487)	154,330 [10]	0	154,330	0	154,330
15	Total maintenance expenses	5,189,383	114,002	5,303,385	0	5,303,365	0	5,303,385
General Expenses:								
16	Salaries and wages	680,757	(83,034)	597,723 [8]	0	597,723	0	597,723
17	Office supplies and other office expense	183,066	(916)	183,350 [11]	0	183,350	0	183,350
18	Regulatory commission expense	141,366	(105,565)	35,801 [12]	0	35,801	0	35,801
19	Pension and other benefits	437,286	(1,933)	435,353 [6]	0	435,353	0	435,353
20	Rent	75,402	(2,978)	72,424 [13]	0	72,424	0	72,424
21	Insurance	151,385	(42,634)	138,751 [14]	0	138,751	0	138,751
22	Office utilities	247,118	(355)	248,763 [15]	0	248,763	0	248,763
23	Miscellaneous	71,230	(5,432)	65,798 [16]	0	65,798	0	65,798
24	Total general expenses	2,018,510	(242,647)	1,775,963	0	1,775,963	0	1,775,963
Depreciation and Taxes:								
25	Depreciation expense	2,184,741	67,081	2,271,822 [17]	0	2,271,822	0	2,271,822
26	Amortization of CIAC	(616,095)	(158,499)	(774,595) [18]	0	(774,595)	0	(774,595)
27	Amortization of PAA	(24,963)	7,739	(17,244) [19]	0	(17,244)	0	(17,244)
28	Amortization of ITC	(232)	0	(232)	0	(232)	0	(232)
29	Franchise and other taxes	(17,738)	0	(17,738)	0	(17,738)	0	(17,738)
30	Property taxes	79,682	(162)	79,520 [20]	0	79,520	0	79,520
31	Payroll taxes	173,676	(6,501)	167,175 [9]	0	167,175	0	167,175
32	Regulatory fee	19,333	(1,524)	17,809 [21]	1,411	19,220 [29]	(257)	17,552 [37]
33	Deferred Income Tax	0	0	0 [22]	0	0	0	0
34	State income tax	106,245	(30,581)	75,664 [23]	30,181	105,845 [30]	(5,501)	79,183 [38]
35	Federal income tax	721,493	(207,645)	513,758 [24]	204,831	718,689 [31]	(37,353)	478,405 [39]
36	Total depreciation and taxes	2,628,031	(310,082)	2,315,939	236,523	2,552,462	(43,111)	2,272,628
37	Total operating revenue deductions	9,833,904	(438,638)	9,395,266	236,523	9,631,789	(43,111)	9,352,155
38	Net operating income for a return	\$2,953,171	\$372,633	\$3,325,804	\$770,931	\$4,096,735	(\$140,515)	\$3,185,289

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-454, Sub 360
NET OPERATING INCOME FOR A RETURN
For The Test Year Ended December 31, 2017

Public Staff
 Fiscal Exhibit 1
 Schedule 3(c)
 Page 1 of 2

BROADFIELD/FAIRFIELD WATER OPERATIONS

Line No.		Present Rates		Company Proposed Rates		Public Staff Recommended Rates		
		Amount Per Application	Public Staff Adjustment (1)	Amount Per Public Staff (2)	Company Net Increase (3)	Operations After Rate Increase (4)	Public Staff Net Increase (5)	Operations After Rate Increase (6)
Operating Revenues:								
1	Miscellaneous revenues	\$1,043,134	\$0	\$1,043,134	\$517,787	\$1,560,921	\$252,240	\$1,795,374
2	Miscellaneous revenues	42,374	3,932	46,306	832	47,238	454	46,783
3	Uncollectible accounts	172,831	(3,143)	(15,324)	(7,612)	(22,945)	(13,708)	(19,042)
4	Total operating revenues	1,073,317	789	1,074,106	511,007	1,585,213	248,986	1,732,092
Multifunctional Expenses:								
5	Salaries and wages	\$21,200	(8,551)	312,749	0	312,749	0	312,749
6	Purchased power	70,816	0	70,816	0	70,816	0	70,816
7	Maintenance and repair	(31,315)	31,315	0	0	0	0	0
8	Maintenance testing	6,911	3,675	9,286	0	9,286	0	9,286
9	Meter reading	26,305	0	26,305	0	26,305	0	26,305
10	Chemicals	22,291	3,423	32,714	0	32,714	0	32,714
11	Transportation	22,324	(63)	32,241	0	32,241	0	32,241
12	Operating expenses charged to plant	(42,533)	1,684	(40,679)	0	(40,679)	0	(40,679)
13	Outside services - other	22,718	(84)	22,632	0	22,632	0	22,632
14	Total multifunctional expenses	479,155	31,037	530,192	0	530,192	0	530,192
General Expenses:								
15	Salaries and wages	136,275	(18,861)	121,374	0	121,374	0	121,374
16	Office supplies and other office expense	34,748	(124)	34,624	0	34,624	0	34,624
17	Regulatory commission expense	27,233	(20,016)	7,267	0	7,267	0	7,267
18	Pension and other benefits	101,627	(391)	101,436	0	101,436	0	101,436
19	Rent	15,311	(604)	14,707	0	14,707	0	14,707
20	Insurance	42,233	(14,115)	26,178	0	26,178	0	26,178
21	Office utilities	40,175	(72)	40,103	0	40,103	0	40,103
22	Miscellaneous	12,750	(11,023)	11,967	0	11,967	0	11,967
23	Total general expenses	471,592	(33,206)	538,786	0	538,786	0	538,786
Depreciation and Taxes:								
24	Depreciation expense	346,934	(222,391)	127,603	0	127,603	0	127,603
25	Amortization of C/IAC	(38,156)	(6,727)	(47,886)	0	(47,886)	0	(47,886)
26	Amortization of P/A	11,572	1,385	12,967	0	12,967	0	12,967
27	Amortization of TC	0	0	0	0	0	0	0
28	Franchise and other taxes	(3,653)	0	(3,653)	0	(3,653)	0	(3,653)
29	Property taxes	8,677	(32)	8,645	0	8,645	0	8,645
30	Payroll taxes	35,297	(1,320)	33,947	0	33,947	0	33,947
31	Regulatory fee	2,219	(716)	1,504	715	2,219	300	2,468
32	Deferred Income Tax	4,503	0	4,503	0	4,503	0	4,503
33	State income tax	48,202	(8,638)	11,829	15,312	13,486	7,469	5,634
34	Total depreciation and taxes	418,825	(289,020)	119,805	103,867	229,839	58,448	38,252
35	Total operating revenue deductions	1,330,072	(231,189)	1,098,883	119,894	1,178,677	58,459	1,067,239
36	Net operating income for a return	<u>\$756,759</u>	<u>\$321,978</u>	<u>\$665,223</u>	<u>\$391,113</u>	<u>\$458,336</u>	<u>\$190,630</u>	<u>\$295,733</u>

CAROLINA WATER SERVICE, INC., OF NC
 DOCKET NO. W-354, SUB 350
 NET OPERATING INCOME FOR A RETURN
 For The Year Ended December 31, 2017
 BRADFIELD/PAFFIELD SEWER OPERATIONS

Line	No.	Item	Amount Per Application	Public Staff Adjustments	Amount Per Public Staff	Net Company Increase	Operations After Rate Increase	Public Staff Recommended Rates	Operations After Rate Increase
1		Operating Revenues:	\$1,758,104	\$11,651	\$1,769,755	\$393,345	\$2,163,100	\$2,052,488	\$2,163,100
2		Miscellaneous revenues	17,420	(2,829)	14,591	708	15,299	15,002	15,299
3		Uncollected accounts	(731,321)	(4,694)	(726,627)	(5,783)	(732,410)	(732,410)	(732,410)
4		Total operating revenues	1,754,203	4,031	1,758,234	388,270	2,146,984	2,037,078	2,146,984
5		Maintenance Expenses:							
6		Salaries and wages	334,483	(8,901)	325,582	0	325,582	325,582	325,582
7		Purchased power	155,566	0	155,566	0	155,566	155,566	155,566
8		Maintenance and repair	272,544	(19,643)	252,901	0	252,901	252,901	252,901
9		Material and repair	25,515	(1,965)	23,548	0	23,548	23,548	23,548
10		Meter reading	0	0	0	0	0	0	0
11		Chemicals	30,483	(3,422)	27,071	0	27,071	27,071	27,071
12		Transportation	33,650	(87)	33,563	0	33,563	33,563	33,563
13		Operating expenses charged to plant	(44,768)	1,839	(42,929)	0	(42,929)	(42,929)	(42,929)
14		Outside services - other	23,648	(81)	23,567	0	23,567	23,567	23,567
15		Total maintenance expenses	831,659	(32,167)	799,492	0	799,492	799,492	799,492
16		General Expenses:							
17		Salaries and wages	143,907	(17,553)	126,354	0	126,354	126,354	126,354
18		Office supplies and other office expense	28,174	(130)	28,044	0	28,044	28,044	28,044
19		Regulatory commission expense	29,314	(2,749)	26,565	0	26,565	26,565	26,565
20		Pension and other benefits	106,005	(408)	105,597	0	105,597	105,597	105,597
21		Rent	15,939	(629)	15,310	0	15,310	15,310	15,310
22		Insurance	44,028	(14,694)	29,334	0	29,334	29,334	29,334
23		Office utilities	41,823	(75)	41,748	0	41,748	41,748	41,748
24		Miscellaneous	12,618	(1,063)	11,555	0	11,555	11,555	11,555
25		Depreciation and Taxes:							
26		Amortization of CLAC	(144,644)	(36,834)	(181,478)	0	(181,478)	(181,478)	(181,478)
27		Amortization of PAA	78,181	(35,721)	42,460	0	42,460	42,460	42,460
28		Amortization of JTC	0	0	0	0	0	0	0
29		Franchise and other taxes	(6,395)	0	(6,395)	0	(6,395)	(6,395)	(6,395)
30		Property taxes	10,074	(34)	10,040	0	10,040	10,040	10,040
31		Payroll taxes	36,714	(1,375)	35,339	0	35,339	35,339	35,339
32		Regulatory fee	2,987	(635)	2,352	0	2,352	2,352	2,352
33		Deferred Income Tax	0	0	0	0	0	0	0
34		State income tax	17,240	(13,916)	3,324	0	3,324	3,324	3,324
35		Federal income tax	117,657	(94,489)	23,168	0	23,168	23,168	23,168
36		Total depreciation and taxes	234,141	(34,187)	200,000	0	200,000	200,000	200,000
37		Total operating revenue deductions	1,495,608	(54,281)	1,441,327	91,155	1,532,482	1,506,848	1,532,482
38		Net operating income for a return	\$258,595	\$58,312	\$316,907	\$297,115	\$614,022	\$530,470	\$614,022

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

FOOTNOTES TO SCHEDULE 3(a)

For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3(a)
Page 2 of 2

CWSNC WATER OPERATIONS

- [1] Column (c) minus Column (a), unless otherwise footnoted.
- [2] Column (a) plus Column (b), unless otherwise footnoted.
- [3] Based on the recommendation of Public Staff Engineer Casselberry
- [4] Feasel Exhibit I, Schedule 3-1(a), Column (c), Line 5.
- [5] Feasel Exhibit I, Schedule 3-2, Column (a), Line 6.
- [6] Based on the recommendation of Public Staff Accountant Johnson
- [7] Feasel Exhibit I, Schedule 3-3, Column (a), Line 3.
- [8] Feasel Exhibit I, Schedule 3-4, Column (a), Line 8.
- [9] Feasel Exhibit I, Schedule 3-5, Column (a), Line 3.
- [10] Feasel Exhibit I, Schedule 3-6, Column (a), Line 5.
- [11] Feasel Exhibit I, Schedule 3-7, Column (a), Line 6.
- [12] Feasel Exhibit I, Schedule 3-8, Column (a), Line 7.
- [13] Feasel Exhibit I, Schedule 3-9, Column (a), Line 6.
- [14] Feasel Exhibit I, Schedule 3-10, Column (d), Line 9.
- [15] Feasel Exhibit I, Schedule 3-11, Column (a), Line 5.
- [16] Feasel Exhibit I, Schedule 3-12, Column (a), Line 11.
- [17] Feasel Exhibit I, Schedule 3-13, Column (a), Line 6.
- [18] Feasel Exhibit I, Schedule 3-14, Column (a), Line 6.
- [19] Feasel Exhibit I, Schedule 3-15, Column (a), Line 5.
- [20] Feasel Exhibit I, Schedule 3-15, Column (a), Line 10.
- [21] Feasel Exhibit I, Schedule 3-15, Column (a), Line 13.
- [22] Feasel Exhibit I, Schedule 3-16, Column (a), Line 3.
- [23] Feasel Exhibit I, Schedule 3-17, Column (a), Line 5.
- [24] Line 4 column (c) multiplied by 0.14%.
- [25] Based on the recommendation of Public Staff Accountant Boswell.
- [26] Feasel Exhibit I, Schedule 3-18(a), Column (a), Line 16.
- [27] Feasel Exhibit I, Schedule 3-18(a), Column (a), Line 18.
- [28] Column (e) minus Column (c), unless otherwise footnoted.
- [29] Column (c) plus Column (d), unless otherwise footnoted.
- [30] Feasel Exhibit I, Schedule 3-1(a), Column (c), Line 10.
- [31] Feasel Exhibit I, Schedule 3-2, Column (a), Line 9.
- [32] Line 4 column (e) multiplied by 0.14%.
- [33] Feasel Exhibit I, Schedule 3-18(a), Column (b), Line 16.
- [34] Feasel Exhibit I, Schedule 3-18(a), Column (b), Line 18.
- [35] Column (g) minus Column (c), unless otherwise footnoted.
- [36] Column (c) plus Column (f), unless otherwise footnoted.
- [37] Revenue requirement as calculated by the Public Staff.
- [38] Feasel Exhibit I, Schedule 3-1(a), Column (c), Line 15.
- [39] Feasel Exhibit I, Schedule 3-2, Column (a), Line 12.
- [40] Line 4 column (g) multiplied by 0.14%.
- [41] Feasel Exhibit I, Schedule 3-18(a), Column (c), Line 16.
- [42] Feasel Exhibit I, Schedule 3-18(a), Column (c), Line 18.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

FOOTNOTES TO SCHEDULE 3(b)

For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3(b)
Page 2 of 2

CWSNC SEWER OPERATIONS

- [1] Column (c) minus Column (a), unless otherwise footnoted.
- [2] Column (a) plus Column (b), unless otherwise footnoted.
- [3] Provided by Public Staff Engineer Casselberry.
- [4] Feasel Exhibit I, Schedule 3-1(b), Column (c), Line 5.
- [5] Feasel Exhibit I, Schedule 3-2, Column (b), Line 6.
- [6] Based on the recommendation of Public Staff Accountant Johnson
- [7] Feasel Exhibit I, Schedule 3-4, Column (b), Line 8.
- [8] Feasel Exhibit I, Schedule 3-6, Column (b), Line 5.
- [9] Feasel Exhibit I, Schedule 3-7, Column (b), Line 6.
- [10] Feasel Exhibit I, Schedule 3-8, Column (b), Line 7.
- [11] Feasel Exhibit I, Schedule 3-9, Column (b), Line 6.
- [12] Feasel Exhibit I, Schedule 3-10, Column (e), Line 9.
- [13] Feasel Exhibit I, Schedule 3-11, Column (b), Line 5.
- [14] Feasel Exhibit I, Schedule 3-12, Column (b), Line 11.
- [15] Feasel Exhibit I, Schedule 3-13, Column (b), Line 6.
- [16] Feasel Exhibit I, Schedule 3-14, Column (b), Line 6.
- [17] Feasel Exhibit I, Schedule 3-15, Column (b), Line 5.
- [18] Feasel Exhibit I, Schedule 3-15, Column (b), Line 10.
- [19] Feasel Exhibit I, Schedule 3-15, Column (b), Line 13.
- [20] Feasel Exhibit I, Schedule 3-17, Column (b), Line 5.
- [21] Line 4 column (c) multiplied by 0.14%.
- [22] Based on the recommendation of Public Staff Accountant Boswell.
- [23] Feasel Exhibit I, Schedule 3-18(b), Column (a), Line 16.
- [24] Feasel Exhibit I, Schedule 3-18(b), Column (a), Line 18.
- [25] Column (e) minus Column (c), unless otherwise footnoted.
- [26] Column (c) plus Column (d), unless otherwise footnoted.
- [27] Feasel Exhibit I, Schedule 3-1(b), Column (c), Line 10.
- [28] Feasel Exhibit I, Schedule 3-2, Column (b), Line 9.
- [29] Line 4 column (e) multiplied by 0.14%.
- [30] Feasel Exhibit I, Schedule 3-18(b), Column (b), Line 16.
- [31] Feasel Exhibit I, Schedule 3-18(b), Column (b), Line 18.
- [32] Column (g) minus Column (c), unless otherwise footnoted.
- [33] Column (c) plus Column (f), unless otherwise footnoted.
- [34] Revenue requirement as calculated by the Public Staff.
- [35] Feasel Exhibit I, Schedule 3-1(b), Column (c), Line 15.
- [36] Feasel Exhibit I, Schedule 3-2, Column (b), Line 12.
- [37] Line 4 column (g) multiplied by 0.14%.
- [38] Feasel Exhibit I, Schedule 3-18(b), Column (c), Line 16.
- [39] Feasel Exhibit I, Schedule 3-18(b), Column (c), Line 18.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

FOOTNOTES TO SCHEDULE 3(c)

For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3(c)
Page 2 of 2

BRADFIELD FARMS/FAIRFIELD HARBOUR WATER OPERATIONS

- [1] Column (c) minus Column (a), unless otherwise footnoted.
- [2] Column (a) plus Column (b), unless otherwise footnoted.
- [3] Provided by Public Staff Engineer Casselberry.
- [4] Feasel Exhibit I, Schedule 3-1(c), Column (c), Line 5.
- [5] Feasel Exhibit I, Schedule 3-2, Column (c), Line 6.
- [6] Based on the recommendation of Public Staff Accountant Johnson
- [7] Remove Antenna lease revenue that is mistakenly put into purchase water
- [8] Feasel Exhibit I, Schedule 3-4, Column (c), Line 8.
- [9] Feasel Exhibit I, Schedule 3-6, Column (c), Line 5.
- [10] Feasel Exhibit I, Schedule 3-7, Column (c), Line 6.
- [11] Feasel Exhibit I, Schedule 3-8, Column (c), Line 7.
- [12] Feasel Exhibit I, Schedule 3-9, Column (c), Line 6.
- [13] Feasel Exhibit I, Schedule 3-10, Column (f), Line 9.
- [14] Feasel Exhibit I, Schedule 3-11, Column (c), Line 5.
- [15] Feasel Exhibit I, Schedule 3-12, Column (c), Line 11.
- [16] Feasel Exhibit I, Schedule 3-13, Column (c), Line 6.
- [17] Feasel Exhibit I, Schedule 3-14, Column (c), Line 6.
- [18] Feasel Exhibit I, Schedule 3-15, Column (c), Line 5.
- [19] Feasel Exhibit I, Schedule 3-15, Column (c), Line 10.
- [20] Feasel Exhibit I, Schedule 3-15, Column (c), Line 13.
- [21] Feasel Exhibit I, Schedule 3-17, Column (c), Line 5.
- [22] Line 4 column (c) multiplied by 0.14%.
- [23] Based on the recommendation of Public Staff Accountant Boswell.
- [24] Feasel Exhibit I, Schedule 3-18(c), Column (a), Line 16.
- [25] Feasel Exhibit I, Schedule 3-18(c), Column (a), Line 18.
- [26] Column (e) minus Column (c), unless otherwise footnoted.
- [27] Column (c) plus Column (d), unless otherwise footnoted.
- [28] Feasel Exhibit I, Schedule 3-1(c), Column (c), Line 10.
- [29] Feasel Exhibit I, Schedule 3-2, Column (c), Line 9.
- [30] Line 4 column (e) multiplied by 0.14%.
- [31] Feasel Exhibit I, Schedule 3-18(c), Column (b), Line 16.
- [32] Feasel Exhibit I, Schedule 3-18(c), Column (b), Line 18.
- [33] Column (g) minus Column (c), unless otherwise footnoted.
- [34] Column (c) plus Column (f), unless otherwise footnoted.
- [35] Revenue requirement as calculated by the Public Staff.
- [36] Feasel Exhibit I, Schedule 3-1(c), Column (c), Line 15.
- [37] Feasel Exhibit I, Schedule 3-2, Column (c), Line 12.
- [38] Line 4 column (g) multiplied by 0.14%.
- [39] Feasel Exhibit I, Schedule 3-18(c), Column (c), Line 16.
- [40] Feasel Exhibit I, Schedule 3-18(c), Column (c), Line 18.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

FOOTNOTES TO SCHEDULE 3(d)

For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3(d)
Page 2 of 2

BRADFIELD FARMS/FAIRFIELD HARBOUR SEWER OPERATIONS

- [1] Column (c) minus Column (a), unless otherwise footnoted.
- [2] Column (a) plus Column (b), unless otherwise footnoted.
- [3] Provided by Public Staff Engineer Casselberry.
- [4] Feasel Exhibit I, Schedule 3-1(d), Column (c), Line 5.
- [5] Feasel Exhibit I, Schedule 3-2, Column (d), Line 6.
- [6] Based on the recommendation of Public Staff Accountant Johnson
- [7] Feasel Exhibit I, Schedule 3-4, Column (d), Line 8.
- [8] Feasel Exhibit I, Schedule 3-6, Column (d), Line 5.
- [9] Feasel Exhibit I, Schedule 3-7, Column (d), Line 6.
- [10] Feasel Exhibit I, Schedule 3-8, Column (d), Line 7.
- [11] Feasel Exhibit I, Schedule 3-9, Column (d), Line 6.
- [12] Feasel Exhibit I, Schedule 3-10, Column (g), Line 9.
- [13] Feasel Exhibit I, Schedule 3-11, Column (d), Line 5.
- [14] Feasel Exhibit I, Schedule 3-12, Column (d), Line 11.
- [15] Feasel Exhibit I, Schedule 3-13, Column (d), Line 6.
- [16] Feasel Exhibit I, Schedule 3-14, Column (d), Line 6.
- [17] Feasel Exhibit I, Schedule 3-15, Column (d), Line 5.
- [18] Feasel Exhibit I, Schedule 3-15, Column (d), Line 10.
- [19] Feasel Exhibit I, Schedule 3-15, Column (d), Line 13.
- [20] Feasel Exhibit I, Schedule 3-17, Column (d), Line 5.
- [21] Line 4 column (c) multiplied by 0.14%.
- [22] Based on the recommendation of Public Staff Accountant Boswell.
- [23] Feasel Exhibit I, Schedule 3-18(d), Column (a), Line 16.
- [24] Feasel Exhibit I, Schedule 3-18(d), Column (a), Line 18.
- [25] Column (e) minus Column (c), unless otherwise footnoted.
- [26] Column (c) plus Column (d), unless otherwise footnoted.
- [27] Feasel Exhibit I, Schedule 3-1(d), Column (c), Line 10.
- [28] Feasel Exhibit I, Schedule 3-2, Column (d), Line 9.
- [29] Line 4 column (e) multiplied by 0.14%.
- [30] Feasel Exhibit I, Schedule 3-18(d), Column (b), Line 16.
- [31] Feasel Exhibit I, Schedule 3-18(d), Column (b), Line 18.
- [32] Column (g) minus Column (c), unless otherwise footnoted.
- [33] Column (c) plus Column (f), unless otherwise footnoted.
- [34] Revenue requirement as calculated by the Public Staff.
- [35] Feasel Exhibit I, Schedule 3-1(d), Column (c), Line 15.
- [36] Feasel Exhibit I, Schedule 3-2, Column (d), Line 12.
- [37] Line 4 column (g) multiplied by 0.14%.
- [38] Feasel Exhibit I, Schedule 3-18(d), Column (c), Line 16.
- [39] Feasel Exhibit I, Schedule 3-18(d), Column (c), Line 18.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO MISCELLANEOUS REVENUES
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-1(a)

CWSNC WATER OPERATIONS

Line No.	Item	Amount Per Before Adjustment (a)	Public Staff Adjustments (b)	Amount Per Public Staff (c) [3]
<u>Present Rates:</u>				
1	Forfeited discounts	\$41,335 [1]	\$4,379	\$45,714 [5]
2	Other water/sewer revenues	94,206 [1]	19,509	113,715 [6]
3	Antenna leases	0 [1]	0	0
4	Sale of utility property	29,225 [1]	571	29,796 [1]
5	Total miscellaneous revenues (Sum of L1 thru L4)	<u>\$164,766</u>	<u>\$24,459</u>	<u>\$189,225</u>
<u>Company Proposed Rates:</u>				
6	Forfeited discounts	\$45,714 [2]	\$6,753	\$52,467 [7]
7	Other water/sewer revenues	113,715 [2]	0	113,715
8	Antenna leases	0 [2]	0	0
9	Sale of utility property	29,796 [2]	0	29,796
10	Total miscellaneous revenues (Sum of L6 thru L9)	<u>\$189,225</u>	<u>\$6,753</u>	<u>\$195,978</u>
<u>Public Staff Recommended Rates:</u>				
11	Forfeited discounts	\$45,714 [2]	\$14	\$45,728 [8]
12	Other water/sewer revenues	113,715 [2]	0	113,715
13	Antenna leases	0 [2]	0	0
14	Sale of utility property	29,796 [2]	0	29,796
15	Total miscellaneous revenues (Sum of L11 thru L14)	<u>\$189,225</u>	<u>\$14</u>	<u>\$189,239</u>

[1] Per examination of Company's financial records.

[2] Adjusted amount per Public Staff, Column (c), Lines 1 thru 4.

[3] Column (c) minus Column (a), unless otherwise footnoted.

[4] Column (a) plus Column (b), unless otherwise footnoted.

[5] Feasel Exhibit I, Schedule 3-1(a)(1), Column (a), Line 6.

[6] Reclassify other revenue per examination of Company's records

[7] Feasel Exhibit I, Schedule 3-1(a)(1), Column (a), Line 9.

[8] Feasel Exhibit I, Schedule 3-1(a)(1), Column (a), Line 12.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO MISCELLANEOUS REVENUES
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-1(b)

CWSNC SEWER OPERATIONS

Line No.	Item	Amount Per Before Adjustment (a)	Public Staff Adjustments (b)	Amount Per Public Staff (c)
<u>Present Rates:</u>				
1	Forfeited discounts	\$33,518 [1]	\$2,002	\$35,520 [5]
2	Other water/sewer revenues	76,390 [1]	(19,510)	56,880 [6]
3	Antenna leases	0 [1]	0	0
4	Sale of utility property	17,398 [1]	340	17,738 [1]
5	Total miscellaneous revenues (Sum of L1 thru L4)	<u>\$127,307</u>	<u>(\$17,169)</u>	<u>\$110,138</u>
<u>Company Proposed Rates:</u>				
6	Forfeited discounts	\$35,520 [2]	\$2,830	\$38,350 [7]
7	Other water/sewer revenues	56,880 [2]	0	56,880
8	Antenna leases	0 [2]	0	0
9	Sale of utility property	17,738 [2]	0	17,738
10	Total miscellaneous revenues (Sum of L6 thru L9)	<u>\$110,138</u>	<u>\$2,830</u>	<u>\$112,968</u>
<u>Public Staff Recommended Rates:</u>				
11	Forfeited discounts	\$35,520 [2]	(\$516)	\$35,004 [8]
12	Other water/sewer revenues	56,880 [2]	0	56,880
13	Antenna leases	0 [2]	0	0
14	Sale of utility property	17,738 [2]	0	17,738
15	Total miscellaneous revenues (Sum of L11 thru L14)	<u>\$110,138</u>	<u>(\$516)</u>	<u>\$109,622</u>

[1] Per examination of Company's financial records.

[2] Adjusted amount per Public Staff, Column (c), Lines 1 thru 4.

[3] Column (c) minus Column (a), unless otherwise footnoted.

[4] Column (a) plus Column (b), unless otherwise footnoted.

[5] Feasel Exhibit I, Schedule 3-1(a)(1), Column (b), Line 6.

[6] Reclassify other revenue per examination of Company's records

[7] Feasel Exhibit I, Schedule 3-1(a)(1), Column (b), Line 9.

[8] Feasel Exhibit I, Schedule 3-1(a)(1), Column (b), Line 12.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO MISCELLANEOUS REVENUES
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-1(c)

BRADFIELD/FAIRFIELD WATER OPERATIONS

Line No.	Item	Amount Per Before Adjustment (a)	Public Staff Adjustments (b)	Amount Per Public Staff (c) [4]
	<u>Present Rates:</u>			
1	Forfeited discounts	\$1,476 [1]	\$402	\$1,878 [5]
2	Other water/sewer revenues	6,868 [1]	3,530	10,398 [6]
3	Antenna leases	31,315 [1]	0	31,315 [1]
4	Sale of utility property	2,715 [1]	(0)	2,715 [1]
5	Total miscellaneous revenues (Sum of L1 thru L4)	<u>\$42,375</u>	<u>\$3,931</u>	<u>\$46,306</u>
	<u>Company Proposed Rates:</u>			
6	Forfeited discounts	\$1,878 [2]	\$932	\$2,810 [7]
7	Other water/sewer revenues	10,398 [2]	0	10,398
8	Antenna leases	31,315 [2]	0	31,315
9	Sale of utility property	2,715 [2]	0	2,715
10	Total miscellaneous revenues (Sum of L6 thru L9)	<u>\$46,306</u>	<u>\$932</u>	<u>\$47,238</u>
	<u>Public Staff Recommended Rates:</u>			
11	Forfeited discounts	\$1,878 [2]	\$454	\$2,332 [8]
12	Other water/sewer revenues	10,398 [2]	0	10,398
13	Antenna leases	31,315 [2]	0	31,315
14	Sale of utility property	2,715 [2]	0	2,715
15	Total miscellaneous revenues (Sum of L11 thru L14)	<u>\$46,306</u>	<u>\$454</u>	<u>\$46,760</u>

[1] Per examination of Company's financial records.

[2] Adjusted amount per Public Staff, Column (c), Lines 1 thru 4.

[3] Column (c) minus Column (a), unless otherwise footnoted.

[4] Column (a) plus Column (b), unless otherwise footnoted.

[5] Feasel Exhibit I, Schedule 3-1(a)(1), Column (c), Line 6.

[6] Reclassify other revenue per examination of Company's records

[7] Feasel Exhibit I, Schedule 3-1(a)(1), Column (c), Line 9.

[8] Feasel Exhibit I, Schedule 3-1(a)(1), Column (c), Line 12.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO MISCELLANEOUS REVENUES
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-1(d)

BRADFIELD/FAIRFIELD SEWER OPERATIONS

Line No.	Item	Amount Per Before Adjustment (a)	Public Staff Adjustments (b)	Amount Per Public Staff (c) [3]	[4]
Present Rates:					
1	Forfeited discounts	\$2,582 [1]	\$604	\$3,186 [5]	
2	Other water/sewer revenues	12,011 [1]	(3,530)	8,481 [6]	
3	Antenna leases	0 [1]	0	0	
4	Sale of utility property	2,827 [1]	0	2,827 [1]	
5	Total miscellaneous revenues (Sum of L1 thru L4)	<u>\$17,420</u>	<u>(\$2,926)</u>	<u>\$14,494</u>	
Company Proposed Rates:					
6	Forfeited discounts	\$3,186 [2]	\$708	\$3,894 [7]	
7	Other water/sewer revenues	8,481 [2]	0	8,481	
8	Antenna leases	0 [2]	0	0	
9	Sale of utility property	2,827 [2]	0	2,827	
10	Total miscellaneous revenues (Sum of L6 thru L9)	<u>\$14,494</u>	<u>\$708</u>	<u>\$15,202</u>	
Public Staff Recommended Rates:					
11	Forfeited discounts	\$3,186 [2]	\$508	\$3,694 [8]	
12	Other water/sewer revenues	8,481 [2]	0	8,481	
13	Antenna leases	0 [2]	0	0	
14	Sale of utility property	2,827 [2]	0	2,827	
15	Total miscellaneous revenues (Sum of L11 thru L14)	<u>\$14,494</u>	<u>\$508</u>	<u>\$15,002</u>	

[1] Per examination of Company's financial records.

[2] Adjusted amount per Public Staff, Column (c), Lines 1 thru 4.

[3] Column (c) minus Column (a), unless otherwise footnoted.

[4] Column (a) plus Column (b), unless otherwise footnoted.

[5] Feasel Exhibit I, Schedule 3-1(a)(1), Column (d), Line 6.

[6] Reclassify other revenue per examination of Company's records

[7] Feasel Exhibit I, Schedule 3-1(a)(1), Column (d), Line 9.

[8] Feasel Exhibit I, Schedule 3-1(a)(1), Column (d), Line 12.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
CALCULATION OF FORFEITED DISCOUNTS
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-1(a)(1)

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BFF/FFH Water (c)	BFF/FFH Sewer (d)
Test Year:					
1	Service revenues	\$15,067,268 [1]	\$11,908,778 [1]	\$817,475 [1]	\$1,429,676 [1]
2	Forfeited discounts	41,335 [1]	33,518 [1]	1,476 [1]	2,582 [1]
3	Forfeited discounts percentage (L2 / L1)	0.27%	0.28%	0.18%	0.18%
Present Rates:					
4	Service revenues	\$16,931,032 [2]	\$12,685,778 [5]	\$1,043,134 [8]	\$1,769,755 [11]
5	Forfeited discounts percentage	0.27%	0.28%	0.18%	0.18%
6	Forfeited discounts (L4 x L5)	\$45,714	\$35,520	\$1,878	\$3,186
Company Proposed Rates:					
7	Service revenues	\$19,432,356 [3]	\$13,696,365 [6]	\$1,560,921 [9]	\$2,163,100 [12]
8	Forfeited discounts percentage	0.27%	0.28%	0.18%	0.18%
9	Forfeited discounts (L7 x L8)	\$52,467	\$38,350	\$2,810	\$3,894
Public Staff Recommended Rates:					
10	Service revenues	\$16,936,425 [4]	\$12,501,581 [7]	\$1,295,374 [10]	\$2,052,488 [13]
11	Forfeited discounts percentage	0.27%	0.28%	0.18%	0.18%
12	Forfeited discounts (L10 x L11)	\$45,728	\$35,004	\$2,332	\$3,694

- [1] Per examination of Company's financial records.
[2] Feasel Exhibit I, Schedule 3(a), Column (c), Line 1.
[3] Feasel Exhibit I, Schedule 3(a), Column (e), Line 1.
[4] Feasel Exhibit I, Schedule 3(a), Column (g), Line 1.
[5] Feasel Exhibit I, Schedule 3(b), Column (c), Line 1.
[6] Feasel Exhibit I, Schedule 3(b), Column (e), Line 1.
[7] Feasel Exhibit I, Schedule 3(b), Column (g), Line 1.

- [8] Feasel Exhibit I, Schedule 3(c), Column (c), Line 1.
[9] Feasel Exhibit I, Schedule 3(c), Column (e), Line 1.
[10] Feasel Exhibit I, Schedule 3(c), Column (g), Line 1.
[11] Feasel Exhibit I, Schedule 3(d), Column (c), Line 1.
[12] Feasel Exhibit I, Schedule 3(d), Column (e), Line 1.
[13] Feasel Exhibit I, Schedule 3(d), Column (g), Line 1.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
CALCULATION OF UNCOLLECTIBLE ACCOUNTS
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-2

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BFF/FFH Water (c)	BFF/FFH Sewer (d)
Test Year:					
1	Service revenues	\$15,067,268 [1]	\$11,908,778 [1]	\$817,475 [1]	\$1,429,676 [1]
2	Uncollectible accounts	86,919 [1]	70,482 [1]	12,048 [1]	21,070 [1]
3	Uncollectible accounts percentage (L2 / L1)	0.58%	0.59%	1.47%	1.47%
Present Rates:					
4	Service revenues	\$16,931,032 [2]	\$12,685,778 [5]	\$1,043,134 [8]	\$1,769,755 [11]
5	Uncollectible accounts percentage	0.58%	0.59%	1.47%	1.47%
6	Uncollectible accounts (L4 x L5)	\$98,200	\$74,846	\$15,334	\$26,015
Company Proposed Rates:					
7	Service revenues	\$19,432,356 [3]	\$13,696,365 [6]	\$1,560,921 [9]	\$2,163,100 [12]
8	Uncollectible accounts percentage	0.58%	0.59%	1.47%	1.47%
9	Uncollectible accounts (L7 x L8)	\$112,708	\$80,809	\$22,946	\$31,795
Public Staff Recommended Rates:					
10	Service revenues	\$16,936,425 [4]	\$12,501,581 [7]	\$1,295,374 [10]	\$2,052,488 [13]
11	Uncollectible accounts percentage	0.58%	0.59%	1.47%	1.47%
12	Uncollectible accounts (L10 x L11)	\$98,231	\$73,759	\$19,042	\$30,172

- [1] Per examination of Company's financial records.
[2] Feasel Exhibit I, Schedule 3(a), Column (c), Line 1.
[3] Feasel Exhibit I, Schedule 3(a), Column (e), Line 1.
[4] Feasel Exhibit I, Schedule 3(a), Column (g), Line 1.
[5] Feasel Exhibit I, Schedule 3(b), Column (c), Line 1.
[6] Feasel Exhibit I, Schedule 3(b), Column (e), Line 1.
[7] Feasel Exhibit I, Schedule 3(b), Column (g), Line 1.

- [8] Feasel Exhibit I, Schedule 3(c), Column (c), Line 1.
[9] Feasel Exhibit I, Schedule 3(c), Column (e), Line 1.
[10] Feasel Exhibit I, Schedule 3(c), Column (g), Line 1.
[11] Feasel Exhibit I, Schedule 3(d), Column (c), Line 1.
[12] Feasel Exhibit I, Schedule 3(d), Column (e), Line 1.
[13] Feasel Exhibit I, Schedule 3(d), Column (g), Line 1.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO PURCHASE POWER
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-3

<u>Line No.</u>	<u>Item</u>	<u>CWSNC Water (a)</u>	<u>CWSNC Sewer (b)</u>	<u>BF/FH Water (c)</u>	<u>BF/FH Sewer (d)</u>
1	Purchase power per application	<u>\$959,790</u>	<u>\$748,066</u>	<u>\$70,816</u>	<u>\$155,596</u>
2	Adjustment to remove duplicate recordings	<u>(1,910) [1]</u>	<u>0</u>	<u>0</u>	<u>0</u>
3	Purchase power per Public Staff (L1 + L2)	<u><u>\$957,880</u></u>	<u><u>\$748,066</u></u>	<u><u>\$70,816</u></u>	<u><u>\$155,596</u></u>

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO MAINTENANCE AND REPAIR
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-4

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)
1	Maintenance and repair per application	<u>\$1,194,143</u>	<u>\$1,599,870</u>	<u>\$62,630</u>	<u>\$272,544</u>
2	Adjustment to deferred maintenance and repair	(270,100) [1]	37,205 [4]	(3,634) [5]	(3,975) [6]
3	Adjustments to correct UA adjustments	(64) [2]	(39) [2]	(8) [2]	(8) [2]
4	Adjustment to maintenance and repair expense	(90,972) [3]	(33,875) [3]	0	0
5	Adjustment to sludge hauling	0	4,579 [3]	0	(15,660) [3]
6	Adjustment to permit fees	<u>(4,820) [3]</u>	<u>(1,310) [3]</u>	<u>3,140 [3]</u>	<u>0</u>
7	Total adjustment to maintenance and repair (Sum of L2 thru L6)	<u>(365,957)</u>	<u>6,760</u>	<u>(502)</u>	<u>(19,643)</u>
8	Maintenance and repair per Public Staff (L1 + L7)	<u>\$828,186</u>	<u>\$1,606,630</u>	<u>\$62,128</u>	<u>\$252,901</u>

- [1] Feasel Exhibit I, Schedule 3-4(a), Column (a), Line 3.
[2] Correct UA adjustments per examination of the Company's financial records
[3] Provided by Public Staff Engineer Casselberry.
[4] Feasel Exhibit I, Schedule 3-4(a), Column (b), Line 3.
[5] Feasel Exhibit I, Schedule 3-4(a), Column (c), Line 3.
[6] Feasel Exhibit I, Schedule 3-4(a), Column (d), Line 3.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 380
ADJUSTMENT TO DEFERRED MAINTENANCE AND REPAIR
For The Test Year Ended December 31, 2017

Public Staff
Feasibel Exhibit I
Schedule 3-4(a)

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)
1	Annual deferred maintenance and repair per Public Staff	\$250,238 [1]	\$346,975 [1]	\$18,827 [1]	\$19,408 [1]
2	Deferred maintenance and repair per application	520,338 [2]	309,770 [2]	22,461 [2]	23,383 [2]
3	Adjustment to deferred maintenance and repair (L1 - L2)	<u>(\$270,100)</u>	<u>\$37,205</u>	<u>(\$3,634)</u>	<u>(\$3,975)</u>

[1] Annual depreciation expense of systems that have not been fully retired per reviewing the Company's records
[2] Per examination of Company's financial records.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO METER READING
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-5

<u>Line No.</u>	<u>Item</u>	<u>CWSNC Water (a)</u>	<u>CWSNC Sewer (b)</u>	<u>BF/FH Water (c)</u>	<u>BF/FH Sewer (d)</u>
1	Meter reading per application	\$197,658	\$0	\$28,305	\$0
2	Adjustment to remove Riverbend meter reading expense	(96) [1]	0 [1]	0 [1]	0 [1]
3	Meter reading per Public Staff (L1 + L2)	<u>\$197,562</u>	<u>\$0</u>	<u>\$28,305</u>	<u>\$0</u>

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO TRANSPORTATION
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-6

<u>Line No.</u>	<u>Item</u>	<u>CWSNC Water (a)</u>	<u>CWSNC Sewer (b)</u>	<u>BF/FH Water (c)</u>	<u>BF/FH Sewer (d)</u>
1	Transportation per application	<u>\$240,289</u>	<u>\$143,050</u>	<u>\$32,324</u>	<u>\$33,650</u>
2	Adjustment to remove Riverbend transportation expense	(774) [1]	0 [1]	0 [1]	0 [1]
3	Adjustments to correct UA adjustments	<u>(688) [1]</u>	<u>(410) [1]</u>	<u>(83) [1]</u>	<u>(87) [1]</u>
4	Total adjustments to transportation (-L2+L3)	<u>(1,462)</u>	<u>(410)</u>	<u>(83)</u>	<u>(87)</u>
5	Transportation per Public Staff (L1 + L4)	<u>\$238,827</u>	<u>\$142,640</u>	<u>\$32,241</u>	<u>\$33,563</u>

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO CAPITALIZED TIME ADJUSTMENT
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-7

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)
1	Operating expenses charged to plant per application	<u>(\$389,286)</u>	<u>(\$231,754)</u>	<u>(\$42,523)</u>	<u>(\$44,268)</u>
2	Adjustment to remove Riverbend cap time	72 [1]	0	0	0
3	Adjustments to correct UA adjustments	18,830 [1]	11,214 [1]	2,278 [1]	2,372 [1]
4	Adjustment to correct UA classification adjustments	<u>96 [1]</u>	<u>771 [1]</u>	<u>(434) [1]</u>	<u>(433) [1]</u>
5	Total adjustments to capitalized time (Sum of L2 thru L4)	<u>18,998</u>	<u>11,985</u>	<u>1,844</u>	<u>1,939</u>
6	Operating expenses charged to plant per Public Staff (L1 + L5)	<u>(\$370,288)</u>	<u>(\$219,769)</u>	<u>(\$40,679)</u>	<u>(\$42,329)</u>

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO OUTSIDE SERVICE OTHER
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-8

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)
1	Outside service other per application	\$273,381	\$162,817	\$22,716	\$23,648
2	Adjustment to remove Riverbend outside services	(16,132) [1]	0	0	0
3	Adjustments to correct UA adjustments	(677) [1]	(413) [1]	(84) [1]	(88) [1]
4	Adjustment to remove legal fees should be capitalized	0	(8,022) [1]	0	0
5	Adjustment to remove legal fees prior to test year	(1,725) [1]	(52) [1]	0	0
6	Total adjustments to outside service other (Sum of L2 thru L5)	(18,534)	(8,487)	(84)	(88)
7	Outside service other per Public Staff (L1 + L6)	\$254,847	\$154,330	\$22,632	\$23,560

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 380
ADJUSTMENT TO OFFICE SUPPLIES AND OTHER OFFICE EXPENSE
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-9

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)
1	Office supplies & other office expense per application	<u>\$308,987</u>	<u>\$183,966</u>	<u>\$34,748</u>	<u>\$36,174</u>
2	Adjustment to remove Riverbend office supplies & other office expense	(969) [1]	0	0	0
3	Adjustments to correct UA adjustments	(1,003) [1]	(616) [1]	(124) [1]	(130) [1]
4	Adjustment to remove transaction without invoice support	<u>(670) [1]</u>	<u>0</u>	<u>0</u>	<u>0</u>
5	Total adjustments to office supplies & other (Sum of L2 throu L4)	<u>(2,642)</u>	<u>(616)</u>	<u>(124)</u>	<u>(130)</u>
6	Office supplies & other office expense per Public Staff (L1 + L5)	<u>\$306,345</u>	<u>\$183,350</u>	<u>\$34,624</u>	<u>\$36,044</u>

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
CALCULATION OF REGULATORY COMMISSION EXPENSE
For The Test Year Ended December 31, 2017

Public Staff
Feasibility Exhibit I
Schedule 3-10

Line No.	Item	Amount Per Application (a)	Public Staff Adjustment (b)	[1]	Amount Per Public Staff (c)	CWSNC Water (d)	CWSNC Sewer (e)	BF/FH Water (f)	BF/FH Sewer (g)
1	Rate case expenses for current proceeding	<u>\$449,971</u>	<u>(\$330,191)</u>		<u>\$119,780</u> [2]				
2	Amortization period in years				<u>5</u>				
3	Annual rate case expense for current proceeding (L1 / L2)				<u>23,956</u>	<u>\$13,808</u> [4]	<u>\$7,743</u> [5]	<u>\$1,572</u> [6]	<u>\$1,636</u> [7]
4	Unamortized balance of rate case expense (L1 - L3)				<u>95,824</u>	<u>\$2,023</u> [4]	<u>\$0,970</u> [5]	<u>\$,286</u> [6]	<u>6,545</u> [7]
5	Sub 356 and prior rate cases unamortized rate case expense	<u>\$414,327</u>	<u>\$19,733</u>		<u>434,060</u> [3]				
6	Amortization period in years				<u>5</u>				
7	Sub 356 unamortized annual rate case expense (L5 / L6)				<u>86,812</u>	<u>47,130</u> [4]	<u>28,058</u> [5]	<u>5,695</u> [6]	<u>5,929</u> [7]
8	Unamortized balance of rate case expense (L5 - L7)				<u>347,248</u>	<u>188,521</u> [4]	<u>112,231</u> [5]	<u>22,779</u> [6]	<u>23,717</u> [7]
9	Total annual rate case expense (L3 + L7)				<u>\$110,768</u>	<u>\$60,136</u>	<u>\$35,801</u>	<u>\$7,267</u>	<u>\$7,565</u>
10	Total unamortized balance of rate case expense (L4 + L8)				<u>\$443,072</u>	<u>\$240,544</u>	<u>\$143,201</u>	<u>\$29,065</u>	<u>\$30,262</u>

[1] Column (c) minus Column (a).

[2] Per examination of the company's response to accounting data requests

[3] Calculated base on amount approved in prior rate cases.

[4] Column (c) multiplied by CWSNC Uniform water allocation factor of 54.29%.

[5] Column (c) multiplied by CWSNC Uniform sewer allocation factor of 32.32%.

[6] Column (c) multiplied by BF/FH water allocation factor of 6.56%.

[7] Column (c) multiplied by BF/FH sewer allocation factor of 6.63%.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ADJUSTMENT TO RENT

For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-11

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)
1	Rent per application	<u>\$127,276</u>	<u>\$75,402</u>	<u>\$15,311</u>	<u>\$15,939</u>
2	Adjustment to remove rent expense related to Riverbend	(277) [1]	0	0	0
3	Adjustment to adjust rent proforma expense	<u>(5,621) [1]</u>	<u>(2,978) [1]</u>	<u>(604) [1]</u>	<u>(629) [1]</u>
4	Total adjustments to rent (L2 + L3)	<u>(5,898)</u>	<u>(2,978)</u>	<u>(604)</u>	<u>(629)</u>
5	Rent per Public Staff (L1 + L4)	<u>\$121,378</u>	<u>\$72,424</u>	<u>\$14,707</u>	<u>\$15,310</u>

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ALLOCATION OF INSURANCE

For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-12

No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)	Total (f) [4]
1.		\$38,059 [1]	\$22,657 [1]	\$4,601 [1]	\$4,790 [1]	\$70,108
2.	Workers compensation	72,071 [1]	42,905 [1]	8,713 [1]	9,071 [1]	132,760
3.	Property insurance	18,580 [1]	11,081 [1]	2,246 [1]	2,338 [1]	34,226
4.	General Liability	38,082 [1]	22,671 [1]	4,604 [1]	4,793 [1]	70,150
5.	Excess Liability	39,513 [1]	23,523 [1]	4,777 [1]	4,973 [1]	72,785
6.	Umbrella insurance	5,567 [1]	3,314 [1]	673 [1]	701 [1]	10,254
7.	Employment Practices insurance	1,950 [1]	1,161 [1]	236 [1]	245 [1]	3,592
8.	Cyber security insurance	2,366 [1]	1,408 [1]	266 [1]	298 [1]	4,358
9.	Pollution liability	16,556 [1]	9,856 [1]	2,002 [1]	2,084 [1]	30,498
10.	Tank liability	328 [1]	195 [1]	40 [1]	41 [1]	604
11.	Total insurance per Public Staff (Sum of L1 thru L10)	<u>233,072</u>	<u>138,751</u>	<u>28,178</u>	<u>29,334</u>	<u>429,335</u>
12.	Less: Insurance expense related to Riverbend	<u>(951) [2]</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>(951)</u>
13.	Less: Amount per Company	<u>304,639 [3]</u>	<u>181,385 [3]</u>	<u>42,293 [3]</u>	<u>44,028 [3]</u>	<u>572,345</u>
14.	Adjustment to insurance expense (L11 - L12 - L13)	<u>(\$70,616)</u>	<u>(\$42,634)</u>	<u>(\$14,115)</u>	<u>(\$14,694)</u>	<u>(\$142,059)</u>

[1] Column (f) times customer ratios for each rate division.

[2] Based on information provided by the Company.

[3] NCUC Form W-1, Item 10, Schedule B-18, Column (h) for each rate division.

[4] Feasel Exhibit I, Schedule 13-12(a), Column (c).

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF INSURANCE

For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-12 (a)

Line No.	Item	Annual Premium (a)	CWSNC Percentage (b)	CWSNC Insurance Expense (c)	[6]
1.		\$460,350	15.23% [2]	\$70,108	
2.	Workers compensation	602,769	22.03% [3]	132,760	
3.	Property insurance	238,827	14.33% [4]	34,226	
4.	General Liability	400,000	17.54% [5]	70,150	
5.	Excess Liability	415,021	17.54% [5]	72,785	
6.	Umbrella insurance	58,466	17.54% [5]	10,254	
7.	Employment Practices insurance	20,481	17.54% [5]	3,592	
8.	Cyber security insurance	24,850	17.54% [5]	4,358	
9.	Pollution liability	173,900	17.54% [5]	30,498	
10.	Tank liability	3,446	17.54% [5]	604	
11.	Total insurance per Public Staff (Sum of L1 thru L10)			\$429,335	

[1] Based on current insurance policies and information provided by Company.

[2] Percentage of CWSNC automobiles covered under current policy.

[3] Percentage of CWSNC workers compensation insurance based on CSWNC payroll.

[4] Percentage of CWSNC property insurance based on CSWNC value of property covered.

[5] Percentage of CWSNC insurance based on CSWNC customer count.

[6] Column (a) X Column (b).

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO OFFICE UTILITY
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-13

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)
1	Office utility per application	<u>\$415,080</u>	<u>\$247,118</u>	<u>\$40,175</u>	<u>\$41,823</u>
2	Adjustment to remove Riverbend office utility expense	(433) [1]	0	0	0
3	Adjustments to correct UA adjustments	(578) [1]	(355) [1]	(72) [1]	(75) [1]
4	Adjustment to remove duplicate recorded transactions	<u>(383) [1]</u>	<u>0</u>	<u>0</u>	<u>0</u>
5	Total adjustments to office utility (Sum of L2 thru L4)	<u>(1,394)</u>	<u>(355)</u>	<u>(72)</u>	<u>(75)</u>
6	Office utility per Public Staff (L1 + L5)	<u><u>\$413,686</u></u>	<u><u>\$246,763</u></u>	<u><u>\$40,103</u></u>	<u><u>\$41,748</u></u>

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO MISCELLANEOUS EXPENSE
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-14

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)
1	Miscellaneous expense per application	\$119,644	\$71,230	\$12,120	\$12,618
2	Adjustments to remove unqualified miscellaneous expense	(8,296) [1]	(5,259) [1]	(988) [1]	(1,027) [1]
3	Adjustments to remove Riverbend miscellaneous expense	(794) [1]	0	0	0
4	Adjustments to correct UA adjustments	(285) [1]	(173) [1]	(35) [1]	(36) [1]
5	Total miscellaneous adjustments (Sum of L2 thru L4)	<u>(9,375)</u>	<u>(5,432)</u>	<u>(1,023)</u>	<u>(1,063)</u>
6	Miscellaneous expense per Public Staff (L1 + L5)	<u>\$110,269</u>	<u>\$65,798</u>	<u>\$11,097</u>	<u>\$11,555</u>

[1] Per examination of Company's financial records.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

**CALCULATION OF DEPRECIATION AND
AMORTIZATION EXPENSE**

For The Test Year Ended December 31, 2017

Public Staff
Feasibel Exhibit I
Schedule 3-15

Line No.		CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)
1	Depreciation on direct plant	\$2,764,567 [1]	\$2,220,708 [8]	\$110,497 [13]	\$324,927 [17]
2	Depreciation on allocated plant	125,066 [2]	69,068 [2]	17,106 [2]	15,053 [2]
3	Gain on sale	0	0	0	0
4	Excess book value	(11,970) [3]	(17,954) [9]	0	0
5	Total depreciation expense (Sum of L1 thru L4)	<u>\$2,877,663</u>	<u>\$2,271,822</u>	<u>\$127,603</u>	<u>\$339,980</u>
6	Contributions in aid of construction	##### [4]	(\$28,157,914) [10]	(\$2,227,276) [14]	(\$7,088,979) [18]
7	Advances in aid of construction	(23,760) [5]	(9,180) [5]	0	0
8	Depreciable CIAC and AIA (L6 + L7)	(28,620,789)	(28,167,094)	(2,227,276)	(7,088,979)
9	Amortization rate	2.70% [6]	2.75% [11]	2.15% [15]	2.56% [19]
10	CIAC and AIA amortization expense (L8 x L9)	<u>(\$772,761)</u>	<u>(\$774,595)</u>	<u>(\$47,886)</u>	<u>(\$181,478)</u>
11	Purchase acquisition adjustment	(\$4,278,312) [7]	(\$627,070) [12]	\$603,123 [16]	\$1,658,577 [20]
12	Amortization rate	2.70% [6]	2.75% [11]	2.15% [15]	2.56% [19]
13	PAA amortization expense (L11 x L12)	<u>(\$115,514)</u>	<u>(\$17,244)</u>	<u>\$12,967</u>	<u>\$42,460</u>

- [1] Feasibel Exhibit I, Schedule 3-15(a), Column (c), Line 46.
 [2] Calculated by the Public Staff based on information provided by the Company.
 [3] Feasibel Exhibit I, Schedule 2-9, Column (b), Line 7.
 [4] Feasibel Exhibit I, Schedule 2-4, Column (a), Line 6.
 [5] Per examination of Company's financial records.
 [6] Feasibel Exhibit I, Schedule 3-15(a), Column (d), Line 46.
 [7] Feasibel Exhibit I, Schedule 2-8, Column (a), Line 5.
 [8] Feasibel Exhibit I, Schedule 3-15(b), Column (c), Line 58.
 [9] Feasibel Exhibit I, Schedule 2-9, Column (b), Line 12.
 [10] Feasibel Exhibit I, Schedule 2-4, Column (d), Line 6.

- [11] Feasibel Exhibit I, Schedule 3-15(b), Column (d), Line 58.
 [12] Feasibel Exhibit I, Schedule 2-8, Column (d), Line 5.
 [13] Feasibel Exhibit I, Schedule 3-15(c), Column (c), Line 46.
 [14] Feasibel Exhibit I, Schedule 2-4, Column (g), Line 6.
 [15] Feasibel Exhibit I, Schedule 3-15(c), Column (d), Line 46.
 [16] Feasibel Exhibit I, Schedule 2-8, Column (g), Line 5.
 [17] Feasibel Exhibit I, Schedule 3-15(d), Column (c), Line 58.
 [18] Feasibel Exhibit I, Schedule 2-4, Column (j), Line 6.
 [19] Feasibel Exhibit I, Schedule 3-15(d), Column (d), Line 58.
 [20] Feasibel Exhibit I, Schedule 2-8, Column (j), Line 5.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF DIRECT PLANT

DEPRECIATION EXPENSE

For The Test Year Ended December 31, 2017

CWSNC WATER OPERATIONS

Public Staff
Feasel Exhibit I
Schedule 3-15(a)

Line No.	Account	Item	Plant In Service [1] (a)	Depreciation Rate [2] (b)	Annual Depreciation [3] (c)	Composite Rate (d)
1	1020	Organization	\$458,055	2.50%	\$11,451	
2	1025	Franchises	111,898	2.50%	2,797	
3	1030	Land & land rights pump	71,437	0.00%	0	
4	1035	Land & land rights water tr.	357,109	0.00%	0	
5	1040	Land & land rights trans.	3,194	0.00%	0	
6	1045	Land & land rights gen. plt.	513,502	0.00%	0	
7	1050	Struct & improv. src. supply	4,301,643	2.00%	86,033	
8	1055	Struct & improv. wtr. trt. plt.	1,349,510	2.00%	26,990	
9	1060	Struct & improv. trans. dist.	247,389	2.00%	4,948	
10	1065	Struct & improv. gen. plt.	331,380	2.00%	6,628	
11	1070	Collecting reservoirs	13,139	2.00%	263	
12	1080	Wells & springs	13,753,498	2.00%	275,070	
13	1085	Infiltration gallery	45,185	2.50%	1,130	
14	1090	Supply mains	464,877	1.00%	4,649	
15	1095	Power generation equip.	158,288	10.00%	15,829	
16	1100	Electric pump equip. src. plt.	2,504,141	14.29%	357,842	
17	1105	Electric pump equip. wtp.	8,223,165	3.33%	273,831	
18	1110	Electric pump equip. trans.	2,804,464	14.29%	415,048	
19	1115	Water treatment equip.	4,313,158	2.50%	107,829	
20	1120	Dist. resv. & standpipes	7,917,031	2.00%	158,341	
21	1125	Trans. & distr. mains	31,722,821	1.00%	317,228	
22	1130	Service lines	11,789,469	2.00%	235,789	
23	1135	Meters	5,289,544	3.33%	176,142	
24	1140	Meter installations	1,183,396	3.33%	39,407	
25	1145	Hydrants	1,199,892	2.50%	29,997	
26	1150	Backflow prevention devic.	27,242	10.00%	2,724	
27	1160	Other plt. & misc. equip. src. su.	260	2.50%	7	
28	1165	Other plt. & misc. equip. wtp.	6,262	2.50%	157	
29	1175	Office struct & improv.	98,808	10.00%	9,881	
30	1180	Office furn. & equip.	362,781	10.00%	36,278	
31	1185	Stores equipment	4,055	3.33%	135	
32	1190	Tool shop & misc. equip.	1,365,202	5.00%	68,260	
33	1195	Laboratory equipment	154,374	10.00%	15,437	
34	1200	Power operated equip.	314,236	10.00%	31,424	
35	1205	Communication equip.	321,334	10.00%	32,133	
36	1210	Misc. equipment	183,548	3.33%	6,112	
37	1215	Water plant allocated	207,809	6.67%	13,851	
38	1220	Other tangible plt. water	36,650	2.50%	916	
39	1555	Transportation equip.	0	0.00%	0	
40	1580	Mainframe computer - wtr	0	2.50%	0	
41	1585	Mini computer - wtr	(7,016)	0.00%	0	
42	1590	Comp. system cost - wtr	59,691	0.00%	0	
43	1595	Micro system cost - wtr	0	0.00%	0	
44	1805	Plt. held for future use	(95,528)	0.00%	0	
45		Pro forma plant additions	0	0.00%	0	
46		Total plant in service (Sum of L1 thru L45)	<u>\$102,266,893</u>		<u>\$2,764,567</u>	<u>2.70%</u> [4]

[1] Feasel Exhibit I, Schedule 2-1(a)(1), Column (d).

[2] Depreciation rates approved in Docket No. W-354, Sub 344.

[3] Column (a) multiplied by Column (b).

[4] Column (c) divided by Column (a), Line 46.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 350

**CALCULATION OF DIRECT PLANT
DEPRECIATION EXPENSE**

For The Test Year Ended December 31, 2017

CWSNC SEWER OPERATIONS

Public Staff
Feasel Exhibit I
Schedule 3-15(b)

Line No.	Account No.	Item	Plant In Service (a)	Depreciation Rate (b)	Annual Depreciation (c)	Composite Rate (d)
1	1245	Organization	\$907,534	2.50%	\$22,688	
2	1250	Franchises intang. plt.	127,476	2.50%	3,187	
3	1270	Land & land rights trmnt plt	39,167	0.00%	0	
4	1275	Land & land rights reclaim.	1,150	0.00%	0	
5	1285	Land & land rights gen. plt.	213,811	0.00%	0	
6	1290	Struct/improv. coll. plt.	67,263	2.00%	1,345	
7	1295	Struct/improv. pump plt. ls.	7,139,461	2.00%	142,789	
8	1300	Struct/improv. treat. plt.	19,687,912	2.50%	492,198	
9	1305	Struct/improv. reclaim. wtp.	3,271	2.50%	82	
10	1310	Struct/improv. reclaim. wtr.	179,730	2.50%	4,493	
11	1315	Struct/improv. gen. plt.	1,653,362	2.00%	33,267	
12	1320	Power gen. equip. coll. plt.	215,248	10.00%	21,525	
13	1325	Power gen. equip. pump plt.	52,159	10.00%	5,216	
14	1330	Power gen. equip. treat. plt.	209,729	10.00%	20,973	
15	1345	Sewer force main/serv. lin.	3,555,492	1.33%	47,288	
16	1350	Sewer gravity main	16,621,671	1.00%	166,217	
17	1353	Manholes	738,769	1.00%	7,388	
18	1355	Special coll. structures	6,923	2.00%	138	
19	1360	Services to customers	1,506,296	1.33%	20,034	
20	1365	Flow measure devices	122,282	4.00%	4,891	
21	1370	Flow measure install	1,010	4.00%	40	
22	1375	Receiving wells	89,444	2.00%	1,789	
23	1380	Pumping equipment pump plt.	3,721,651	14.29%	531,824	
24	1385	Pumping equipment reclaim.	30,101	14.29%	4,301	
25	1390	Pumping equipment rcl. wtr.	44,313	14.29%	6,332	
26	1395	Treat./disp. equip. lagoon	577,820	2.50%	14,446	
27	1400	Treat./disp. equip. trt. plt.	18,819,014	2.50%	470,475	
28	1405	Treat./disp. equip. rct. wtp.	13,460	2.50%	337	
29	1410	Plant sewers treat. plt.	3,337,197	2.50%	83,430	
30	1415	Plant sewers reclaim wtp.	5,155	2.50%	129	
31	1420	Outfall lines	98,563	1.00%	986	
32	1425	Other plt. tangible	3,676	2.50%	92	
33	1430	Other plt. collection	21,142	2.50%	529	
34	1435	Other plt. pump	48,131	2.50%	1,203	
35	1440	Other plt. treatment	36,998	2.50%	925	
36	1445	Other plt. reclaim wtr. trt.	650	2.50%	16	
37	1450	Other plt. reclaim wtr. dis.	460	2.50%	12	
38	1455	Office struct & improv.	34,218	10.00%	3,422	
39	1460	Office furn. & equip.	29,554	10.00%	2,955	
40	1465	Stores equipment	4,341	3.33%	145	
41	1470	Tool shop & misc. equip.	189,882	5.00%	9,494	
42	1475	Laboratory equipment	132,463	10.00%	13,246	
43	1480	Power operated equip.	365,003	10.00%	36,500	
44	1485	Communication equip.	73,595	10.00%	7,360	
45	1490	Misc equip. sewer	19,105	3.33%	636	
46	1495	Sewer plant allocated	526,952	6.67%	35,148	
47	1500	Other tangible plt. sewer	1,776	2.50%	44	
48	1535	Reuse dist. reservoirs	3,417	2.00%	68	
49	1540	Reuse transmission & dist.	55,225	2.00%	1,105	
50	1555	Transportation equip.	0	0.00%	0	
51	1575	Desktop computer - wtr	0	0.00%	0	
52	1580	Mainframe computer - wtr	0	0.00%	0	
53	1585	Mini computer - wtr	(4,177)	0.00%	0	
54	1590	Comp. system cost - wtr	35,535	0.00%	0	
55	1595	Micro system cost - wtr	0	0.00%	0	
56	1805	Plt. held for future use	(514,608)	0.00%	0	
57		Pro forma plant additions	0	0.00%	0	
58		Total plant in service (Sum of L1 thru L57)	\$80,859,772		\$2,220,708	2.75% [4]

[1] Feasel Exhibit I, Schedule 2-1(b)(1), Column (d).

[2] Depreciation rates approved in Docket No. W-354, Sub 344.

[3] Column (a) multiplied by Column (b).

[4] Column (c) divided by Column (a), Line 58.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF DIRECT PLANT

DEPRECIATION EXPENSE

For The Test Year Ended December 31, 2017

BRADFIELD/FAIRFIELD WATER OPERATIONS

Public Staff
Feasel Exhibit I
Schedule 3-15(c)

Line No.	Account No.	Item	Plant In Service [1] (a)	Depreciation Rate [2] (b)	Annual Depreciation [3] (c)	Composite Rate (d)
1	1020	Organization	\$100,321	2.50%	\$2,508	
2	1025	Franchises	29,653	2.50%	741	
3	1030	Land & land rights pump	0	0.00%	0	
4	1035	Land & land rights water tr.	0	0.00%	0	
5	1040	Land & land rights trans.	0	0.00%	0	
6	1045	Land & land rights gen. plt.	431	0.00%	0	
7	1050	Struct & improv. src. supply	162,909	2.00%	3,258	
8	1055	Struct & improv. wir. trt. plt.	82,740	2.00%	1,655	
9	1060	Struct & improv. trans. dist.	461	2.00%	9	
10	1065	Struct & improv. gen. plt.	1,671	2.00%	33	
11	1070	Collecting reservoirs	0	2.00%	0	
12	1080	Wells & springs	497,829	2.00%	9,957	
13	1085	Infiltration gallery	0	2.50%	0	
14	1090	Supply mains	839	1.00%	8	
15	1095	Power generation equip.	0	10.00%	0	
16	1100	Electric pump equip. src. plt.	39,995	14.29%	5,715	
17	1105	Electric pump equip. wtp.	346,211	3.33%	11,529	
18	1110	Electric pump equip. trans.	31,088	14.29%	4,442	
19	1115	Water treatment equip.	127,839	2.50%	3,196	
20	1120	Dist. resv. & standpipes	750,433	2.00%	15,009	
21	1125	Trans. & distr. mains	1,768,183	1.00%	17,682	
22	1130	Service lines	633,237	2.00%	12,665	
23	1135	Meters	122,185	3.33%	4,069	
24	1140	Meter installations	134,665	3.33%	4,491	
25	1145	Hydrants	161,575	2.50%	4,039	
26	1150	Backflow prevention devic.	98	10.00%	10	
27	1160	Other plt. & misc. equip. src. su.	0	2.50%	0	
28	1165	Other plt. & misc. equip. wtp.	0	2.50%	0	
29	1175	Office struct & improv.	6,790	10.00%	679	
30	1180	Office furn. & equip.	3,913	10.00%	391	
31	1185	Stores equipment	235	3.33%	8	
32	1190	Tool shop & misc. equip.	92,758	5.00%	4,638	
33	1195	Laboratory equipment	11,419	10.00%	1,142	
34	1200	Power operated equip.	3,464	10.00%	346	
35	1205	Communication equip.	22,756	10.00%	2,276	
36	1210	Misc. equipment	18	3.33%	1	
37	1215	Water plant allocated	0	6.67%	0	
38	1220	Other tangible plt. water	0	2.50%	0	
39	1555	Transportation equip.	0	0.00%	0	
40	1580	Mainframe computer - wtr	0	2.50%	0	
41	1585	Mini computer - wtr	0	0.00%	0	
42	1590	Comp. system cost - wtr	0	0.00%	0	
43	1595	Micro system cost - wtr	0	0.00%	0	
44	1805	Plt. held for future use	0	0.00%	0	
45		Pro forma plant additions	0	0.00%	0	
46		Total plant in service (Sum of L1 thru L45)	\$5,133,916		\$110,497	2.15% [4]

[1] Feasel Exhibit I, Schedule 2-1(c)(1), Column (d).

[2] Depreciation rates approved in Docket No. W-354, Sub 344.

[3] Column (a) multiplied by Column (b).

[4] Column (c) divided by Column (a), Line 46.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF DIRECT PLANT

DEPRECIATION EXPENSE

For The Test Year Ended December 31, 2017

BRADFIELD/FAIRFIELD SEWER OPERATIONS

Public Staff
Feasel Exhibit I
Schedule 3-15(d)

Line No.	Account No.	Item	Plant In Service [1] (a)	Depreciation Rate [2] (b)	Annual Depreciation [3] (c)	Composite Rate (d)
1	1245	Organization	\$16,688	2.50%	\$417	
2	1250	Franchises intang. plt.	20,351	2.50%	509	
3	1270	Land & land rights trmnt plt	0	0.00%	0	
4	1275	Land & land rights reclaim.	0	0.00%	0	
5	1285	Land & land rights gen. plt.	0	0.00%	0	
6	1290	Struct/improv. coll. plt.	0	2.00%	0	
7	1295	Struct/improv. pump plt. ls.	890,705	2.00%	17,814	
8	1300	Struct/improv. treat. plt.	1,985,107	2.50%	49,628	
9	1305	Struct/improv. reclaim. wtp.	0	2.50%	0	
10	1310	Struct/improv. reclaim. wtr.	2,477	2.50%	62	
11	1315	Struct/improv. gen. plt.	245,538	2.00%	4,911	
12	1320	Power gen. equip. coll. plt.	0	10.00%	0	
13	1325	Power gen. equip. pump plt.	41,076	10.00%	4,108	
14	1330	Power gen. equip. treat. plt.	0	10.00%	0	
15	1345	Sewer force main/serv. lin.	193,998	1.33%	2,580	
16	1350	Sewer gravity main	5,212,518	1.00%	52,125	
17	1353	Manholes	16,252	1.00%	163	
18	1355	Special coll. structures	775	2.00%	16	
19	1360	Services to customers	37,341	1.33%	497	
20	1365	Flow measure devices	17,011	4.00%	680	
21	1370	Flow measure install	0	4.00%	0	
22	1375	Receiving wells	0	2.00%	0	
23	1380	Pumping equipment pump plt.	729,968	14.29%	104,312	
24	1385	Pumping equipment reclaim.	234	14.29%	33	
25	1390	Pumping equipment rcl. wtr.	0	14.29%	0	
26	1395	Treat./disp. equip. lagoon	56	2.50%	1	
27	1400	Treat./disp. equip. trt. plt.	2,782,133	2.50%	69,553	
28	1405	Treat./disp. equip. rct. wtp.	0	2.50%	0	
29	1410	Plant sewers treat. plt.	385,368	2.50%	9,634	
30	1415	Plant sewers reclaim wtp.	0	2.50%	0	
31	1420	Outfall lines	15,379	1.00%	154	
32	1425	Other plt. tangible	0	2.50%	0	
33	1430	Other plt. collection	(224)	2.50%	(6)	
34	1435	Other plt. pump	2,873	2.50%	72	
35	1440	Other plt. treatment	0	2.50%	0	
36	1445	Other plt. reclaim wtr. trt.	5,189	2.50%	130	
37	1450	Other plt. reclaim wtr. dis.	0	2.50%	0	
38	1455	Office struct & improv.	10,136	10.00%	1,014	
39	1460	Office fum. & equip.	699	10.00%	70	
40	1465	Stores equipment	2,752	3.33%	92	
41	1470	Tool shop & misc. equip.	12,142	5.00%	607	
42	1475	Laboratory equipment	6,227	10.00%	623	
43	1480	Power operated equip.	47,069	10.00%	4,707	
44	1485	Communication equip.	993	10.00%	99	
45	1490	Misc equip. sewer	8,603	3.33%	285	
46	1495	Sewer plant allocated	0	6.67%	0	
47	1500	Other tangible plt. sewer	0	2.50%	0	
48	1535	Reuse dist. reservoirs	2,763	2.00%	55	
49	1540	Reuse transmission & dist.	(934)	2.00%	(19)	
50	1555	Transportation equip.	0	0.00%	0	
51	1575	Desktop computer - wtr	0	0.00%	0	
52	1580	Mainframe computer - wtr	0	0.00%	0	
53	1585	Mini computer - wtr	0	0.00%	0	
54	1590	Comp. system cost - wtr	0	0.00%	0	
55	1595	Micro system cost - wtr	0	0.00%	0	
56	1805	Plt. held for future use	0	0.00%	0	
57		Pro forma plant additions	0	0.00%	0	
58		Total plant in service (Sum of L1 thru L57)	\$12,691,261		\$324,927	2.56% [4]

[1] Feasel Exhibit I, Schedule 2-1(d)(1), Column (d).

[2] Depreciation rates approved in Docket No. W-354, Sub 344.

[3] Column (a) multiplied by Column (b).

[4] Column (c) divided by Column (a), Line 58.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO FRANCHISE TAX & OTHER TAX
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-16

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)
1	Franchise tax & other tax per application	(\$21,941)	(\$17,738)	(\$3,653)	(\$6,368)
2	Adjustment to remove Riverbend franchise tax & other tax	(2) [1]	0 [1]	0 [1]	0 [1]
3	Franchise tax & other tax per Public Staff (L1 + L2)	(\$21,943)	(\$17,738)	(\$3,653)	(\$6,368)

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ADJUSTMENT TO PROPERTY TAX

For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-17

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)
1	Property tax per application	<u>\$133,847</u>	<u>\$79,682</u>	<u>\$9,677</u>	<u>\$10,074</u>
2	Adjustment to remove property tax related to Riverbend	794 [1]	0	0	0
3	Adjustments to correct UA adjustments	<u>(271) [1]</u>	<u>(162) [1]</u>	<u>(32) [1]</u>	<u>(34) [1]</u>
4	Total adjustments to property tax (L2 + L3)	<u>523</u>	<u>(162)</u>	<u>(32)</u>	<u>(34)</u>
5	Property tax per Public Staff (L1 + L4)	<u><u>\$134,370</u></u>	<u><u>\$79,520</u></u>	<u><u>\$9,645</u></u>	<u><u>\$10,040</u></u>

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
CALCULATION OF INCOME TAXES
For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-18(a)

CWSNC WATER OPERATIONS

Line No.	Item	Present Rates [1] (a)	Company Proposed Rates [3] (b)	Public Staff Recommended Rates [5] (c)
1	Operating revenue	\$17,022,057	\$19,515,626	\$17,027,433
	Operating revenue deductions:			
2	Maintenance expenses	6,410,682	6,410,682	6,410,682
3	General expenses	2,980,201	2,980,201	2,980,201
4	Depreciation expense	2,877,663	2,877,663	2,877,663
5	Amortization of CIAC	(772,761)	(772,761)	(772,761)
6	Amortization of PAA	(115,514)	(115,514)	(115,514)
7	Amortization of ITC	(287)	(287)	(287)
8	Franchise and other taxes	(21,943)	(21,943)	(21,943)
9	Property taxes	134,370	134,370	134,370
10	Payroll taxes	280,813	280,813	280,813
11	Regulatory fee	23,831	27,322	23,838
12	Gross receipts tax	0	0	0
13	Interest expense	1,952,490 [2]	1,952,490 [4]	1,952,490 [6]
14	Total deductions (Sum of L2 thru L13)	13,749,545	13,753,036	13,749,552
15	Taxable income (L1 - L14)	3,272,512	5,762,590	3,277,881
16	State income tax (L15 x 3%)	98,175	172,878	98,336
17	Federal taxable income after state income tax (L15 - L16)	3,174,337	5,589,712	3,179,545
18	Federal income tax (L17 x 21%)	666,611	1,173,839	667,704
19	Excess deferred income tax amortization			
20	Net amount (L15 - L16 - L18-L19)	2,507,726	4,415,873	2,511,841
21	Add: Interest expense	1,952,490 [2]	1,952,490 [4]	1,952,490 [6]
22	Net income for a return (L20 + L21)	\$4,460,216	\$6,368,363	\$4,464,331

- [1] Feasel Exhibit I, Schedule 3(a), Column (c).
[2] Feasel Exhibit I, Schedule 1(a), Column (e), Line 1.
[3] Feasel Exhibit I, Schedule 3(a), Column (e).
[4] Feasel Exhibit I, Schedule 1(a), Column (e), Line 4.
[5] Feasel Exhibit I, Schedule 3(a), Column (g).
[6] Feasel Exhibit I, Schedule 1(a), Column (e), Line 7.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF INCOME TAXES

For The Test Year Ended December 31, 2017

Public Staff
Feasel Exhibit I
Schedule 3-18(b)**CWSNC SEWER OPERATIONS**

Line No.	Item	Present Rates (a)	[1]	Company Proposed Rates (b)	[3]	Public Staff Recommended Rates (c)	[5]
1	Operating revenue	\$12,721,070		\$13,728,524		\$12,537,444	
	Operating revenue deductions:						
2	Maintenance expenses	5,303,365		5,303,365		5,303,365	
3	General expenses	1,775,963		1,775,963		1,775,963	
4	Depreciation expense	2,271,822		2,271,822		2,271,822	
5	Amortization of CIAC	(774,595)		(774,595)		(774,595)	
6		(17,244)		(17,244)		(17,244)	
7	Amortization of ITC	(232)		(232)		(232)	
8	Franchise and other taxes	(17,738)		(17,738)		(17,738)	
9	Property taxes	79,520		79,520		79,520	
10	Payroll taxes	167,175		167,175		167,175	
11	Regulatory fee	17,809		19,220		17,552	
12	Gross receipts tax	0		0		0	
13	Interest expense	1,393,097	[2]	1,393,097	[4]	1,393,097	[6]
14	Total deductions (Sum of L2 thru L13)	10,198,941		10,200,352		10,198,684	
15	Taxable income (L1 - L14)	2,522,129		3,528,172		2,338,760	
16	State income tax (L15 x 3%)	75,664		105,845		70,163	
17	Federal taxable income after state income tax (L15 - L16)	2,446,465		3,422,327		2,268,597	
18	Federal income tax (L17 x 21%)	513,758		718,689		476,405	
19	Excess deferred income tax amortization						
20	Net amount (L15 - L16 - L18-L19)	1,932,707		2,703,638		1,792,192	
21	Add: Interest expense	1,393,097	[2]	1,393,097	[4]	1,393,097	[6]
22	Net income for a return (L20 + L21)	\$3,325,804		\$4,096,735		\$3,185,289	

[1] Feasel Exhibit I, Schedule 3(b), Column (c).

[2] Feasel Exhibit I, Schedule 1(b), Column (e), Line 1.

[3] Feasel Exhibit I, Schedule 3(b), Column (e).

[4] Feasel Exhibit I, Schedule 1(b), Column (e), Line 4.

[5] Feasel Exhibit I, Schedule 3(b), Column (g).

[6] Feasel Exhibit I, Schedule 1(b), Column (e), Line 7.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF INCOME TAXES

For The Test Year Ended December 31, 2017

BRADFIELD/FAIRFIELD WATER OPERATIONSPublic Staff
Feasel Exhibit I
Schedule 3-18(c)

Line No.	Item	Present Rates [1] (a)	Company Proposed Rates [3] (b)	Public Staff Recommended Rates [5] (c)
1	Operating revenue	\$1,074,106	\$1,585,213	\$1,323,092
	Operating revenue deductions:			
2	Maintenance expenses	530,192	530,192	530,192
3	General expenses	358,786	358,786	358,786
4	Depreciation expense	127,603	127,603	127,603
5	Amortization of CIAC	(47,886)	(47,886)	(47,886)
6	Amortization of PAA	12,967	12,967	12,967
7	Amortization of ITC	0	0	0
8	Franchise and other taxes	(3,653)	(3,653)	(3,653)
9	Property taxes	9,645	9,645	9,645
10	Payroll taxes	33,947	33,947	33,947
11	Regulatory fee	1,504	2,219	1,852
12	Gross receipts tax	0	0	0
13	Interest expense	111,855 [2]	111,855 [4]	111,855 [6]
14	Total deductions (Sum of L2 thru L13)	1,134,960	1,135,675	1,135,308
15	Taxable income (L1 - L14)	(60,854)	449,538	187,784
16	State income tax (L15 x 3%)	0	13,486	5,634
17	Federal taxable income after state income tax (L15 - L16)	(59,028)	436,052	182,150
18	Federal income tax (L17 x 21%)	0	91,571	38,252
19	Excess deferred income tax amortization			
20	Net amount (L15 - L16 - L18-L19)	(46,632)	344,481	143,898
21	Add: Interest expense	111,855 [2]	111,855 [4]	111,855 [6]
22	Net income for a return (L20 + L21)	\$65,223	\$456,336	\$255,753

[1] Feasel Exhibit I, Schedule 3(c), Column (c).

[2] Feasel Exhibit I, Schedule 1(c), Column (e), Line 1.

[3] Feasel Exhibit I, Schedule 3(c), Column (e).

[4] Feasel Exhibit I, Schedule 1(c), Column (e), Line 4.

[5] Feasel Exhibit I, Schedule 3(c), Column (g).

[6] Feasel Exhibit I, Schedule 1(c), Column (e), Line 7.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF INCOME TAXES

For The Test Year Ended December 31, 2017

BRADFIELD/FAIRFIELD SEWER OPERATIONSPublic Staff
Feasibility Exhibit I
Schedule 3-18(d)

Line No.	Item	Present Rates (a)	[1]	Company Proposed Rates (b)	[3]	Public Staff Recommended Rates (c)	[5]
1	Operating revenue	\$1,758,234		\$2,146,504		\$2,037,318	
	Operating revenue deductions:						
2	Maintenance expenses	799,492		799,492		799,492	
3	General expenses	373,507		373,507		373,507	
4	Depreciation expense	339,980		339,980		339,980	
5	Amortization of CIAC	(181,478)		(181,478)		(181,478)	
6	Amortization of PAA	42,460		42,460		42,460	
7	Amortization of ITC	0		0		0	
8	Franchise and other taxes	(6,368)		(6,368)		(6,368)	
9	Property taxes	10,040		10,040		10,040	
10	Payroll taxes	35,339		35,339		35,339	
11	Regulatory fee	2,462		3,005		2,852	
12	Gross receipts tax	0		0		0	
13	Interest expense	232,003	[2]	232,003	[4]	232,003	[6]
14	Total deductions (Sum of L2 thru L13)	1,647,437		1,647,980		1,647,827	
15	Taxable income (L1 - L14)	110,797		498,524		389,491	
16	State income tax (L15 x 3%)	3,324		14,956		11,685	
17	Federal taxable income after state income tax (L15 - L16)	107,473		483,568		377,806	
18	Federal income tax (L17 x 21%)	22,569		101,549		79,339	
19	Excess deferred income tax amortization						
20	Net amount (L15 - L16 - L18-L19)	84,904		382,019		298,467	
21	Add: Interest expense	232,003	[2]	232,003	[4]	232,003	[6]
22	Net income for a return (L20 + L21)	\$316,907		\$614,022		\$530,470	

[1] Feasibility Exhibit I, Schedule 3(d), Column (c).

[2] Feasibility Exhibit I, Schedule 1(d), Column (e), Line 1.

[3] Feasibility Exhibit I, Schedule 3(d), Column (e).

[4] Feasibility Exhibit I, Schedule 1(d), Column (e), Line 4.

[5] Feasibility Exhibit I, Schedule 3(d), Column (g).

[6] Feasibility Exhibit I, Schedule 1(d), Column (e), Line 7.

CAROLINA WATER SERVICE, INC. OF NC

Docket No. W-354, Sub 360

**CALCULATION OF GROSS REVENUE
IMPACT OF PUBLIC STAFF ADJUSTMENTS
For The Test Year Ended December 31, 2017**

Public Staff
Feasibility Exhibit II
Schedule 1

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)
1	Increase/(decrease) in total revenue per Company	\$2,485,612	\$1,022,180	\$511,341	\$386,403
2	Difference in calculation of revenue requirement based on Company amounts	(1)	(2)	(2)	0
3	Adjust capital structure to 53.59% debt and 46.41% equity	(423,350)	(314,332)	(20,132)	(51,002)
4	Adjust debt cost rate to 5.64%	(42,967)	(31,902)	(2,043)	(5,176)
5	Adjust return on equity to 9.2%	(814,278)	(604,595)	(38,719)	(98,096)
6	Adjustment to uncollectibles	10,049	3,366	3,143	4,694
7	Adjustment to forfeited discounts	(4,379)	(2,002)	(402)	(604)
8	Adjustment to miscellaneous revenues	(20,080)	19,170	(3,530)	3,530
9	Update revenues to 6/30/2017	(27,964)	45,470	0	(11,651)
10	Adjustment to include plant held for future use	(8,261)	(44,504)	0	0
11	Adjustment to remove pro forma estimates	(277,889)	(151,680)	0	(15,679)
12	Adjustment to cost center rate base	(483)	(182)	0	0
13	Adjustment to include cost centers GL additions	19,637	9,865	2,170	1,823
14	Adjustment to update rate base	8,306	3,608	28,154	10,227
15	Adjustment to include actual GL additions	261,109	179,780	4,630	29,764
16	Adjustments to add in capitalized legal fees	0	676	0	0
17	Adjustment to remove AA Riverbend	45	0	0	0
18	Adjustment to cash working capital	(10,182)	(1,368)	(578)	(956)
19	Adjustment to ADIT	69,615	(52,897)	27,577	(27,284)
20	Adjustment to customer deposits	(1,610)	(958)	(253)	(263)
21	Adjustment to gain on sale	7,787	3,967	0	0
22	Adjustment to excess book value	(1)	0	0	0
24	Adjustment to average tax accruals	(11,810)	(7,127)	(803)	(863)
25	Adjustment for excess deferred taxes	12,481	7,393	930	969
26	Adjustment to deferred charges	(28,170)	(68,386)	(8,897)	(1,475)
27	Adjustment to maintenance salaries	(83,856)	(42,168)	(8,563)	(8,913)
28	Adjustment to purchased power	(1,913)	0	0	0
29	Adjustment to purchased water/sewer	(125,068)	(1,988)	31,359	0
30	Adjustment to maintenance and repair	(366,470)	6,770	(503)	(19,671)
31	Adjustment to maintenance testing	59,523	12,397	3,680	(1,968)
32	Adjustment to meter reading	(96)	0	0	0
33	Adjustment to chemicals	(131,848)	136,058	3,428	(3,427)
34	Adjustment to transportation	(1,464)	(411)	(83)	(87)
35	Adjustment to capitalized time	19,025	12,002	1,847	1,942
36	Adjustment to outside services - other	(18,560)	(8,499)	(84)	(88)
37	Adjustment to general salaries and wages	(145,276)	(83,150)	(16,885)	(17,578)
38	Adjustment to office supplies and other office exp.	(2,646)	(617)	(124)	(130)
39	Adjustment to regulatory commission expense	(178,163)	(105,713)	(20,044)	(21,779)
40	Adjustment to pension and benefits	(3,147)	(1,836)	(392)	(409)
41	Adjustment to rent	(5,906)	(2,982)	(605)	(630)
42	Adjustment to insurance	(71,667)	(42,694)	(14,135)	(14,715)
43	Adjustment to office utility	(1,396)	(355)	(72)	(75)
44	Adjustment to miscellaneous	(9,389)	(5,440)	(1,024)	(1,065)
45	Adjustment to depreciation expense	(14,137)	87,203	(222,703)	217,394
46	Adjustment to amortization expense - CIAC	(91,880)	(158,721)	(8,739)	(36,886)
47	Adjustment to amortization expense - PAA	(11,553)	7,750	1,397	(35,771)
48	Adjustment to franchise tax	(2)	0	0	0
49	Adjustment to property tax	524	(162)	(32)	(34)
50	Adjustment to payroll tax	(12,364)	(6,510)	(1,322)	(1,377)
51	Revenue impact of Public Staff adjustments	(2,480,235)	(1,205,805)	(262,353)	(107,319)
52	Increase/(decrease) per Public Staff	\$5,377	(\$183,625)	\$246,987	\$279,084

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
RETURN ON ORIGINAL COST RATE BASE
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 1(a)

I/A
V 8

CWSNC WATER OPERATIONS

Line No.	Item	Capitalization Ratio [1] (a)	Original Cost Rate Base [1] (b)	Embedded Cost [1] (c)	Overall Cost Rate [7] (d)	Net Operating Income [7] (e)
<u>Present Rates:</u>						
1	Debt	49.09%	\$29,891,211 [2]	5.68% [1]	2.79%	\$1,697,821 [8]
2	Equity	50.91%	30,999,421 [2]	8.93% [6]	4.55%	2,768,220 [9]
3	Total	100.00%	\$60,890,632 [3]		7.34%	\$4,466,041 [10]
<u>Company Proposed Rates:</u>						
4	Debt	49.09%	\$29,891,211 [4]	5.68% [1]	2.79%	\$1,697,821 [8]
5	Equity	50.91%	30,999,421 [4]	15.09% [6]	7.68%	4,676,367 [11]
6	Total	100.00%	\$60,890,632 [3]		10.47%	\$6,374,188 [12]
<u>Public Staff Recommended Rates:</u>						
7	Debt	49.09%	\$29,891,211 [5]	5.68% [1]	2.79%	\$1,697,821 [8]
8	Equity	50.91%	30,999,421 [5]	9.20% [1]	4.68%	2,851,947 [13]
9	Total	100.00%	\$60,890,632 [3]		7.47%	\$4,549,768 [14]

[1] Per Public Staff Financial Analyst Hilton.

[2] Column (a) multiplied by Line 3, Column (b).

[3] Henry Exhibit I, Schedule 2(a), Column (c), Line 17.

[4] Column (a) multiplied by Line 6, Column (b).

[5] Column (a) multiplied by Line 9, Column (b).

[6] Column (e) divided by Column (b).

[7] Column (a) multiplied by Column (c).

[8] Column (b) multiplied by Column (c).

[9] Line 3 minus Line 1, Column (e).

[10] Henry Exhibit I, Schedule 3(a), Column (c), Line 38.

[11] Line 6 minus Line 4, Column (e).

[12] Henry Exhibit I, Schedule 3(a), Column (e), Line 38.

[13] Line 9 minus Line 7, Column (e).

[14] Henry Exhibit I, Schedule 3(a), Column (g), Line 38.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
RETURN ON ORIGINAL COST RATE BASE
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 1(b)

CWSNC SEWER OPERATIONS

Line No.	Item	Capitalization Ratio [1] (a)	Original Cost Rate Base [2] (b)	Embedded Cost [3] (c)	Overall Cost Rate [7] (d)	Net Operating Income [8] (e)
Present Rates:						
1	Debt	49.09%	\$21,414,302 [2]	5.68% [1]	2.79%	\$1,216,332 [8]
2	Equity	50.91%	22,208,232 [2]	9.57% [6]	4.87%	2,125,383 [9]
3	Total	100.00%	\$43,622,534 [3]		7.66%	\$3,341,715 [10]
Company Proposed Rates:						
4	Debt	49.09%	\$21,414,302 [4]	5.68% [1]	2.79%	\$1,216,332 [8]
5	Equity	50.91%	22,208,232 [4]	13.04% [6]	6.64%	2,896,314 [11]
6	Total	100.00%	\$43,622,534 [3]		9.43%	\$4,112,646 [12]
Public Staff Recommended Rates:						
7	Debt	49.09%	\$21,414,302 [5]	5.68% [1]	2.79%	\$1,216,332 [8]
8	Equity	50.91%	22,208,232 [5]	9.20% [1]	4.68%	2,043,157 [13]
9	Total	100.00%	\$43,622,534 [3]		7.47%	\$3,259,489 [14]

- [1] Per Public Staff Financial Analyst Hilton.
[2] Column (a) multiplied by Line 3, Column (b).
[3] Henry Exhibit I, Schedule 2(b), Column (c), Line 17.
[4] Column (a) multiplied by Line 6, Column (b).
[5] Column (a) multiplied by Line 9, Column (b).
[6] Column (e) divided by Column (b).
[7] Column (a) multiplied by Column (c).

- [8] Column (b) multiplied by Column (c).
[9] Line 3 minus Line 1, Column (e).
[10] Henry Exhibit I, Schedule 3(b), Column (c), Line 38.
[11] Line 6 minus Line 4, Column (e).
[12] Henry Exhibit I, Schedule 3(b), Column (e), Line 38.
[13] Line 9 minus Line 7, Column (e).
[14] Henry Exhibit I, Schedule 3(b), Column (g), Line 38.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360
RETURN ON ORIGINAL COST RATE BASE
 For The Test Year Ended December 31, 2017

Public Staff
 Henry Supp. Exhibit I
 Schedule 1(c)

BRADFIELD/FAIRFIELD WATER OPERATIONS

Line No.	Item	Capitalization Ratio [1] (a)	Original Cost Rate Base [2] (b)	Embedded Cost [3] (c)	Overall Cost Rate [7] (d)	Net Operating Income [8] (e)
Present Rates:						
1	Debt	49.09%	\$1,689,914 [2]	5.68% [1]	2.79%	\$95,987 [8]
2	Equity	50.91%	1,752,567 [2]	-1.79% [6]	-0.91%	(31,423) [9]
3	Total	100.00%	\$3,442,481 [3]		1.88%	\$64,564 [10]
Company Proposed Rates:						
4	Debt	49.09%	\$1,689,914 [4]	5.68% [1]	2.79%	\$95,987 [8]
5	Equity	50.91%	1,752,567 [4]	20.52% [6]	10.45%	359,691 [11]
6	Total	100.00%	\$3,442,481 [3]		13.24%	\$455,678 [12]
Public Staff Recommended Rates:						
7	Debt	49.09%	\$1,689,914 [5]	5.68% [1]	2.79%	\$95,987 [8]
8	Equity	50.91%	1,752,567 [5]	9.20% [1]	4.68%	161,236 [13]
9	Total	100.00%	\$3,442,481 [3]		7.47%	\$257,223 [14]

[1] Per Public Staff Financial Analyst Hilton.

[2] Column (a) multiplied by Line 3, Column (b).

[3] Henry Exhibit I, Schedule 2(c), Column (c), Line 17.

[4] Column (a) multiplied by Line 6, Column (b).

[5] Column (a) multiplied by Line 9, Column (b).

[6] Column (e) divided by Column (b).

[7] Column (a) multiplied by Column (c).

[8] Column (b) multiplied by Column (c).

[9] Line 3 minus Line 1, Column (e).

[10] Henry Exhibit I, Schedule 3(c), Column (c), Line 38.

[11] Line 6 minus Line 4, Column (e).

[12] Henry Exhibit I, Schedule 3(c), Column (e), Line 38.

[13] Line 9 minus Line 7, Column (e).

[14] Henry Exhibit I, Schedule 3(c), Column (g), Line 38.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
RETURN ON ORIGINAL COST RATE BASE
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 1(d)

BRADFIELD/FAIRFIELD SEWER OPERATIONS

Line No.	Item	Capitalization Ratio [1] (a)	Original Cost Rate Base [2] (b)	Embedded Cost [3] (c)	Overall Cost Rate [4] (d)	Net Operating Income [5] (e)
Present Rates:						
1	Debt	49.09%	\$3,587,167 [2]	5.68% [1]	2.79%	\$203,751 [8]
2	Equity	50.91%	3,720,160 [2]	3.25% [6]	1.65%	120,794 [9]
3	Total	100.00%	\$7,307,327 [3]		4.44%	\$324,545 [10]
Company Proposed Rates:						
4	Debt	49.09%	\$3,587,167 [4]	5.68% [1]	2.79%	\$203,751 [8]
5	Equity	50.91%	3,720,160 [4]	11.23% [6]	5.72%	417,910 [11]
6	Total	100.00%	\$7,307,327 [3]		8.51%	\$621,661 [12]
Public Staff Recommended Rates:						
7	Debt	49.09%	\$3,587,167 [5]	5.68% [1]	2.79%	\$203,751 [8]
8	Equity	50.91%	3,720,160 [5]	9.20% [1]	4.68%	342,255 [13]
9	Total	100.00%	\$7,307,327 [3]		7.47%	\$546,006 [14]

[1] Per Public Staff Financial Analyst Hilton.

[2] Column (a) multiplied by Line 3, Column (b).

[3] Henry Exhibit I, Schedule 2(d), Column (c), Line 17.

[4] Column (a) multiplied by Line 6, Column (b).

[5] Column (a) multiplied by Line 9, Column (b).

[6] Column (e) divided by Column (b).

[7] Column (a) multiplied by Column (c).

[8] Column (b) multiplied by Column (c).

[9] Line 3 minus Line 1, Column (e).

[10] Henry Exhibit I, Schedule 3(d), Column (c), Line 38.

[11] Line 6 minus Line 4, Column (e).

[12] Henry Exhibit I, Schedule 3(d), Column (e), Line 38.

[13] Line 9 minus Line 7, Column (e).

[14] Henry Exhibit I, Schedule 3(d), Column (g), Line 38.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360
ORIGINAL COST RATE BASE
 For The Test Year Ended December 31, 2017

Public Staff
 Henry Supp. Exhibit I
 Schedule 2(a)

CWSNC WATER OPERATIONS

Line No.	Item	Amount Per Application (a)	Public Staff Adjustments (b)	Amount Per Public Staff (c)	
1	Plant in service	\$105,659,424	\$3,753,488	\$ 109,412,912	[3]
2	Accumulated depreciation	(26,572,384)	(898,887)	(27,471,271)	[4]
3	Net plant in service (L1 + L2)	79,087,040	2,854,601	81,941,641	
4	Cash working capital	1,131,235	(123,263)	1,007,972	[5]
5	Contributions in aid of construction	(18,714,027)	354,774	(18,359,254)	[6]
6	Advances in aid of construction	(23,760)	0	(23,760)	
7	Accumulated deferred income taxes	(2,922,461)	1,249,571	(1,672,890)	[7]
8	Customer deposits	(173,055)	(18,614)	(191,669)	[8]
9	Gain on sale and flow back taxes	(286,987)	90,040	(196,947)	[9]
10	Plant acquisition adjustment	(2,336,007)	63,513	(2,272,494)	[10]
11	Excess book value	(448)	(8)	(456)	[11]
12	Cost-free capital	(121,791)	0	(121,791)	
13	Average tax accruals	64,607	(136,558)	(71,951)	[12]
14	Regulatory liability for excess deferred taxes	(144,323)	0	(144,323)	
15	Deferred charges	1,322,290	(325,736)	996,554	[13]
16	Pro forma plant	3,214,455	(3,214,455)	0	[14]
17	Original cost rate base (Sum of L3 thru L16)	\$60,096,768	\$793,864	\$60,890,632	

- [1] Column (c) minus Column (a).
 [2] Column (a) plus Column (b), unless otherwise footnoted.
 [3] Henry Exhibit I, Schedule 2-1(a), Column (c), Line 4.
 [4] Henry Exhibit I, Schedule 2-1(a), Column (c), Line 8.
 [5] Henry Exhibit I, Schedule 2-3, Column (a), Line 4.
 [6] Henry Exhibit I, Schedule 2-4, Column (c), Line 6.
 [7] Henry Exhibit I, Schedule 2-5(a), Column (d), Line 27.
 [8] Henry Exhibit I, Schedule 2-6, Column (a), Line 3.
 [9] Henry Exhibit I, Schedule 2-7, Column (a), Line 6.
 [10] Henry Exhibit I, Schedule 2-8, Column (c), Line 5.
 [11] Henry Exhibit I, Schedule 2-9, Column (d), Line 7.
 [12] Henry Exhibit I, Schedule 2-3, Column (a), Line 9.
 [13] Henry Exhibit I, Schedule 2-10, Column (a), Line 4.
 [14] To remove estimated plant cost in the future.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360
ORIGINAL COST RATE BASE
 For The Test Year Ended December 31, 2017

Public Staff
 Henry Supp. Exhibit I
 Schedule 2(b)

CWSNC SEWER OPERATIONS

Line No.	Item	Amount Per Application (a)	Public Staff Adjustments [1] (b)	Amount Per Public Staff [2] (c)
1	Plant in service	\$82,208,113	\$2,126,887	\$ 84,335,000 [3]
2	Accumulated depreciation	(20,517,737)	(836,191)	(21,353,928) [4]
3	Net plant in service (L1 + L2)	61,690,376	1,290,696	62,981,072
4	Cash working capital	815,643	(19,062)	796,581 [5]
5	Contributions in aid of construction	(18,672,446)	430,286	(18,242,160) [6]
6	Advances in aid of construction	(9,180)	0	(9,180)
7	Accumulated deferred income taxes	(1,731,139)	(113,206)	(1,844,345) [7]
8	Customer deposits	(103,024)	(11,081)	(114,105) [8]
9	Gain on sale and flow back taxes	(138,550)	45,869	(92,681) [9]
10	Plant acquisition adjustment	261,581	4,752	266,333 [10]
11	Excess book value	0	0	0
12	Cost-free capital	(139,708)	0	(139,708)
13	Average tax accruals	39,084	(82,406)	(43,322) [11]
14	Regulatory liability for excess deferred taxes	(85,491)	0	(85,491)
15	Deferred charges	940,307	(790,767)	149,540 [12]
16	Pro forma plant	1,753,909	(1,753,909)	0 [13]
17	Original cost rate base (Sum of L3 thru L16)	<u>\$44,621,362</u>	<u>(\$998,828)</u>	<u>\$43,622,534</u>

- [1] Column (c) minus Column (a).
 [2] Column (a) plus Column (b), unless otherwise footnoted.
 [3] Henry Exhibit I, Schedule 2-1(b), Column (c), Line 4.
 [4] Henry Exhibit I, Schedule 2-1(b), Column (c), Line 8.
 [5] Henry Exhibit I, Schedule 2-3, Column (b), Line 4.
 [6] Henry Exhibit I, Schedule 2-4, Column (f), Line 6.
 [7] Henry Exhibit I, Schedule 2-5(a), Column (e), Line 27.
 [8] Henry Exhibit I, Schedule 2-6, Column (b), Line 3.
 [9] Henry Exhibit I, Schedule 2-7, Column (b), Line 6.
 [10] Henry Exhibit I, Schedule 2-8, Column (f), Line 5.
 [11] Henry Exhibit I, Schedule 2-3, Column (b), Line 9.
 [12] Henry Exhibit I, Schedule 2-10, Column (b), Line 4.
 [13] To remove estimated plant cost in the future.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ORIGINAL COST RATE BASE

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 2(c)

BRADFIELD/FAIRFIELD WATER OPERATIONS

Line No.	Item	Amount Per Application (a)	Public Staff Adjustments (b)	[1]	Amount Per Public Staff (c)	[2]
1	Plant in service	\$5,815,265	\$108,811		\$5,924,076	[3]
2	Accumulated depreciation	(1,903,826)	278,501		(1,625,325)	[4]
3	Net plant in service (L1 + L2)	3,911,439	387,312		4,298,751	
4	Cash working capital	117,808	(7,460)		110,348	[5]
5	Contributions in aid of construction	(1,127,502)	24,031		(1,103,471)	[6]
6	Advances in aid of construction	0	0		0	
7	Accumulated deferred income taxes	(251,858)	303,227		51,369	[7]
8	Customer deposits	(15,137)	(2,926)		(18,063)	[8]
9	Gain on sale and flow back taxes	0	0		0	
10	Plant acquisition adjustment	31,423	(7,161)		24,262	[9]
11	Excess book value	0	0		0	
12	Cost-free capital	0	0		0	
13	Average tax accruals	4,164	(9,288)		(5,124)	[10]
14	Regulatory liability for excess deferred taxes	(10,756)	0		(10,756)	
15	Deferred charges	198,042	(102,877)		95,165	[11]
16	Pro forma plant	0	0		0	
17	Original cost rate base (Sum of L3 thru L16)	<u>\$2,857,623</u>	<u>\$584,858</u>		<u>\$3,442,481</u>	

- [1] Column (c) minus Column (a).
 [2] Column (a) plus Column (b), unless otherwise footnoted.
 [3] Henry Exhibit I, Schedule 2-1(c), Column (c), Line 3.
 [4] Henry Exhibit I, Schedule 2-1(c), Column (c), Line 6.
 [5] Henry Exhibit I, Schedule 2-3, Column (c), Line 4.
 [6] Henry Exhibit I, Schedule 2-4, Column (i), Line 6.
 [7] Henry Exhibit I, Schedule 2-5(b), Column (d), Line 27.
 [8] Henry Exhibit I, Schedule 2-6, Column (c), Line 3.
 [9] Henry Exhibit I, Schedule 2-8, Column (i), Line 5.
 [10] Henry Exhibit I, Schedule 2-3, Column (c), Line 9.
 [11] Henry Exhibit I, Schedule 2-10, Column (c), Line 4.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ORIGINAL COST RATE BASE

For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 2(d)

BRADFIELD/FAIRFIELD SEWER OPERATIONS

Line No.	Item	Amount Per Application (a)	Public Staff Adjustments (b)	[1]	Amount Per Public Staff (c)	[2]
1	Plant in service	\$12,932,107	\$401,431		\$13,333,538	[3]
2	Accumulated depreciation	(2,504,941)	348		(2,504,593)	[4]
3	Net plant in service (L1 + L2)	10,427,166	401,779		10,828,945	
4	Cash working capital	157,683	(11,865)		145,818	[5]
5	Contributions in aid of construction	(4,299,941)	109,156		(4,190,785)	[6]
6	Advances in aid of construction	0	0		0	
7	Accumulated deferred income taxes	(262,243)	(192,728)		(454,971)	[7]
8	Customer deposits	(15,758)	(3,045)		(18,803)	[8]
9	Gain on sale and flow back taxes	0	0		0	
10	Plant acquisition adjustment	980,236	(27,539)		952,697	[9]
11	Excess book value	0	0		0	
12	Cost-free capital	0	0		0	
13	Average tax accruals	4,472	(9,984)		(5,512)	[10]
14	Regulatory liability for excess deferred taxes	(11,200)	0		(11,200)	
15	Deferred charges	78,188	(17,050)		61,138	[11]
16	Pro forma plant	181,300	(181,300)		0	[12]
17	Original cost rate base (Sum of L3 thru L16)	<u>\$7,239,903</u>	<u>\$67,424</u>		<u>\$7,307,327</u>	

[1] Column (c) minus Column (a).

[2] Column (a) plus Column (b), unless otherwise footnoted.

[3] Henry Exhibit I, Schedule 2-1(d), Column (c), Line 3.

[4] Henry Exhibit I, Schedule 2-1(d), Column (c), Line 6.

[5] Henry Exhibit I, Schedule 2-3, Column (d), Line 4.

[6] Henry Exhibit I, Schedule 2-4, Column (I), Line 6.

[7] Henry Exhibit I, Schedule 2-5(b), Column (e), Line 27.

[8] Henry Exhibit I, Schedule 2-6, Column (d), Line 3.

[9] Henry Exhibit I, Schedule 2-8, Column (I), Line 5.

[10] Henry Exhibit I, Schedule 2-3, Column (d), Line 9.

[11] Henry Exhibit I, Schedule 2-10, Column (d), Line 4.

[12] To remove estimated plant cost in the future.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360¹
**CALCULATION OF PLANT IN SERVICE AND
ACCUMULATED DEPRECIATION**
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 2-1(a)

CWSNC WATER OPERATIONS

Line No.	Item	Amount Per Application (a)	Public Staff Adjustments [1] (b)	Amount Per Public Staff [2] (c)
	<u>Plant In Service:</u>			
1	Direct plant in service	\$98,867,930	\$3,430,381	\$102,298,311 [3]
2	Allocation of common plant in service: WSC cost center, Regional and NC	6,791,492	343,494	7,134,986 [4]
3	Riverbend adjustment--2017 and 2018	0	(20,385)	(20,385) [4]
4	Total plant in service (Sum of L1 thru L3)	<u>\$105,659,422</u>	<u>\$3,753,490</u>	<u>\$109,412,912</u>
	<u>Accumulated Depreciation:</u>			
5	Direct accumulated depreciation	(\$21,524,143)	(\$797,263)	(\$22,321,406) [5]
6	Allocation of common accumulated depreciation: WSC cost center, Regional and NC	(5,048,241)	(116,427)	(5,164,668) [4]
7	Riverbend adjustment--2017 and 2018	0	14,803	14,803 [4]
8	Total accumulated depr. (Sum of L5 thru L7)	<u>(\$26,572,384)</u>	<u>(\$898,887)</u>	<u>(\$27,471,271)</u>

- [1] Column (c) minus Column (a), unless otherwise footnoted.
[2] Column (a) plus Column (b), unless otherwise footnoted.
[3] Henry Exhibit I, Schedule 2-1(a)(1), Column (d), Line 46.
[4] Calculated based on information provided by the Company.
[5] Henry Exhibit I, Schedule 2-2, Column (a), Line 7.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
**CALCULATION OF PLANT IN SERVICE AND
ACCUMULATED DEPRECIATION**
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 2-1(b)

CWSNC SEWER OPERATIONS

Line No.	Item	Amount Per Application (a)	Public Staff Adjustments (b)	[1]	Amount Per Public Staff (c)	[2]
	<u>Plant In Service:</u>					
1	Direct plant in service	\$78,901,230	\$1,958,542		\$80,859,772	[3]
2	Allocation of common plant in service: WSC cost center	3,306,883	178,339		3,485,222	[4]
3	Riverbend adjustment--2017 and 2018	0	(9,994)		(9,994)	[4]
4	Total plant in service (Sum of L1 thru L3)	<u>\$82,208,113</u>	<u>\$2,126,887</u>		<u>\$84,335,000</u>	
	<u>Accumulated Depreciation:</u>					
5	Direct accumulated depreciation	(\$17,836,073)	(\$779,810)		(\$18,615,883)	[5]
6	Allocation of common accumulated depreciation: WSC cost center	(2,681,664)	(64,271)		(2,745,935)	[4]
7	Riverbend adjustment--2017 and 2018	0	7,889		7,889	[4]
8	Total accumulated depr. (Sum of L5 thru L7)	<u>(\$20,517,737)</u>	<u>(\$836,191)</u>		<u>(\$21,353,928)</u>	

- [1] Column (c) minus Column (a), unless otherwise footnoted.
[2] Column (a) plus Column (b), unless otherwise footnoted.
[3] Henry Exhibit I, Schedule 2-1(b)(1), Column (d), Line 58.
[4] Calculated based on information provided by the Company.
[5] Henry Exhibit I, Schedule 2-2, Column (b), Line 7.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

**CALCULATION OF PLANT IN SERVICE AND
ACCUMULATED DEPRECIATION**

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I
Schedule 2-1(c)

BRADFIELD/FAIRFIELD WATER OPERATIONS

<u>Line No.</u>	<u>Item</u>	<u>Amount Per Application (a)</u>	<u>Public Staff Adjustments (b)</u>	[1]	<u>Amount Per Public Staff (c)</u>	[2]
	<u>Plant In Service:</u>					
1	Direct plant in service	\$5,062,815	\$71,101		\$5,133,916	[3]
2	Allocation of common plant in service: WSC cost center	752,451	37,709		790,160	[4]
3	Total plant in service (L1+ L2)	<u>\$5,815,266</u>	<u>\$108,810</u>		<u>\$5,924,076</u>	
	<u>Accumulated Depreciation:</u>					
4	Direct accumulated depreciation	(\$1,355,807)	\$291,118		(\$1,064,689)	[5]
5	Allocation of common accumulated depreciation: WSC cost center	(548,019)	(12,617)		(560,636)	[4]
6	Total accumulated depr. (L4 + L5)	<u>(\$1,903,826)</u>	<u>\$278,501</u>		<u>(\$1,625,325)</u>	

[1] Column (c) minus Column (a), unless otherwise footnoted.

[2] Column (a) plus Column (b), unless otherwise footnoted.

[3] Henry Exhibit I, Schedule 2-1(c)(1), Column (d), Line 46.

[4] Calculated based on information provided by the Company.

[5] Henry Exhibit I, Schedule 2-2, Column (c), Line 7.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
**CALCULATION OF PLANT IN SERVICE AND
ACCUMULATED DEPRECIATION**
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 2-1(d)

BRADFIELD/FAIRFIELD SEWER OPERATIONS

<u>Line No.</u>	<u>Item</u>	<u>Amount Per Application (a)</u>	<u>Public Staff Adjustments [1] (b)</u>	<u>Amount Per Public Staff [2] (c)</u>
	<u>Plant In Service:</u>			
1	Direct plant in service	\$12,322,875	\$368,386	\$12,691,261 [3]
2	Allocation of common plant in service: WSC cost center	609,232	33,045	642,277 [4]
3	Total plant in service (L1+ L2)	<u>\$12,932,107</u>	<u>\$401,431</u>	<u>\$13,333,538</u>
	<u>Accumulated Depreciation:</u>			
4	Direct accumulated depreciation	(\$2,011,003)	\$12,308	(\$1,998,695) [5]
5	Allocation of common accumulated depreciation: WSC cost center	(493,938)	(11,960)	(505,898) [4]
6	Total accumulated depr. (L4 + L5)	<u>(\$2,504,941)</u>	<u>\$348</u>	<u>(\$2,504,593)</u>

- [1] Column (c) minus Column (a), unless otherwise footnoted.
[2] Column (a) plus Column (b), unless otherwise footnoted.
[3] Henry Exhibit I, Schedule 2-1(d)(1), Column (d), Line 58.
[4] Calculated based on information provided by the Company.
[5] Henry Exhibit I, Schedule 2-2, Column (d), Line 7.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 350
CALCULATION OF DIRECT PLANT IN SERVICE
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 2-1(a)(1)

CWSNC WATER OPERATIONS

Line No.	Account No.	Item	Amount Per Application (a)	Public Staff Adjustments (b)	Actual Plant Additions (c)	Amount Per Public Staff (d)
			(1)	(2)	(1)	(3)
1	1020	Organization	\$458,055	\$0	\$0	\$458,055
2	1025	Franchises	111,898	0	0	111,898
3	1030	Land & land rights pump	71,187	0	250	71,437
4	1035	Land & land rights water tr.	357,109	0	0	357,109
5	1040	Land & land rights trans.	3,194	0	0	3,194
6	1045	Land & land rights gen. pit.	543,502	0	(30,000)	513,502
7	1050	Struct & improv. src. supply	4,278,791	0	22,852	4,301,643
8	1055	Struct & improv. wtr. trt. pit.	1,330,956	0	18,554	1,349,510
9	1060	Struct & improv. trans. dist.	227,921	0	19,468	247,389
10	1065	Struct & improv. gen. pit.	323,370	0	8,010	331,380
11	1070	Collecting reservoirs	13,139	0	0	13,139
12	1080	Wells & springs	13,750,997	0	2,501	13,753,498
13	1085	Infiltration gallery	45,185	0	0	45,185
14	1090	Supply mains	460,301	0	4,576	464,877
15	1095	Power generation equip.	158,288	0	0	158,288
16	1100	Electric pump equip. src. pit.	2,453,593	0	50,548	2,504,141
17	1105	Electric pump equip. wtp.	8,146,927	0	76,238	8,223,165
18	1110	Electric pump equip. trans.	2,241,609	0	682,855	2,904,464
19	1115	Water treatment equip.	3,816,288	0	496,870	4,313,158
20	1120	Dist. resv. & standpipes	7,652,096	0	264,935	7,917,031
21	1125	Trans. & distr. mains	30,306,733	0	1,447,506	31,754,239
22	1130	Service lines	11,415,974	(1,700)	375,195	11,789,469
23	1135	Meters	5,234,293	0	55,251	5,289,544
24	1140	Meter installations	1,167,483	0	15,913	1,183,396
25	1145	Hydrants	1,191,074	0	8,818	1,199,892
26	1150	Backflow prevention devic.	24,617	0	2,625	27,242
27	1160	Other pit. & misc. equip. src. su.	260	0	0	260
28	1165	Other pit. & misc. equip. wtp.	6,262	0	0	6,262
29	1175	Office struct & improv.	97,514	0	1,294	98,808
30	1180	Office furn. & equip.	358,961	0	3,820	362,781
31	1185	Stores equipment	3,691	0	384	4,055
32	1190	Tool shop & misc. equip.	1,351,355	0	13,847	1,365,202
33	1195	Laboratory equipment	152,134	0	2,240	154,374
34	1200	Power operated equip.	311,229	0	3,007	314,236
35	1205	Communication equip.	321,304	0	30	321,334
36	1210	Misc. equipment	183,506	0	42	183,548
37	1215	Water plant allocated	207,809	0	0	207,809
38	1220	Other tangible pit. water	36,650	0	0	36,650
39	1555	Transportation equip.	0	0	0	0
40	1580	Mainframe computer - wtr	0	0	0	0
41	1585	Mini computer - wtr	(7,016)	0	0	(7,016)
42	1590	Comp. system cost - wtr	59,691	0	0	59,691
43	1595	Micro system cost - wtr	0	0	0	0
44	1805	Pit. held for future use	0	(95,528)	0	(95,528)
45		Pro forma plant additions	0	0	0	0
46		Total plant in service (Sum of L1 thru L45)	\$98,867,930	(\$97,228)	\$3,527,609	\$102,298,311

[1] Per examination of Company's financial records.

[2] Henry Exhibit I, Schedule 2-1(a)(2), column (d).

[3] Sum of Column (a) through Column (c).

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
CALCULATION OF DIRECT PLANT IN SERVICE
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 2-1(b)(1)

CWSNC SEWER OPERATIONS

Line No.	Account No.	Item	Amount Per Application [1] (a)	Public Staff Adjustments [2] (b)	Actual Plant Additions [1] (c)	Amount Per Public Staff [3] (d)
1	1245	Organization	\$907,534	\$0	\$0	\$907,534
2	1250	Franchises intang. plt.	127,476	0	0	127,476
3	1270	Land & land rights trmnt plt	39,167	0	0	39,167
4	1275	Land & land rights reclaim.	1,150	0	0	1,150
5	1285	Land & land rights gen. plt.	213,811	0	0	213,811
6	1290	Struct/improv. coll. plt.	67,180	0	83	67,263
7	1295	Struct/improv. pump plt. ls.	6,297,794	0	841,667	7,139,461
8	1300	Struct/improv. treat. plt.	19,093,156	8,022	586,734	19,687,912
9	1305	Struct/improv. reclaim. wtp.	3,271	0	0	3,271
10	1310	Struct/improv. reclaim. wtr.	179,730	0	0	179,730
11	1315	Struct/improv. gen. plt.	1,655,397	0	7,965	1,663,362
12	1320	Power gen. equip. coll. plt.	0	0	215,248	215,248
13	1325	Power gen. equip. pump plt.	52,159	0	0	52,159
14	1330	Power gen. equip. treat. plt.	209,654	0	75	209,729
15	1345	Sewer force main/serv. lin.	3,522,930	0	32,562	3,555,492
16	1350	Sewer gravity main	16,279,148	0	342,523	16,621,671
17	1353	Manholes	730,097	0	8,672	738,769
18	1355	Special coll. structures	6,502	0	421	6,923
19	1360	Services to customers	1,389,914	0	116,382	1,506,296
20	1365	Flow measure devices	106,936	0	15,346	122,282
21	1370	Flow measure install	1,010	0	0	1,010
22	1375	Receiving wells	89,127	0	317	89,444
23	1380	Pumping equipment pump plt.	3,535,514	0	186,137	3,721,651
24	1385	Pumping equipment reclaim.	27,636	0	2,465	30,101
25	1390	Pumping equipment rcl. wtr.	36,108	0	8,205	44,313
26	1395	Treat./disp. equip. lagoon	579,636	0	(1,816)	577,820
27	1400	Treat./disp. equip. trt. plt.	18,738,569	0	80,445	18,819,014
28	1405	Treat./disp. equip. rcl. wtp.	13,251	0	209	13,460
29	1410	Plant sewers treat. plt.	3,335,990	0	1,207	3,337,197
30	1415	Plant sewers reclaim wtp.	5,155	0	0	5,155
31	1420	Outfall lines	98,563	0	0	98,563
32	1425	Other plt. tangible	3,676	0	0	3,676
33	1430	Other plt. collection	21,142	0	0	21,142
34	1435	Other plt. pump	48,131	0	0	48,131
35	1440	Other plt. treatment	36,998	0	0	36,998
36	1445	Other plt. reclaim wtr. trt.	650	0	0	650
37	1450	Other plt. reclaim wtr. dis.	460	0	0	460
38	1455	Office struct & improv.	30,218	0	4,000	34,218
39	1460	Office furn. & equip.	28,965	0	589	29,554
40	1465	Stores equipment	4,341	0	0	4,341
41	1470	Tool shop & misc. equip.	185,673	0	4,209	189,882
42	1475	Laboratory equipment	125,332	0	7,131	132,463
43	1480	Power operated equip.	360,651	0	4,352	365,003
44	1485	Communication equip.	73,595	0	0	73,595
45	1490	Misc equip. sewer	19,105	0	0	19,105
46	1495	Sewer plant allocated	526,952	0	0	526,952
47	1500	Other tangible plt. sewer	1,776	0	0	1,776
48	1535	Reuse dist. reservoirs	3,417	0	0	3,417
49	1540	Reuse transmission & dist.	55,225	0	0	55,225
50	1555	Transportation equip.	0	0	0	0
51	1575	Desktop computer - wtr	0	0	0	0
52	1580	Mainframe computer - wtr	0	0	0	0
53	1585	Mini computer - wtr	(4,177)	0	0	(4,177)
54	1590	Comp. system cost - wtr	35,535	0	0	35,535
55	1595	Micro system cost - wtr	0	0	0	0
56	1805	Plt. held for future use	0	(514,608)	0	(514,608)
57		Pro forma plant additions	0	0	0	0
58		Total plant in service (Sum of L1 thru L57)	<u>\$78,901,230</u>	<u>(\$506,586)</u>	<u>\$2,465,128</u>	<u>\$80,859,772</u>

- [1] Per examination of Company's financial records.
[2] Henry Exhibit I, Schedule 2-1(b)(2), column (d).
[3] Sum of Column (a) through Column (c).

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 380
CALCULATION OF DIRECT PLANT IN SERVICE
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 2-1(c)(1)

BRADFIELD/FAIRFIELD WATER OPERATIONS

Line No.	Account No.	Item	Amount Per Application (a)	Public Staff Adjustments (b)	Actual Plant Additions (c)	Amount Per Public Staff (d)
			[1]		[1]	[2]
1	1020	Organization	\$100,321	\$0	\$0	\$100,321
2	1025	Franchises	29,653	0	0	29,653
3	1030	Land & land rights pump	0	0	0	0
4	1035	Land & land rights water tr.	0	0	0	0
5	1040	Land & land rights trans.	0	0	0	0
6	1045	Land & land rights gen. plt.	431	0	0	431
7	1050	Struct & improv. src. supply	162,909	0	0	162,909
8	1055	Struct & improv. wtr. trl. plt.	82,609	0	131	82,740
9	1060	Struct & improv. trans. dist.	461	0	0	461
10	1065	Struct & improv. gen. plt.	1,671	0	0	1,671
11	1070	Collecting reservoirs	0	0	0	0
12	1080	Wells & springs	497,704	0	125	497,829
13	1085	Infiltration gallery	0	0	0	0
14	1090	Supply mains	839	0	0	839
15	1095	Power generation equip.	0	0	0	0
16	1100	Electric pump equip. src. plt.	37,211	0	2,784	39,995
17	1105	Electric pump equip. wtp.	346,128	0	83	346,211
18	1110	Electric pump equip. trans.	15,204	0	15,884	31,088
19	1115	Water treatment equip.	123,563	0	4,276	127,839
20	1120	Dist. resv. & standpipes	745,820	0	4,613	750,433
21	1125	Trans. & distr. mains	1,764,241	0	3,942	1,768,183
22	1130	Service lines	604,042	0	29,195	633,237
23	1135	Meters	118,048	0	4,137	122,185
24	1140	Meter installations	131,945	0	2,920	134,865
25	1145	Hydrants	161,575	0	0	161,575
26	1150	Backflow prevention devic.	98	0	0	98
27	1160	Other plt. & misc. equip. src. su.	0	0	0	0
28	1165	Other plt. & misc. equip. wtp.	0	0	0	0
29	1175	Office struct & improv.	6,790	0	0	6,790
30	1180	Office furn. & equip.	3,731	0	182	3,913
31	1185	Stores equipment	235	0	0	235
32	1190	Tool shop & misc. equip.	90,038	0	2,720	92,758
33	1195	Laboratory equipment	11,419	0	0	11,419
34	1200	Power operated equip.	3,355	0	109	3,464
35	1205	Communication equip.	22,756	0	0	22,756
36	1210	Misc. equipment	18	0	0	18
37	1215	Water plant allocated	0	0	0	0
38	1220	Other tangible plt. water	0	0	0	0
39	1555	Transportation equip.	0	0	0	0
40	1580	Mainframe computer - wtr	0	0	0	0
41	1585	Mini computer - wtr	0	0	0	0
42	1590	Comp. system cost - wtr	0	0	0	0
43	1595	Micro system cost - wtr	0	0	0	0
44	1805	Plt. held for future use	0	0	0	0
45		Pro forma plant additions	0	0	0	0
46		Total plant in service (Sum of L1 thru L45)	\$5,062,815	\$0	\$71,101	\$5,133,916

[1] Per examination of Company's financial records.

[2] Sum of Column (a) through Column (c).

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
CALCULATION OF DIRECT PLANT IN SERVICE
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp Exhibit I
Schedule 2-1(d)(1)

BRADFIELD/FAIRFIELD SEWER OPERATIONS

Line No.	Account No.	Item	Amount Per Application (a)	Public Staff Adjustments (b)	Actual Plant Additions (c)	Amount Per Public Staff (d)
			(1)		(1)	(2)
1	1245	Organization	\$16,686	\$0	\$0	\$16,686
2	1250	Franchises intang. plt.	20,351	0	0	20,351
3	1270	Land & land rights trmnt plt	0	0	0	0
4	1275	Land & land rights reclaim.	0	0	0	0
5	1285	Land & land rights gen. plt.	0	0	0	0
6	1290	Struct/improv. coll. plt.	0	0	0	0
7	1295	Struct/improv. pump plt. ls.	618,795	0	271,910	890,705
8	1300	Struct/improv. treat. plt.	1,982,728	0	2,379	1,985,107
9	1305	Struct/improv. reclaim. wtr.	0	0	0	0
10	1310	Struct/improv. reclaim. wtr.	2,477	0	0	2,477
11	1315	Struct/improv. gen. plt.	239,935	0	5,603	245,538
12	1320	Power gen. equip. coll. plt.	0	0	0	0
13	1325	Power gen. equip. pump plt.	41,076	0	0	41,076
14	1330	Power gen. equip. treat. plt.	0	0	0	0
15	1345	Sewer force main/serv. lin.	178,168	0	15,830	193,998
16	1350	Sewer gravity main	5,210,150	0	2,368	5,212,518
17	1353	Manholes	9,008	0	7,244	16,252
18	1355	Special coll. structures	775	0	0	775
19	1360	Services to customers	35,615	0	726	37,341
20	1365	Flow measure devices	17,011	0	0	17,011
21	1370	Flow measure install	0	0	0	0
22	1375	Receiving wells	0	0	0	0
23	1380	Pumping equipment pump plt.	687,495	0	42,473	729,968
24	1385	Pumping equipment reclaim.	234	0	0	234
25	1390	Pumping equipment rcl. wtr.	0	0	0	0
26	1395	Treat./disp. equip. lagoon	56	0	0	56
27	1400	Treat./disp. equip. trt. plt.	2,770,519	0	11,614	2,782,133
28	1405	Treat./disp. equip. rct. wtr.	0	0	0	0
29	1410	Plant sewers treat. plt.	379,833	0	5,535	385,368
30	1415	Plant sewers reclaim wtr.	0	0	0	0
31	1420	Outfall lines	15,379	0	0	15,379
32	1425	Other plt. tangible	0	0	0	0
33	1430	Other plt. collection	(224)	0	0	(224)
34	1435	Other plt. pump	2,873	0	0	2,873
35	1440	Other plt. treatment	0	0	0	0
36	1445	Other plt. reclaim wtr. trt.	5,189	0	0	5,189
37	1450	Other plt. reclaim wtr. dis.	0	0	0	0
38	1455	Office struct & improv.	10,136	0	0	10,136
39	1460	Office furn. & equip.	448	0	251	699
40	1465	Stores equipment	2,752	0	0	2,752
41	1470	Tool shop & misc. equip.	10,232	0	1,910	12,142
42	1475	Laboratory equipment	6,227	0	0	6,227
43	1480	Power operated equip.	47,069	0	0	47,069
44	1485	Communication equip.	993	0	0	993
45	1490	Misc equip. sewer	8,603	0	0	8,603
46	1495	Sewer plant allocated	0	0	0	0
47	1500	Other tangible plt. sewer	0	0	0	0
48	1535	Reuse dist. reservoirs	2,763	0	0	2,763
49	1540	Reuse transmission & dist.	(1,477)	0	543	(934)
50	1555	Transportation equip.	0	0	0	0
51	1575	Desktop computer - wtr	0	0	0	0
52	1580	Mainframe computer - wtr	0	0	0	0
53	1585	Mini computer - wtr	0	0	0	0
54	1590	Comp. system cost - wtr	0	0	0	0
55	1595	Micro system cost - wtr	0	0	0	0
56	1805	Plt. held for future use	0	0	0	0
57		Pro forma plant additions	0	0	0	0
58		Total plant in service (Sum of L1 thru L57)	\$12,322,875	\$0	\$368,386	\$12,691,261

[1] Per examination of Company's financial records.
[2] Sum of Column (a) through Column (c).

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO DIRECT PLANT IN SERVICE
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 2-1(a)(2)

CWSNC WATER OPERATIONS

Line No.	Account No.	Item	Plant Held For Future Use [1] (a)	Capitalized Legal Fees (b)	Riverbend Adjustments (c)	Adjustments Amount Per Public Staff [2] (d)
1	1020	Organization	\$0	\$0	\$0	\$0
2	1025	Franchises	0	0	0	0
3	1030	Land & land rights pump	0	0	0	0
4	1035	Land & land rights water tr.	0	0	0	0
5	1040	Land & land rights trans.	0	0	0	0
6	1045	Land & land rights gen. plt.	0	0	0	0
7	1050	Struct & improv. src. supply	0	0	0	0
8	1055	Struct & improv. wtr. trt. plt.	0	0	0	0
9	1060	Struct & improv. trans. dist.	0	0	0	0
10	1065	Struct & improv. gen. plt.	0	0	0	0
11	1070	Collecting reservoirs	0	0	0	0
12	1080	Wells & springs	0	0	0	0
13	1085	Infiltration gallery	0	0	0	0
14	1090	Supply mains	0	0	0	0
15	1095	Power generation equip.	0	0	0	0
16	1100	Electric pump equip. src. plt.	0	0	0	0
17	1105	Electric pump equip. wtp.	0	0	0	0
18	1110	Electric pump equip. trans.	0	0	0	0
19	1115	Water treatment equip.	0	0	0	0
20	1120	Dist. resv. & standpipes	0	0	0	0
21	1125	Trans. & distr. mains	0	0	0	0
22	1130	Service lines	0	0	(1,700)	(1,700)
23	1135	Meters	0	0	0	0
24	1140	Meter installations	0	0	0	0
25	1145	Hydrants	0	0	0	0
26	1150	Backflow prevention devic.	0	0	0	0
27	1160	Other plt. & misc. equip. src. su.	0	0	0	0
28	1165	Other plt. & misc. equip. wtp.	0	0	0	0
29	1175	Office struct & improv.	0	0	0	0
30	1180	Office furn. & equip.	0	0	0	0
31	1185	Stores equipment	0	0	0	0
32	1190	Tool shop & misc. equip.	0	0	0	0
33	1195	Laboratory equipment	0	0	0	0
34	1200	Power operated equip.	0	0	0	0
35	1205	Communication equip.	0	0	0	0
36	1210	Misc. equipment	0	0	0	0
37	1215	Water plant allocated	0	0	0	0
38	1220	Other tangible plt. water	0	0	0	0
39	1555	Transportation equip.	0	0	0	0
40	1580	Mainframe computer - wtr	0	0	0	0
41	1585	Mini computer - wtr	0	0	0	0
42	1590	Comp. system cost - wtr	0	0	0	0
43	1595	Micro system cost - wtr	0	0	0	0
44	1805	Plt. held for future use	(95,528)	0	0	(95,528)
45		Pro forma plant additions	0	0	0	0
46		Total plant in service (Sum of L1 thru L45)	(\$95,528)	\$0	(\$1,700)	(\$97,228)

[1] Per examination of Company's financial records.
[2] Sum of Column (a) through Column (c)

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO DIRECT PLANT IN SERVICE
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit 1
Schedule 2-1(b)(2)

CWSNC SEWER OPERATIONS

Line No.	Account No.	Item	Plant Held For Future Use [1] (a)	Capitalized Legal Fees [1] (b)	Riverbend Adjustments (c)	Adjustments Amount Per Public Staff [2] (d)
1	1245	Organization	\$0	\$0	\$0	\$0
2	1250	Franchises intang. plt.	0	0	0	0
3	1270	Land & land rights trmnt plt	0	0	0	0
4	1275	Land & land rights reclaim.	0	0	0	0
5	1285	Land & land rights gen. plt.	0	0	0	0
6	1290	Struct/improv. coll. plt.	0	0	0	0
7	1295	Struct/improv. pump plt. ls.	0	0	0	0
8	1300	Struct/improv. treat. plt.	0	8,022	0	8,022
9	1305	Struct/improv. reclaim. wtp.	0	0	0	0
10	1310	Struct/improv. reclaim. wtr.	0	0	0	0
11	1315	Struct/improv. gen. plt.	0	0	0	0
12	1320	Power gen. equip. coll. plt.	0	0	0	0
13	1325	Power gen. equip. pump plt.	0	0	0	0
14	1330	Power gen. equip. treat. plt.	0	0	0	0
15	1345	Sewer force main/serv. lin.	0	0	0	0
16	1350	Sewer gravity main	0	0	0	0
17	1353	Manholes	0	0	0	0
18	1355	Special coll. structures	0	0	0	0
19	1360	Services to customers	0	0	0	0
20	1365	Flow measure devices	0	0	0	0
21	1370	Flow measure install	0	0	0	0
22	1375	Receiving wells	0	0	0	0
23	1380	Pumping equipment pump plt.	0	0	0	0
24	1385	Pumping equipment reclaim.	0	0	0	0
25	1390	Pumping equipment rct. wtr.	0	0	0	0
26	1395	Treat./disp. equip. lagoon	0	0	0	0
27	1400	Treat./disp. equip. trt. plt.	0	0	0	0
28	1405	Treat./disp. equip. rct. wtp.	0	0	0	0
29	1410	Plant sewers treat. plt.	0	0	0	0
30	1415	Plant sewers reclaim wtp.	0	0	0	0
31	1420	Outfall lines	0	0	0	0
32	1425	Other plt. tangible	0	0	0	0
33	1430	Other plt. collection	0	0	0	0
34	1435	Other plt. pump	0	0	0	0
35	1440	Other plt. treatment	0	0	0	0
36	1445	Other plt. reclaim wtr. trt.	0	0	0	0
37	1450	Other plt. reclaim wtr. dis.	0	0	0	0
38	1455	Office struct & improv.	0	0	0	0
39	1460	Office furn. & equip.	0	0	0	0
40	1465	Stores equipment	0	0	0	0
41	1470	Tool shop & misc. equip.	0	0	0	0
42	1475	Laboratory equipment	0	0	0	0
43	1480	Power operated equip.	0	0	0	0
44	1485	Communication equip.	0	0	0	0
45	1490	Misc equip. sewer	0	0	0	0
46	1495	Sewer plant allocated	0	0	0	0
47	1500	Other tangible plt. sewer	0	0	0	0
48	1535	Reuse dist. reservoirs	0	0	0	0
49	1540	Reuse transmission & dist.	0	0	0	0
50	1555	Transportation equip.	0	0	0	0
51	1575	Desktop computer - wtr	0	0	0	0
52	1580	Mainframe computer - wtr	0	0	0	0
53	1585	Mini computer - wtr	0	0	0	0
54	1590	Comp. system cost - wtr	0	0	0	0
55	1595	Micro system cost - wtr	0	0	0	0
56	1805	Plt. held for future use	(514,608)	0	0	(514,608)
57		Pro forma plant additions	0	0	0	0
58		Total plant in service (Sum of L1 thru L57)	(\$514,608)	\$8,022	\$0	(\$506,586)

[1] Per examination of Company's financial records.

[2] Sum of Column (a) through Column (c)

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 350
ADJUSTMENT TO DIRECT PLANT IN SERVICE
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 2-1(c)(2)

BRADFIELD/FAIRFIELD WATER OPERATIONS

Line No.	Account No.	Item	Plant Held For Future Use [1] (a)	Capitalized Legal Fees (b)	Riverbend Adjustments [1] (c)	Adjustments Amount Per Public Staff [2] (d)
1	1020	Organization	\$0	\$0	\$0	\$0
2	1025	Franchises	0	0	0	0
3	1030	Land & land rights pump	0	0	0	0
4	1035	Land & land rights water tr.	0	0	0	0
5	1040	Land & land rights trans.	0	0	0	0
6	1045	Land & land rights gen. plt.	0	0	0	0
7	1050	Struct & improv. src. supply	0	0	0	0
8	1055	Struct & improv. wtr. trt. plt.	0	0	0	0
9	1060	Struct & improv. trans. dist.	0	0	0	0
10	1065	Struct & improv. gen. plt.	0	0	0	0
11	1070	Collecting reservoirs	0	0	0	0
12	1080	Wells & springs	0	0	0	0
13	1085	Infiltration gallery	0	0	0	0
14	1090	Supply mains	0	0	0	0
15	1095	Power generation equip.	0	0	0	0
16	1100	Electric pump equip. src. plt.	0	0	0	0
17	1105	Electric pump equip. wtp.	0	0	0	0
18	1110	Electric pump equip. trans.	0	0	0	0
19	1115	Water treatment equip.	0	0	0	0
20	1120	Dist. resv. & standpipes	0	0	0	0
21	1125	Trans. & distr. mains	0	0	0	0
22	1130	Service lines	0	0	0	0
23	1135	Meters	0	0	0	0
24	1140	Meter installations	0	0	0	0
25	1145	Hydrants	0	0	0	0
26	1150	Backflow prevention devic.	0	0	0	0
27	1160	Other plt. & misc. equip. src. su.	0	0	0	0
28	1165	Other plt. & misc. equip. wtp.	0	0	0	0
29	1175	Office struct & improv.	0	0	0	0
30	1180	Office furn. & equip.	0	0	0	0
31	1185	Stores equipment	0	0	0	0
32	1190	Tool shop & misc. equip.	0	0	0	0
33	1195	Laboratory equipment	0	0	0	0
34	1200	Power operated equip.	0	0	0	0
35	1205	Communication equip.	0	0	0	0
36	1210	Misc. equipment	0	0	0	0
37	1215	Water plant allocated	0	0	0	0
38	1220	Other tangible plt. water	0	0	0	0
39	1555	Transportation equip.	0	0	0	0
40	1580	Mainframe computer - wtr	0	0	0	0
41	1585	Mini computer - wtr	0	0	0	0
42	1590	Comp. system cost - wtr	0	0	0	0
43	1595	Micro system cost - wtr	0	0	0	0
44	1805	Plt. held for future use	0	0	0	0
45		Pro forma plant additions	0	0	0	0
46		Total plant in service (Sum of L1 thru L45)	\$0	\$0	\$0	\$0

[1] Per examination of Company's financial records.

[2] Sum of Column (a) through Column (c)

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360
ADJUSTMENT TO DIRECT PLANT IN SERVICE
 For The Test Year Ended December 31, 2017

Public Staff
 Henry Supp. Exhibit I
 Schedule 2-1(d)(2)

BRADFIELD/FAIRFIELD SEWER OPERATIONS

Line No.	Account No.	Item	Plant Held For Future Use [1] (a)	Capitalized Legal Fees (b)	Riverbend Adjustments [1] (c)	Adjustments Amount Per Public Staff [2] (d)
1	1245	Organization	\$0	\$0	\$0	\$0
2	1250	Franchises intang. plt.	0	0	0	0
3	1270	Land & land rights trimnt plt	0	0	0	0
4	1275	Land & land rights reclaim.	0	0	0	0
5	1285	Land & land rights gen. plt.	0	0	0	0
6	1290	Struct/improv. coll. plt.	0	0	0	0
7	1295	Struct/improv. pump plt. ls.	0	0	0	0
8	1300	Struct/improv. treat. plt.	0	0	0	0
9	1305	Struct/improv. reclaim. wtp.	0	0	0	0
10	1310	Struct/improv. reclaim. wtr.	0	0	0	0
11	1315	Struct/improv. gen. plt.	0	0	0	0
12	1320	Power gen. equip. coll. plt.	0	0	0	0
13	1325	Power gen. equip. pump plt.	0	0	0	0
14	1330	Power gen. equip. treat. plt.	0	0	0	0
15	1345	Sewer force main/serv. lin.	0	0	0	0
16	1350	Sewer gravity main	0	0	0	0
17	1353	Manholes	0	0	0	0
18	1355	Special coll. structures	0	0	0	0
19	1360	Services to customers	0	0	0	0
20	1365	Flow measure devices	0	0	0	0
21	1370	Flow measure install	0	0	0	0
22	1375	Receiving wells	0	0	0	0
23	1380	Pumping equipment pump plt.	0	0	0	0
24	1385	Pumping equipment reclaim.	0	0	0	0
25	1390	Pumping equipment rcl. wtr.	0	0	0	0
26	1395	Treat./disp. equip. lagoon	0	0	0	0
27	1400	Treat./disp. equip. lrt. plt.	0	0	0	0
28	1405	Treat./disp. equip. rct. wtp.	0	0	0	0
29	1410	Plant sewers treat. plt.	0	0	0	0
30	1415	Plant sewers reclaim wtp.	0	0	0	0
31	1420	Outfall lines	0	0	0	0
32	1425	Other plt. tangible	0	0	0	0
33	1430	Other plt. collection	0	0	0	0
34	1435	Other plt. pump	0	0	0	0
35	1440	Other plt. treatment	0	0	0	0
36	1445	Other plt. reclaim wtr. trt.	0	0	0	0
37	1450	Other plt. reclaim wtr. dis.	0	0	0	0
38	1455	Office struct & improv.	0	0	0	0
39	1460	Office furn. & equip.	0	0	0	0
40	1465	Stores equipment	0	0	0	0
41	1470	Tool shop & misc. equip.	0	0	0	0
42	1475	Laboratory equipment	0	0	0	0
43	1480	Power operated equip.	0	0	0	0
44	1485	Communication equip.	0	0	0	0
45	1490	Misc equip. sewer	0	0	0	0
46	1495	Sewer plant allocated	0	0	0	0
47	1500	Other tangible plt. sewer	0	0	0	0
48	1535	Reuse dist. reservoirs	0	0	0	0
49	1540	Reuse transmission & dist.	0	0	0	0
50	1555	Transportation equip.	0	0	0	0
51	1575	Desktop computer - wtr	0	0	0	0
52	1580	Mainframe computer - wtr	0	0	0	0
53	1585	Mini computer - wtr	0	0	0	0
54	1590	Comp. system cost - wtr	0	0	0	0
55	1595	Micro system cost - wtr	0	0	0	0
56	1805	Plt. held for future use	0	0	0	0
57		Pro forma plant additions	0	0	0	0
58		Total plant in service (Sum of L1 thru L57)	\$0	\$0	\$0	\$0

[1] Per examination of Company's financial records.

[2] Sum of Column (a) through Column (c)

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO DIRECT ACCUMULATED DEPRECIATION
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 2-2

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
1	Direct accumulated depreciation per application	<u>(\$21,524,143)</u>	<u>(\$17,836,073)</u>	<u>(\$1,355,807)</u>	<u>(\$2,011,003)</u>
2	Adjustment to include actual general ledger A/D additions through 6/30/2018	(793,413) [1]	(671,783) [1]	(25,322) [1]	(81,738) [1]
3	Adjustments to include A/D for additional capitalized fees	0	(201) [1]	0	0
4	Adjustment to remove riverbend accumulated depreciation	3 [1]	0	0	0
5	Adjustment to reflect annual level of depreciation	<u>(3,853) [1]</u>	<u>(107,826) [1]</u>	<u>316,440 [1]</u>	<u>94,046 [1]</u>
6	Adjustment to accumulated depreciation (Sum of L2 thru L5)	<u>(797,263)</u>	<u>(779,810)</u>	<u>291,118</u>	<u>12,308</u>
7	Direct accumulated depreciation per Public Staff (L1 + L6)	<u><u>(\$22,321,406)</u></u>	<u><u>(\$18,615,883)</u></u>	<u><u>(\$1,064,689)</u></u>	<u><u>(\$1,998,695)</u></u>

[1] Per examination of Company's financial records.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
CALCULATION OF CASH WORKING CAPITAL
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 2-3

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
Cash Working Capital:					
1	Maintenance expenses, less purchased water and sewer	\$5,127,749 [1]	\$4,622,623 [5]	\$530,192 [9]	\$799,492 [13]
2	General expenses	2,936,024 [2]	1,750,021 [6]	352,591 [10]	367,056 [14]
3	Total cash working capital expenses (L1 + L2)	<u>\$ 8,063,774</u>	<u>\$6,372,644</u>	<u>\$882,783</u>	<u>\$1,166,548</u>
4	Cash working capital (L3 x 1/8)	<u>1,007,972</u>	<u>796,581</u>	<u>110,348</u>	<u>145,818</u>
Average Tax Accruals:					
5	Property taxes	134,370 [3]	79,520 [7]	9,645 [11]	10,040 [15]
6	Average accrual (L5 x 1/2)	<u>67,185</u>	<u>39,760</u>	<u>4,823</u>	<u>5,020</u>
7	Regulatory fee	23,831 [4]	17,809 [8]	1,504 [12]	2,462 [16]
8	Average accrual (L7 x 1/5)	<u>4,766</u>	<u>3,562</u>	<u>301</u>	<u>492</u>
9	Total tax accrual (L6 + L8)	<u>71,951</u>	<u>43,322</u>	<u>5,124</u>	<u>5,512</u>
10	Total cash working capital (L4 - L9)	<u>\$936,021</u>	<u>\$753,259</u>	<u>\$105,224</u>	<u>\$140,306</u>

- [1] Henry Exhibit I, Schedule 3(a), Column (c), Line 15 minus Line 7.
[2] Henry Exhibit I, Schedule 3(a), Column (c), Line 24.
[3] Henry Exhibit I, Schedule 3(a), Column (c), Line 30.
[4] Henry Exhibit I, Schedule 3(a), Column (c), Line 32.
[5] Henry Exhibit I, Schedule 3(b), Column (c), Line 15 minus Line 7.
[6] Henry Exhibit I, Schedule 3(b), Column (c), Line 24.
[7] Henry Exhibit I, Schedule 3(b), Column (c), Line 30.
[8] Henry Exhibit I, Schedule 3(b), Column (c), Line 32.
[9] Henry Exhibit I, Schedule 3(c), Column (c), Line 15 minus Line 7.

- [10] Henry Exhibit I, Schedule 3(c), Column (c), Line 24.
[11] Henry Exhibit I, Schedule 3(c), Column (c), Line 30.
[12] Henry Exhibit I, Schedule 3(c), Column (c), Line 32.
[13] Henry Exhibit I, Schedule 3(d), Column (c), Line 15 minus Line 7.
[14] Henry Exhibit I, Schedule 3(d), Column (c), Line 24.
[15] Henry Exhibit I, Schedule 3(d), Column (c), Line 30.
[16] Henry Exhibit I, Schedule 3(d), Column (c), Line 32.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

**ADJUSTMENT TO CONTRIBUTIONS IN AID OF
CONSTRUCTION, NET OF AMORTIZATION
For The Test Year Ended December 31, 2017**

Public Staff
Henry Supp. Exhibit I
Schedule 2-4

Line No.	Item	CWSNC Water Operations			[2]	CWSNC Sewer Operations			[3]
		CIAC (a)	Accumulated Amortization (b)	CIAC, Net of Amortization (c)		CIAC (d)	Accumulated Amortization (e)	CIAC, Net of Amortization (f)	
1	CIAC and accumulated amortization per application	<u>(\$28,522,560)</u>	<u>\$9,808,533</u>	<u>(\$18,714,027)</u>		<u>(\$28,121,121)</u>	<u>\$9,448,675</u>	<u>(\$18,672,446)</u>	
2	Adjustment to include actual general ledger additions through 6/30/2018	(76,719) [1]	341,221 [1]	264,502		(36,793) [1]	309,789 [1]	272,996	
3	Adjustment to remove riverbend accumulated amortization	2,250 [1]	(38) [1]	2,213		0	0	0	
4	Adjustment to reflect annual level of amortization	<u>0</u>	<u>88,059</u> [1]	<u>88,059</u>		<u>0</u>	<u>157,290</u> [1]	<u>157,290</u>	
5	Adjustment to CIAC (Sum of L2 thru L4)	<u>(74,469)</u>	<u>429,243</u>	<u>354,774</u>		<u>(36,793)</u>	<u>467,079</u>	<u>430,286</u>	
6	CIAC per Public Staff (L1 + L5)	<u>(\$28,597,029)</u>	<u>\$10,237,776</u>	<u>(\$18,359,254)</u>		<u>(\$28,157,914)</u>	<u>\$9,915,754</u>	<u>(\$18,242,160)</u>	

[1] Per examination of Company's financial records.

[2] Column (a) plus Column (b).

[3] Column (d) plus Column (e).

[4] Column (g) plus Column (h).

[5] Column (j) plus Column (k).

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
**ADJUSTMENT TO CONTRIBUTIONS IN AID OF
CONSTRUCTION, NET OF AMORTIZATION**
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit
Schedule 2-4

Line No.	Item	BF/FH/TC Water Operations			[4]	BF/FH/TC Sewer Operations			[5]
		CIAC (g)	Accumulated Amortization (h)	CIAC, Net of Amortization (i)		CIAC (j)	Accumulated Amortization (k)	CIAC, Net of Amortization (l)	
1	CIAC and accumulated amortization per application	<u>(\$2,221,481)</u>	<u>\$1,093,979</u>	<u>(\$1,127,502)</u>		<u>(\$7,088,979)</u>	<u>\$2,789,038</u>	<u>(\$4,299,941)</u>	
2	Adjustment to include actual general ledger additions through 6/30/2018	(5,795) [1]	19,343 [1]	13,548		0	72,322 [1]	72,322	
3	Adjustment to remove riverbend accumulated amortization	0	0	0		0	0	0	
4	Adjustment to reflect annual level of amortization	<u>0</u>	<u>10,483</u> [1]	<u>10,483</u>		<u>0</u>	<u>36,834</u> [1]	<u>36,834</u>	
5	Adjustment to CIAC (Sum of L2 thru L4)	<u>(5,795)</u>	<u>29,826</u>	<u>24,031</u>		<u>0</u>	<u>109,156</u>	<u>109,156</u>	
6	CIAC per Public Staff (L1 + L5)	<u>(\$2,227,276)</u>	<u>\$1,123,805</u>	<u>(\$1,103,471)</u>		<u>(\$7,088,979)</u>	<u>\$2,898,194</u>	<u>(\$4,190,785)</u>	

[1] Per examination of Company's financial records.

[2] Column (a) plus Column (b).

[3] Column (d) plus Column (e).

[4] Column (g) plus Column (h).

[5] Column (j) plus Column (k).

CAROLINA WATER SERVICE, INC. OF NC
Docket No. W-354, Sub 360
**CALCULATION OF ACCUMULATED DEFERRED
INCOME TAXES**
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 2-5(a)

CWSNC UNIFORM OPERATIONS

Line No.	Item	Total ADIT Per Application [1] (a)	Public Staff Adjustments [2] (b)	Amount To Be Allocated Per Public Staff [5] (c)	CWS Uniform Water [8] (d)	CWS Uniform Sewer [8] (e)
1	ACCUM DEF INCOME TAX-FED	\$610,658	\$0	\$610,658	\$382,760	\$227,898
2	DEF FED TAX - CIAC PRE 19	287,698	0	287,698	180,329	107,369
3	DEF FED TAX - TAP FEE POS	2,198,816	0	2,198,816	1,378,218	820,598
4	DEF FED TAX - RATE CASE	(101,998)	23,829	(78,169) [6]	(48,996) [9]	(29,173) [9]
5	DEF FED TAX - DEF MAINT	(358,893)	203,602	(155,291) [6]	(154,002) [10]	(1,289) [10]
6	DEF FED TAX - ORGN EXP	(208,987)	0	(208,987)	(130,993)	(77,994)
7	DEF FED TAX - BAD DEBT	135,427	0	135,427	84,885	50,541
8	DEF FED TAX - CAB WOODS GOS	27,685	0	27,685	17,353	10,332
9	DEF FED TAX - DEPRECIATIO	(10,596,669)	0	(10,596,669)	(5,983,939) [11]	(4,612,730) [11]
10	DEF FED TAX - NOL	3,876,421	0	3,876,421	2,429,741	1,446,680
11	Total Federal ADIT (Sum of L1 thru L10)	(4,129,842)	227,431	(3,902,411)	(1,844,643)	(2,057,768)
12	ACCUM DEF INCOME TAX - ST	(310,632)	0	(310,632)	(194,704)	(115,928)
13	DEF ST TAX - CIAC PRE 198	312,312	0	312,312	195,757	116,555
14	DEF ST TAX - TAP FEE POS	703,756	0	703,756	441,114	262,642
15	DEF ST TAX - RATE CASE	(15,022)	3,510	(11,512) [7]	(7,216) [9]	(4,296) [9]
16	DEF ST TAX - DEF MAINT	(52,856)	29,986	(22,870) [7]	(22,680) [10]	(190) [10]
17	DEF ST TAX - ORGN EXP	(111,524)	0	(111,524)	(69,903)	(41,621)
18	DEF ST TAX - BAD DEBT	9,011	0	9,011	5,648	3,363
19	DEF ST TAX - CAB WOODS GOS	4,077	0	4,077	2,555	1,522
20	DEF ST TAX - DEPRECIATION	(1,352,312)	0	(1,352,312)	(763,651) [11]	(588,661) [11]
21	DEF ST TAX - NOL	289,432	0	289,432	181,416	108,016
22	Total State ADIT (Sum of L12 thru L21)	(523,758)	33,496	(490,262)	(231,664)	(258,598)
23	Total Direct ADIT (L11 + L22)	(4,653,600)	260,927	(4,392,673)	(2,076,307)	(2,316,366)
24	ADIT allocated from WSC	0	(67,610) [3]	(67,610)	(42,378)	(25,232)
25	Total ADIT (L23 + L24)	(4,653,600)	193,317	(4,460,283)	(2,118,685)	(2,341,598)
26	Excess deferred income tax	0	943,048 [4]	943,048	445,795 [12]	497,253 [12]
27	ADIT per Public Staff (L25 + L26)	(\$4,653,600)	\$1,136,365	(\$3,517,235)	(\$1,672,890)	(\$1,844,345)

[1] Form W-1, Item 10, Supplemental Schedules.

[2] Column (c) minus Column (a), unless otherwise footnoted.

[3] Calculated by Public Staff per examination of the Company's records

[4] Provided by Public Staff Accountant Boswell.

[5] Column (a) plus Column (b), unless otherwise footnoted.

[6] Total unamortized balance per Public Staff multiplied by federal income tax rate of 21%.

[7] Total unamortized balance per Public Staff multiplied by state income tax rate of 3%.

[8] Column (c) allocated based on customers, unless otherwise footnoted.

[9] Column (c) allocated based on unamortized rate case expense.

[10] Column (c) allocated based on unamortized deferred maintenance.

[11] Column (c) allocated based on plant in service.

[12] Column (c) allocated based on ADIT.

CAROLINA WATER SERVICE, INC. OF NC
Docket No. W-354, Sub 360
**CALCULATION OF ACCUMULATED DEFERRED
INCOME TAXES**
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 2-5(b)

BRADFIELD/FAIRFIELD

Line No.	Item	Total ADIT Per Application [1] (a)	Public Staff Adjustments [2] (b)	Amount To Be Allocated Per Public Staff [5] (c)	BF/FH/TC Water [8] (d)	BF/FH/TC Sewer [8] (e)
1	ACCUM DEF INCOME TAX-FED	\$175,721	\$0	\$175,721	\$86,086	\$89,635
2	DEF FED TAX - CIAC PRE 19	7,090	0	7,090	3,473	3,617
3	DEF FED TAX - TAP FEE POS	236,691	0	236,691	115,955	120,736
4	DEF FED TAX - RATE CASE	(12,695)	610	(12,085) [6]	(5,920) [9]	(6,165) [9]
5	DEF FED TAX - DEF MAINT	(31,059)	11,305	(19,754) [6]	(13,464) [10]	(6,290) [10]
6	DEF FED TAX - ORGN EXP	(25,425)	0	(25,425)	(12,456)	(12,969)
7	DEF FED TAX - BAD DEBT	193,210	0	193,210	94,654	98,556
8	DEF FED TAX - CAB WOODS GOS	0	0	0	0	0
9	DEF FED TAX - DEPRECIATIO	(1,585,489)	0	(1,585,489)	(487,696) [11]	(1,097,793) [11]
10	DEF FED TAX - NOL	540,266	0	540,266	264,676	275,590
11	Total Federal ADIT (Sum of L1 thru L10)	<u>(501,690)</u>	<u>11,915</u>	<u>(489,775)</u>	<u>45,308</u>	<u>(535,083)</u>
12	ACCUM DEF INCOME TAX - ST	26,465	0	26,465	12,965	13,500
13	DEF ST TAX - CIAC PRE 198	5,942	0	5,942	2,911	3,031
14	DEF ST TAX - TAP FEE POS	75,517	0	75,517	36,996	38,521
15	DEF ST TAX - RATE CASE	(2,264)	484	(1,780) [7]	(872) [9]	(908) [9]
16	DEF ST TAX - DEF MAINT	(6,023)	3,114	(2,909) [7]	(1,983) [10]	(926) [10]
17	DEF ST TAX - ORGN EXP	(6,365)	0	(6,365)	(3,118)	(3,247)
18	DEF ST TAX - BAD DEBT	2,358	0	2,358	1,155	1,203
19	DEF ST TAX - CAB WOODS GOS	0	0	0	0	0
20	DEF ST TAX - DEPRECIATION	(178,423)	0	(178,423)	(54,883) [11]	(123,540) [11]
21	DEF ST TAX - NOL	70,380	0	70,380	34,479	35,901
22	Total State ADIT (Sum of L12 thru L21)	<u>(12,413)</u>	<u>3,598</u>	<u>(8,815)</u>	<u>27,650</u>	<u>(36,465)</u>
23	Total Direct ADIT (L11 + L22)	<u>(514,103)</u>	<u>15,513</u>	<u>(498,590)</u>	<u>72,958</u>	<u>(571,548)</u>
24	ADIT allocated from WSC	0	(12,129) [3]	(12,129)	(5,942)	(6,187)
25	Total ADIT (L23 + L24)	<u>(514,103)</u>	<u>3,384</u>	<u>(510,719)</u>	<u>67,016</u>	<u>(577,735)</u>
26	Excess deferred income tax	0	107,117 [4]	107,117	(15,647) [12]	122,764 [12]
27	ADIT per Public Staff (L25 + L26)	<u>(\$514,103)</u>	<u>\$110,501</u>	<u>(\$403,602)</u>	<u>\$51,369</u>	<u>(\$454,971)</u>

[1] Form W-1, Item 10, Supplemental Schedules.

[2] Column (c) minus Column (a), unless otherwise footnoted.

[3] Calculated by Public Staff per examination of the Company's records

[4] Provided by Public Staff Accountant Boswell.

[5] Column (a) plus Column (b), unless otherwise footnoted.

[6] Total unamortized balance per Public Staff multiplied by federal income tax rate of 21%.

[7] Total unamortized balance per Public Staff multiplied by state income tax rate of 3%.

[8] Column (c) allocated based on customers, unless otherwise footnoted.

[9] Column (c) allocated based on unamortized rate case expense.

[10] Column (c) allocated based on unamortized deferred maintenance.

[11] Column (c) allocated based on plant in service.

[12] Column (c) allocated based on ADIT.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ADJUSTMENT TO CUSTOMER DEPOSITS

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 2-6

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
1	Customer deposits per application	(\$173,055)	(\$103,024)	(\$15,137)	(\$15,758)
2	Adjustment to update customer deposits to 6/30/2018	(18,614) [1]	(11,081) [1]	(2,926) [1]	(3,045) [1]
3	Customer deposits per Public Staff (L1 + L2)	<u>(\$191,669)</u>	<u>(\$114,105)</u>	<u>(\$18,063)</u>	<u>(\$18,803)</u>

[1] Per examination of Company's financial records.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ADJUSTMENT TO GAIN ON SALE

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 2-7

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)
1	Gain on sale per application	<u>(\$286,987)</u>	<u>(\$138,550)</u>
2	Gain on sale of systems sold to CMUD	(500,264) [1]	(254,849) [1]
3	Less: accumulated amortization	<u>500,264 [2]</u>	<u>254,849 [2]</u>
4	Gain on sale of systems, net of amortization (L2 + L3)	0	0
5	Gain on sale and flow back of taxes	<u>(196,947) [1]</u>	<u>(92,681) [1]</u>
6	Gain on sale per Public Staff (L4 + L5)	<u>(196,947)</u>	<u>(92,681)</u>
7	Adjustment to gain on sale (L6 - L1)	<u>\$90,040</u>	<u>\$45,869</u>
8	Gain on sale amortization expense per application	(\$50,953) [1]	(\$25,957) [1]
9	Gain on sale amortization expense per Public Staff	<u>0 [3]</u>	<u>0 [3]</u>
10	Adjustment to gain on sale amortization expense (L9 - L8)	<u>\$50,953</u>	<u>\$25,957</u>

[1] Per examination of Company's financial records.

[2] Line 2 divided by 36 months times 36 months (12/7/2015 thru 12/1/2018).

[3] Line 4 divided by 3 year reamortization period.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO PURCHASE ACQUISITION
ADJUSTMENT, NET OF AMORTIZATION
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 2-8

Line No.	Item	CWSNC Water Operations			[2]	CWSNC Sewer Operations			[3]
		PAA (a)	Accumulated Amortization (b)	PAA, Net of Amortization (c)		PAA (d)	Accumulated Amortization (e)	PAA, Net of Amortization (f)	
1	PAA and accumulated amortization per application	<u>(\$4,278,312)</u>	<u>\$1,942,306</u>	<u>(\$2,336,006)</u>		<u>(\$627,070)</u>	<u>\$888,651</u>	<u>\$261,581</u>	
2	Adjustment to include actual general ledger additions through 6/30/2018	0	51,988 [1]	51,988		0	12,492 [1]	12,492	
3	Adjustment to reflect annual level of amortization	0	11,524 [1]	11,524		0	(7,740) [1]	(7,740)	
4	Adjustment to PAA (Sum of L2 + L3)	0	63,512	63,512		0	4,752	4,752	
5	PAA per Public Staff (L1 + L4)	<u>(\$4,278,312)</u>	<u>\$2,005,818</u>	<u>(\$2,272,494)</u>		<u>(\$627,070)</u>	<u>\$893,403</u>	<u>\$266,333</u>	

- [1] Per examination of Company's financial records.
[2] Column (a) plus Column (b).
[3] Column (d) plus Column (e).
[4] Column (g) plus Column (h).
[5] Column (j) plus Column (k).

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO PURCHASE ACQUISITION
ADJUSTMENT, NET OF AMORTIZATION
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 2-8

Line No.	Item	BF/FH/TC Water Operations			[4]	BF/FH/TC Sewer Operations			[5]
		PAA (g)	Accumulated Amortization (h)	PAA, Net of Amortization (i)		PAA (j)	Accumulated Amortization (k)	PAA, Net of Amortization (l)	
1	PAA and accumulated amortization per application	\$603,123	(\$571,700)	\$31,423		\$1,658,577	(\$678,341)	\$980,236	
2	Adjustment to include actual general ledger additions through 6/30/2018	0	(5,790) [1]	(5,790)		0	(14,921) [1]	(14,921)	
3	Adjustment to reflect annual level of amortization	0	(1,371) [1]	(1,371)		0	(12,618) [1]	(12,618)	
4	Adjustment to PAA (Sum of L2 + L3)	0	(7,161)	(7,161)		0	(27,539)	(27,539)	
5	PAA per Public Staff (L1 + L4)	\$603,123	(\$578,861)	\$24,262		\$1,658,577	(\$705,880)	\$952,697	

- [1] Per examination of Company's financial records.
[2] Column (a) plus Column (b).
[3] Column (d) plus Column (e).
[4] Column (g) plus Column (h).
[5] Column (j) plus Column (k).

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF EXCESS BOOK VALUE

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 2-9

Line No.	Item	Unamortized Balance 12/31/17 (a)	[1]	Annual Amortization (b)	[1]	Accumulated Amortization To 12/31/18 (c)	[2]	Unamortized Balance At 12/31/18 (d)	[3]
<u>CWSNC Uniform Water:</u>									
1	Sugar Mountain	\$0		\$0		\$0		\$0	
2	Carolina Forest, Woodrun	0		0		0		0	
3	Brandywine Bay	10,721		3,139		10,721		0	
4	Queens Harbor	13,800		2,679		13,800		0	
5	Riverpointe	40,361		6,052		40,361		0	
6	Watauga Vista	1,556		100		1,100		456	
7	Total excess book value (Sum of L1 thru L6)	<u>\$66,438</u>		<u>\$11,970</u>		<u>\$65,982</u>		<u>\$456</u>	
<u>CWSNC Uniform Sewer:</u>									
8	Sugar Mountain	\$0		\$0		\$0		\$0	
9	Brandywine Bay	16,214		4,748		16,214		0	
10	Queens Harbor	20,880		4,052		20,880		0	
11	Riverpointe	61,050		9,154		61,050		0	
12	Total excess book value (Sum of L8 thru L11)	<u>\$98,144</u>		<u>\$17,954</u>		<u>\$98,144</u>		<u>\$0</u>	

[1] Based on prior rate cases, unless otherwise footnoted.

[2] Column (b) multiplied by 11.0 years, unless fully amortized.

[3] Column (a) minus Column (c).

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF DEFERRED CHARGES

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 2-10

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
1	Unamortized deferred maintenance - water	\$756,010 [1]	\$0	\$66,100 [5]	\$0
2	Unamortized deferred maintenance - sewer	0	6,339 [3]	0	30,876 [7]
3	Unamortized rate case expense per Public Staff	240,544 [2]	143,201 [4]	29,065 [6]	30,262 [8]
4	Unamortized deferred charges per Public Staff (L1 + L2 + L3)	<u>\$996,554</u>	<u>\$149,540</u>	<u>\$95,165</u>	<u>\$61,138</u>

[1] Henry Exhibit I, Schedule 2-10(a), Column (f), Line 4.

[2] Henry Exhibit I, Schedule 3-10, Column (d), Line 10.

[3] Henry Exhibit I, Schedule 2-10(a), Column (f), Line 6.

[4] Henry Exhibit I, Schedule 3-10, Column (e), Line 10.

[5] Henry Exhibit I, Schedule 2-10(a), Column (f), Line 11.

[6] Henry Exhibit I, Schedule 3-10, Column (f), Line 10.

[7] Henry Exhibit I, Schedule 2-10(a), Column (f), Line 12.

[8] Henry Exhibit I, Schedule 3-10, Column (g), Line 10.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF DEFERRED MAINTENANCE

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 2-10(a)

Line No.	Item	Total Cost Per Public Staff [1] (a)	Amortization Period In Years [1] (b)	Date Amortization Began [1] (c)	Annual Amortization [2] (d)	Accumulated Amortization [3] (e)	Unamortized Balance [4] (f)
<u>Deferred maintenance - CWSNC Uniform Water</u>							
1	Deferred elevated storage tank painting	\$779,037	10	Various	\$77,904	\$236,555	\$542,482
2	Deferred hydro storage tank painting	439,670	5	Various	87,934	368,244	71,426
3	Deferred hydro storage tank inspection	539,687	5	Various	107,937	397,585	142,102
4	Total deferred maintenance - water (Sum of L1 thru L3)	<u>1,758,394</u>			<u>273,775</u>	<u>1,002,384</u>	<u>756,010</u>
<u>Deferred maintenance - CWSNC Uniform Sewer</u>							
5	Belvedere pump and haul	3,424,839	10	Various	342,484	2,191,485	1,233,354
6	WWTP	200,327	5	Various	40,065	193,988	6,339
7	Total deferred maintenance - sewer (L5 + L6)	<u>3,625,166</u>			<u>382,549</u>	<u>2,385,473</u>	<u>1,239,693</u>
<u>Deferred maintenance - BF/FF/TC Water</u>							
8	Deferred elevated storage tank painting	66,028	10	Various	6,603	9,354	56,674
9	Deferred hydro storage tank painting	36,500	5	Various	7,300	32,242	4,258
10	Deferred hydro storage tank inspection	24,622	5	Various	4,924	19,455	5,167
11	Total deferred maintenance - sewer (Sum of L8 thru L10)	<u>127,150</u>			<u>18,827</u>	<u>61,050</u>	<u>66,100</u>
<u>Deferred maintenance - BF/FF/TC Sewer</u>							
12	WWTP	110,492	5	Various	22,098	79,616	30,876
13	Total deferred maintenance (L4 + L7 + L11 + L12)	<u>\$5,621,201</u>			<u>\$697,249</u>	<u>\$3,528,523</u>	<u>\$2,092,678</u>

[1] Per examination of Company's financial records.

[2] Column (a) divided by Column (b).

[3] Total monthly amortization through December 31, 2018.

[4] Column (a) minus Column (e).

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
NET OPERATING INCOME FOR A RETURN
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3(a)
Page 1 of 2

CWSNC WATER OPERATIONS

Line No.	Item	Present Rates		Company Proposed Rates			Public Staff Recommended Rates		
		Amount Per Application	Public Staff Adjustments [1]	Amount Per Public Staff [2]	Net Company Increase [28]	Operations After Rate Increase [29]	Net Public Staff Increase [35]	Operations After Rate Increase [36]	
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	
<u>Operating Revenues:</u>									
1	Service revenues	\$16,903,068	\$27,964	\$16,931,032 [3]	\$2,501,324	\$19,432,356 [3]	\$109,754	\$17,040,766 [37]	
2	Miscellaneous revenues	164,766	24,459	189,225 [4]	6,753	195,978 [30]	296	189,521 [38]	
3	Uncollectible accounts	(88,151)	(10,049)	(98,200) [5]	(14,508)	(112,708) [31]	(637)	(98,837) [39]	
4	Total operating revenues	16,979,683	42,374	17,022,057	2,493,569	19,515,626	109,413	17,131,470	
<u>Maintenance Expenses:</u>									
5	Salaries and wages	2,670,865	(83,739)	2,587,126 [6]	0	2,587,126	0	2,587,126	
6	Purchased power	959,790	(1,910)	957,880 [7]	0	957,880	0	957,880	
7	Purchased water	1,407,826	(124,893)	1,282,933 [3]	0	1,282,933	0	1,282,933	
8	Maintenance and repair	1,194,143	(365,957)	828,186 [8]	0	828,186	0	828,186	
9	Maintenance testing	149,525	59,440	208,965 [3]	0	208,965	0	208,965	
10	Meter reading	197,658	(96)	197,562 [9]	0	197,562	0	197,562	
11	Chemicals	356,307	(131,663)	224,644 [3]	0	224,644	0	224,644	
12	Transportation	240,289	(1,462)	238,827 [10]	0	238,827	0	238,827	
13	Operating expenses charged to plant	(389,286)	18,998	(370,288) [11]	0	(370,288)	0	(370,288)	
14	Outside services - other	273,381	(18,534)	254,847 [12]	0	254,847	0	254,847	
15	Total maintenance expenses	7,060,498	(649,816)	6,410,682	0	6,410,682	0	6,410,682	
<u>General Expenses:</u>									
16	Salaries and wages	1,149,101	(78,559)	1,070,542 [6]	0	1,070,542	0	1,070,542	
17	Office supplies and other office expense	308,987	(2,642)	306,345 [13]	0	306,345	0	306,345	
18	Regulatory commission expense	238,050	(177,914)	60,136 [14]	0	60,136	0	60,136	
19	Pension and other benefits	734,430	(21,405)	713,025 [6]	0	713,025	0	713,025	
20	Rent	127,276	(3,987)	123,289 [15]	0	123,289	0	123,289	
21	Insurance	304,639	(71,567)	233,072 [16]	0	233,072	0	233,072	
22	Office utilities	415,080	(1,394)	413,686 [17]	0	413,686	0	413,686	
23	Miscellaneous	119,644	(103,715)	15,929 [18]	0	15,929	0	15,929	
24	Total general expenses	3,397,207	(461,183)	2,936,024	0	2,936,024	0	2,936,024	
<u>Depreciation and Taxes:</u>									
25	Depreciation expense	2,891,781	(13,804)	2,877,977 [19]	0	2,877,977	0	2,877,977	
26	Amortization of CIAC	(681,010)	(91,751)	(772,761) [20]	0	(772,761)	0	(772,761)	
27	Amortization of PAA	(103,967)	(11,547)	(115,514) [21]	0	(115,514)	0	(115,514)	
28	Amortization of ITC	(287)	0	(287) [22]	0	(287)	0	(287)	
29	Franchise and other taxes	(21,941)	(2)	(21,943) [22]	0	(21,943)	0	(21,943)	
30	Property taxes	133,847	523	134,370 [23]	0	134,370	0	134,370	
31	Payroll taxes	293,160	(7,460)	285,700 [6]	0	285,700	0	285,700	
32	Regulatory fee	27,251	(3,420)	23,831 [24]	3,491	27,322 [32]	153	23,984 [40]	
33	Deferred Income Tax	0	(35,475)	(35,475) [25]	0	(35,475)	0	(35,475)	
34	State income tax	143,102	(36,117)	106,985 [26]	74,702	181,687 [33]	3,277	110,262 [41]	
35	Federal income tax	971,661	(245,235)	726,426 [27]	507,229	1,233,655 [34]	22,256	748,682 [42]	
36	Total depreciation and taxes	3,653,597	(444,288)	3,209,309	585,422	3,794,731	25,686	3,234,995	
37	Total operating revenue deductions	14,111,302	(1,555,286)	12,556,016	585,422	13,141,438	25,686	12,581,702	
38	Net operating income for a return	\$2,868,381	\$1,597,660	\$4,466,041	\$1,908,147	\$6,374,188	\$83,727	\$4,549,766	

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
NET OPERATING INCOME FOR A RETURN
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3(b)
Page 1 of 2

CWSNC SEWER OPERATIONS

		Present Rates			Company Proposed Rates			Public Staff Recommended Rates		
Line No.	Item	Amount Per Application	Public Staff Adjustments [1]	Amount Per Public Staff [2]	Net Company Increase [25]	Operations After Rate Increase [26]	Net Public Staff Increase [32]	Operations After Rate Increase [33]		
		(a)	(b)	(c)	(d)	(e)	(f)	(g)		
<u>Operating Revenues:</u>										
1	Service révenues	\$12,731,248	(\$45,470)	\$12,685,778 [3]	\$1,010,587	\$13,696,365 [3]	(\$107,786)	\$12,577,992 [34]		
2	Miscellaneous revenues	127,307	(17,169)	110,138 [4]	2,830	112,968 [27]	(302)	109,836 [35]		
3	Uncollectible accounts	(71,480)	(3,366)	(74,846) [5]	(5,963)	(80,809) [28]	636	(74,210) [36]		
4	Total operating revenues	12,787,075	(66,005)	12,721,070	1,007,454	13,728,524	(107,452)	12,613,618		
<u>Maintenance Expenses:</u>										
5	Salaries and wages	1,582,288	(42,109)	1,540,179 [6]	0	1,540,179	0	1,540,179		
6	Purchased power	748,066	0	748,066	0	748,066	0	748,066		
7	Purchased sewer	682,727	(1,985)	680,742 [3]	0	680,742	0	680,742		
8	Maintenance and repair	1,599,870	6,760	1,606,630 [7]	0	1,606,630	0	1,606,630		
9	Maintenance testing	290,181	12,380	302,561 [3]	0	302,561	0	302,561		
10	Meter reading	0	0	0	0	0	0	0		
11	Chemicals	212,118	135,868	347,986 [3]	0	347,986	0	347,986		
12	Transportation	143,050	(410)	142,640 [8]	0	142,640	0	142,640		
13	Operating expenses charged to plant	(231,754)	11,985	(219,769) [9]	0	(219,769)	0	(219,769)		
14	Outside services - other	162,817	(8,487)	154,330 [10]	0	154,330	0	154,330		
15	Total maintenance expenses	5,189,363	114,002	5,303,365	0	5,303,365	0	5,303,365		
<u>General Expenses:</u>										
16	Salaries and wages	680,757	(43,437)	637,320 [6]	0	637,320	0	637,320		
17	Office supplies and other office expense	183,966	(616)	183,350 [11]	0	183,350	0	183,350		
18	Regulatory commission expense	141,366	(105,565)	35,801 [12]	0	35,801	0	35,801		
19	Pension and other benefits	437,286	(12,743)	424,543 [8]	0	424,543	0	424,543		
20	Rent	75,402	(1,840)	73,562 [13]	0	73,562	0	73,562		
21	Insurance	181,385	(42,634)	138,751 [14]	0	138,751	0	138,751		
22	Office utilities	247,118	(355)	246,763 [15]	0	246,763	0	246,763		
23	Miscellaneous	71,230	(61,299)	9,931 [16]	0	9,931	0	9,931		
24	Total general expenses	2,018,510	(268,489)	1,750,021	0	1,750,021	0	1,750,021		
<u>Depreciation and Taxes:</u>										
25	Depreciation expense	2,184,741	87,081	2,271,822 [17]	0	2,271,822	0	2,271,822		
26	Amortization of CIAC	(616,096)	(158,499)	(774,595) [18]	0	(774,595)	0	(774,595)		
27	Amortization of PAA	(24,983)	7,739	(17,244) [19]	0	(17,244)	0	(17,244)		
28	Amortization of ITC	(232)	0	(232) [20]	0	(232)	0	(232)		
29	Franchise and other taxes	(17,738)	0	(17,738)	0	(17,738)	0	(17,738)		
30	Property taxes	79,682	(162)	79,520 [20]	0	79,520	0	79,520		
31	Payroll taxes	173,676	(3,592)	170,084 [6]	0	170,084	0	170,084		
32	Regulatory fee	19,333	(1,524)	17,809 [21]	1,411	19,220 [29]	(150)	17,659 [37]		
33	Deferred Income Tax	0	(39,571)	(39,571) [22]	0	(39,571)	0	(39,571)		
34	State income tax	106,245	(24,587)	81,658 [23]	30,181	111,839 [30]	(3,219)	78,439 [38]		
35	Federal income tax	721,403	(166,947)	554,456 [24]	204,931	759,387 [31]	(21,857)	532,599 [39]		
36	Total depreciation and taxes	2,626,031	(300,062)	2,325,969	236,523	2,562,492	(25,226)	2,300,743		
37	Total operating revenue deductions	9,833,904	(454,549)	9,379,355	236,523	9,615,878	(25,226)	9,354,129		
38	Net operating income for a return	\$2,953,171	\$388,544	\$3,341,715	\$770,931	\$4,112,646	(\$82,226)	\$3,259,489		

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
NET OPERATING INCOME FOR A RETURN
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3(c)
Page 1 of 2

BRADFIELD/FAIRFIELD WATER OPERATIONS

	Present Rates				Company Proposed Rates			Public Staff Recommended Rates		
Line No.	Amount Per Application (a)	Public Staff Adjustments [1] (b)	Amount Per Public Staff [2] (c)	Net Company Increase [26] (d)	Operations After Rate Increase [27] (e)	Net Public Staff Increase [33] (f)	Operations After Rate Increase [34] (g)			
<u>Operating Revenues:</u>										
1	Service revenues	\$1,043,134	\$0	\$1,043,134 [3]	\$517,787	\$1,560,921 [3]	\$255,057	\$1,298,191 [35]		
2	Miscellaneous revenues	42,374	3,932	46,306 [4]	932	47,238 [28]	459	46,765 [36]		
3	Uncollectible accounts	(12,191)	(3,143)	(15,334) [5]	(7,612)	(22,946) [29]	(3,749)	(19,083) [37]		
4	Total operating revenues	1,073,317	789	1,074,106	511,107	1,585,213	251,767	1,325,873		
<u>Maintenance Expenses:</u>										
5	Salaries and wages	321,300	(8,551)	312,749 [6]	0	312,749	0	312,749		
6	Purchased power	70,816	0	70,816	0	70,816	0	70,816		
7	Purchased water	(31,315)	31,315	0 [7]	0	0	0	0		
8	Maintenance and repair	62,630	(502)	62,128 [8]	0	62,128	0	62,128		
9	Maintenance testing	5,611	3,675	9,286 [3]	0	9,286	0	9,286		
10	Meter reading	28,305	0	28,305	0	28,305	0	28,305		
11	Chemicals	29,291	3,423	32,714 [3]	0	32,714	0	32,714		
12	Transportation	32,324	(83)	32,241 [9]	0	32,241	0	32,241		
13	Operating expenses charged to plant	(42,523)	1,844	(40,679) [10]	0	(40,679)	0	(40,679)		
14	Outside services - other	22,716	(84)	22,632 [11]	0	22,632	0	22,632		
15	Total maintenance expenses	499,155	31,037	530,192	0	530,192	0	530,192		
<u>General Expenses:</u>										
16	Salaries and wages	138,235	(8,821)	129,414 [6]	0	129,414	0	129,414		
17	Office supplies and other office expense	34,748	(124)	34,624 [12]	0	34,624	0	34,624		
18	Regulatory commission expense	27,283	(20,016)	7,267 [13]	0	7,267	0	7,267		
19	Pension and other benefits	101,827	(2,588)	99,239 [6]	0	99,239	0	99,239		
20	Rent	15,311	(373)	14,938 [14]	0	14,938	0	14,938		
21	Insurance	42,293	(14,115)	28,178 [15]	0	28,178	0	28,178		
22	Office utilities	40,175	(72)	40,103 [16]	0	40,103	0	40,103		
23	Miscellaneous	12,120	(13,292)	(1,172) [17]	0	(1,172)	0	(1,172)		
24	Total general expenses	411,992	(59,401)	352,591	0	352,591	0	352,591		
<u>Depreciation and Taxes:</u>										
25	Depreciation expense	349,994	(222,391)	127,603 [18]	0	127,603	0	127,603		
26	Amortization of CIAC	(39,159)	(8,727)	(47,886) [19]	0	(47,886)	0	(47,886)		
27	Amortization of PAA	11,572	1,395	12,967 [20]	0	12,967	0	12,967		
28	Amortization of ITC	0	0	0	0	0	0	0		
29	Franchise and other taxes	(3,653)	0	(3,653)	0	(3,653)	0	(3,653)		
30	Property taxes	9,677	(32)	9,645 [21]	0	9,645	0	9,645		
31	Payroll taxes	35,267	(730)	34,537 [6]	0	34,537	0	34,537		
32	Regulatory fee	2,219	(715)	1,504 [22]	715	2,219 [30]	352	1,856 [38]		
33	Deferred Income Tax	0	1,245	1,245 [23]	0	1,245	0	1,245		
34	State income tax	6,805	(7,986)	(1,181) [24]	15,311	14,130 [31]	7,542	6,361 [39]		
35	Federal income tax	46,203	(54,225)	(8,022) [25]	103,967	95,945 [32]	51,213	43,191 [40]		
36	Total depreciation and taxes	418,925	(292,166)	126,759	119,993	246,752	59,107	185,866		
37	Total operating revenue deductions	1,330,072	(320,530)	1,009,542	119,993	1,129,535	59,107	1,068,649		
38	Net operating income for a return	(\$256,755)	\$321,319	\$64,564	\$391,114	\$455,678	\$192,660	\$257,224		

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
NET OPERATING INCOME FOR A RETURN
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3(c)
Page 1 of 2

BRADFIELD/FAIRFIELD SEWER OPERATIONS

		Present Rates		Company Proposed Rates		Public Staff Recommended Rates		
Line No.	Item	Amount Per Application (a)	Public Staff Adjustments [1] (b)	Amount Per Public Staff [2] (c)	Net Company Increase [25] (d)	Operations After Rate Increase [26] (e)	Net Public Staff Increase [32] (f)	Operations After Rate Increase [33] (g)
<u>Operating Revenues:</u>								
1	Service revenues	\$1,758,104	\$11,651	\$1,769,755 [3]	\$393,345	\$2,163,100 [3]	\$293,188	\$2,062,943 [34]
2	Miscellaneous revenues	17,420	(2,926)	14,494 [4]	708	15,202 [27]	527	15,021 [35]
3	Uncollectible accounts	(21,321)	(4,694)	(26,015) [5]	(5,783)	(31,798) [28]	(4,310)	(30,325) [36]
4	Total operating revenues	1,754,203	4,031	1,758,234	388,270	2,146,504	289,405	2,047,639
<u>Maintenance Expenses:</u>								
5	Salaries and wages	334,483	(8,901)	325,582 [6]	0	325,582	0	325,582
6	Purchased power	155,596	0	155,596	0	155,596	0	155,596
7	Purchased sewer	0	0	0	0	0	0	0
8	Maintenance and repair	272,544	(19,643)	252,901 [7]	0	252,901	0	252,901
9	Maintenance testing	25,513	(1,965)	23,548 [3]	0	23,548	0	23,548
10	Meter reading	0	0	0	0	0	0	0
11	Chemicals	30,493	(3,422)	27,071 [3]	0	27,071	0	27,071
12	Transportation	33,650	(87)	33,563 [8]	0	33,563	0	33,563
13	Operating expenses charged to plant	(44,268)	1,939	(42,329) [9]	0	(42,329)	0	(42,329)
14	Outside services - other*	23,648	(88)	23,560 [10]	0	23,560	0	23,560
15	Total maintenance expenses	831,859	(32,167)	799,492	0	799,492	0	799,492
<u>General Expenses:</u>								
16	Salaries and wages	143,907	(9,183)	134,724 [6]	0	134,724	0	134,724
17	Office supplies and other office expense	36,174	(130)	36,044 [11]	0	36,044	0	36,044
18	Regulatory commission expense	29,314	(21,749)	7,565 [12]	0	7,565	0	7,565
19	Pension and other benefits	106,005	(2,694)	103,311 [6]	0	103,311	0	103,311
20	Rent	15,939	(389)	15,550 [13]	0	15,550	0	15,550
21	Insurance	44,028	(14,694)	29,334 [14]	0	29,334	0	29,334
22	Office utilities	41,823	(75)	41,748 [15]	0	41,748	0	41,748
23	Miscellaneous	12,618	(13,838)	(1,220) [16]	0	(1,220)	0	(1,220)
24	Total general expenses	429,808	(62,752)	367,056	0	367,056	0	367,056
<u>Depreciation and Taxes:</u>								
25	Depreciation expense	122,890	217,090	339,980 [17]	0	339,980	0	339,980
26	Amortization of CIAC	(144,644)	(36,834)	(181,478) [18]	0	(181,478)	0	(181,478)
27	Amortization of PAA	78,181	(35,721)	42,460 [19]	0	42,460	0	42,460
28	Amortization of ITC	0	0	0	0	0	0	0
29	Franchise and other taxes	(6,368)	0	(6,368)	0	(6,368)	0	(6,368)
30	Property taxes	10,074	(34)	10,040 [20]	0	10,040	0	10,040
31	Payroll taxes	36,714	(760)	35,954 [6]	0	35,954	0	35,954
32	Regulatory fee	2,997	(535)	2,462 [21]	543	3,005 [29]	405	2,667 [37]
33	Deferred Income Tax	0	(9,769)	(9,769) [22]	0	(9,769)	0	(9,769)
34	State income tax	17,240	(12,893)	4,347 [23]	11,631	15,978 [30]	8,670	13,017 [38]
35	Federal income tax	117,057	(87,544)	29,513 [24]	78,980	108,493 [31]	58,869	88,382 [39]
36	Total depreciation and taxes	234,141	33,000	267,141	91,154	358,295	67,944	335,085
37	Total operating revenue deductions	1,495,608	(61,919)	1,433,689	91,154	1,524,843	67,944	1,501,633
38	Net operating income for a return	\$258,595	\$65,950	\$324,545	\$297,116	\$621,661	\$221,461	\$546,006

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

FOOTNOTES TO SCHEDULE 3(a)

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 3(a)

Page 2 of 2

CWSNC WATER OPERATIONS

- [1] Column (c) minus Column (a), unless otherwise footnoted.
- [2] Column (a) plus Column (b), unless otherwise footnoted.
- [3] Based on the recommendation of Public Staff Engineer Casselberry
- [4] Henry Exhibit I, Schedule 3-1(a), Column (c), Line 5.
- [5] Henry Exhibit I, Schedule 3-2, Column (a), Line 6.
- [6] Based on the recommendation of Public Staff Accountant Johnson
- [7] Henry Exhibit I, Schedule 3-3, Column (a), Line 3.
- [8] Henry Exhibit I, Schedule 3-4, Column (a), Line 8.
- [9] Henry Exhibit I, Schedule 3-5, Column (a), Line 3.
- [10] Henry Exhibit I, Schedule 3-6, Column (a), Line 5.
- [11] Henry Exhibit I, Schedule 3-7, Column (a), Line 6.
- [12] Henry Exhibit I, Schedule 3-8, Column (a), Line 7.
- [13] Henry Exhibit I, Schedule 3-9, Column (a), Line 6.
- [14] Henry Exhibit I, Schedule 3-10, Column (d), Line 9.
- [15] Henry Exhibit I, Schedule 3-11, Column (a), Line 5.
- [16] Henry Exhibit I, Schedule 3-12, Column (a), Line 11.
- [17] Henry Exhibit I, Schedule 3-13, Column (a), Line 6.
- [18] Henry Exhibit I, Schedule 3-14, Column (a), Line 7.
- [19] Henry Exhibit I, Schedule 3-15, Column (a), Line 5.
- [20] Henry Exhibit I, Schedule 3-15, Column (a), Line 10.
- [21] Henry Exhibit I, Schedule 3-15, Column (a), Line 13.
- [22] Henry Exhibit I, Schedule 3-16, Column (a), Line 3.
- [23] Henry Exhibit I, Schedule 3-17, Column (a), Line 5.
- [24] Line 4 column (c) multiplied by 0.14%.
- [25] Based on the recommendation of Public Staff Accountant Boswell.
- [26] Henry Exhibit I, Schedule 3-18(a), Column (a), Line 16.
- [27] Henry Exhibit I, Schedule 3-18(a), Column (a), Line 18.
- [28] Column (e) minus Column (c), unless otherwise footnoted.
- [29] Column (c) plus Column (d), unless otherwise footnoted.
- [30] Henry Exhibit I, Schedule 3-1(a), Column (c), Line 10.
- [31] Henry Exhibit I, Schedule 3-2, Column (a), Line 9.
- [32] Line 4 column (e) multiplied by 0.14%.
- [33] Henry Exhibit I, Schedule 3-18(a), Column (b), Line 16.
- [34] Henry Exhibit I, Schedule 3-18(a), Column (b), Line 18.
- [35] Column (g) minus Column (c), unless otherwise footnoted.
- [36] Column (c) plus Column (f), unless otherwise footnoted.
- [37] Revenue requirement as calculated by the Public Staff.
- [38] Henry Exhibit I, Schedule 3-1(a), Column (c), Line 15.
- [39] Henry Exhibit I, Schedule 3-2, Column (a), Line 12.
- [40] Line 4 column (g) multiplied by 0.14%.
- [41] Henry Exhibit I, Schedule 3-18(a), Column (c), Line 16.
- [42] Henry Exhibit I, Schedule 3-18(a), Column (c), Line 18.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
FOOTNOTES TO SCHEDULE 3(b)
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3(b)
Page 2 of 2

CWSNC SEWER OPERATIONS

- [1] Column (c) minus Column (a), unless otherwise footnoted.
- [2] Column (a) plus Column (b), unless otherwise footnoted.
- [3] Provided by Public Staff Engineer Casselberry.
- [4] Henry Exhibit I, Schedule 3-1(b), Column (c), Line 5.
- [5] Henry Exhibit I, Schedule 3-2, Column (b), Line 6.
- [6] Based on the recommendation of Public Staff Accountant Johnson
- [7] Henry Exhibit I, Schedule 3-4, Column (b), Line 8.
- [8] Henry Exhibit I, Schedule 3-6, Column (b), Line 5.
- [9] Henry Exhibit I, Schedule 3-7, Column (b), Line 6.
- [10] Henry Exhibit I, Schedule 3-8, Column (b), Line 7.
- [11] Henry Exhibit I, Schedule 3-9, Column (b), Line 6.
- [12] Henry Exhibit I, Schedule 3-10, Column (e), Line 9.
- [13] Henry Exhibit I, Schedule 3-11, Column (b), Line 5.
- [14] Henry Exhibit I, Schedule 3-12, Column (b), Line 11.
- [15] Henry Exhibit I, Schedule 3-13, Column (b), Line 6.
- [16] Henry Exhibit I, Schedule 3-14, Column (b), Line 7.
- [17] Henry Exhibit I, Schedule 3-15, Column (b), Line 5.
- [18] Henry Exhibit I, Schedule 3-15, Column (b), Line 10.
- [19] Henry Exhibit I, Schedule 3-15, Column (b), Line 13.
- [20] Henry Exhibit I, Schedule 3-17, Column (b), Line 5.
- [21] Line 4 column (c) multiplied by 0.14%.
- [22] Based on the recommendation of Public Staff Accountant Boswell.
- [23] Henry Exhibit I, Schedule 3-18(b), Column (a), Line 16.
- [24] Henry Exhibit I, Schedule 3-18(b), Column (a), Line 18.
- [25] Column (e) minus Column (c), unless otherwise footnoted.
- [26] Column (c) plus Column (d), unless otherwise footnoted.
- [27] Henry Exhibit I, Schedule 3-1(b), Column (c), Line 10.
- [28] Henry Exhibit I, Schedule 3-2, Column (b), Line 9.
- [29] Line 4 column (e) multiplied by 0.14%.
- [30] Henry Exhibit I, Schedule 3-18(b), Column (b), Line 16.
- [31] Henry Exhibit I, Schedule 3-18(b), Column (b), Line 18.
- [32] Column (g) minus Column (c), unless otherwise footnoted.
- [33] Column (c) plus Column (f), unless otherwise footnoted.
- [34] Revenue requirement as calculated by the Public Staff.
- [35] Henry Exhibit I, Schedule 3-1(b), Column (c), Line 15.
- [36] Henry Exhibit I, Schedule 3-2, Column (b), Line 12.
- [37] Line 4 column (g) multiplied by 0.14%.
- [38] Henry Exhibit I, Schedule 3-18(b), Column (c), Line 16.
- [39] Henry Exhibit I, Schedule 3-18(b), Column (c), Line 18.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

FOOTNOTES TO SCHEDULE 3(c)

For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3(c)
Page 2 of 2

BRADFIELD FARMS/FAIRFIELD HARBOUR WATER OPERATIONS

- [1] Column (c) minus Column (a), unless otherwise footnoted.
- [2] Column (a) plus Column (b), unless otherwise footnoted.
- [3] Provided by Public Staff Engineer Casselberry.
- [4] Henry Exhibit I, Schedule 3-1(c), Column (c), Line 5.
- [5] Henry Exhibit I, Schedule 3-2, Column (c), Line 6.
- [6] Based on the recommendation of Public Staff Accountant Johnson
- [7] Remove Antenna lease revenue that is mistakenly put into purchase water
- [8] Henry Exhibit I, Schedule 3-4, Column (c), Line 8.
- [9] Henry Exhibit I, Schedule 3-6, Column (c), Line 5.
- [10] Henry Exhibit I, Schedule 3-7, Column (c), Line 6.
- [11] Henry Exhibit I, Schedule 3-8, Column (c), Line 7.
- [12] Henry Exhibit I, Schedule 3-9, Column (c), Line 6.
- [13] Henry Exhibit I, Schedule 3-10, Column (f), Line 9.
- [14] Henry Exhibit I, Schedule 3-11, Column (c), Line 5.
- [15] Henry Exhibit I, Schedule 3-12, Column (c), Line 11.
- [16] Henry Exhibit I, Schedule 3-13, Column (c), Line 6.
- [17] Henry Exhibit I, Schedule 3-14, Column (c), Line 7.
- [18] Henry Exhibit I, Schedule 3-15, Column (c), Line 5.
- [19] Henry Exhibit I, Schedule 3-15, Column (c), Line 10.
- [20] Henry Exhibit I, Schedule 3-15, Column (c), Line 13.
- [21] Henry Exhibit I, Schedule 3-17, Column (c), Line 5.
- [22] Line 4 column (c) multiplied by 0.14%.
- [23] Based on the recommendation of Public Staff Accountant Boswell.
- [24] Henry Exhibit I, Schedule 3-18(c), Column (a), Line 16.
- [25] Henry Exhibit I, Schedule 3-18(c), Column (a), Line 18.
- [26] Column (e) minus Column (c), unless otherwise footnoted.
- [27] Column (c) plus Column (d), unless otherwise footnoted.
- [28] Henry Exhibit I, Schedule 3-1(c), Column (c), Line 10.
- [29] Henry Exhibit I, Schedule 3-2, Column (c), Line 9.
- [30] Line 4 column (e) multiplied by 0.14%.
- [31] Henry Exhibit I, Schedule 3-18(c), Column (b), Line 16.
- [32] Henry Exhibit I, Schedule 3-18(c), Column (b), Line 18.
- [33] Column (g) minus Column (c), unless otherwise footnoted.
- [34] Column (c) plus Column (f), unless otherwise footnoted.
- [35] Revenue requirement as calculated by the Public Staff.
- [36] Henry Exhibit I, Schedule 3-1(c), Column (c), Line 15.
- [37] Henry Exhibit I, Schedule 3-2, Column (c), Line 12.
- [38] Line 4 column (g) multiplied by 0.14%.
- [39] Henry Exhibit I, Schedule 3-18(c), Column (c), Line 16.
- [40] Henry Exhibit I, Schedule 3-18(c), Column (c), Line 18.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

FOOTNOTES TO SCHEDULE 3(d)

For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3(d)
Page 2 of 2

BRADFIELD FARMS/FAIRFIELD HARBOUR SEWER OPERATIONS

- [1] Column (c) minus Column (a), unless otherwise footnoted.
- [2] Column (a) plus Column (b), unless otherwise footnoted.
- [3] Provided by Public Staff Engineer Casselberry.
- [4] Henry Exhibit I, Schedule 3-1(d), Column (c), Line 5.
- [5] Henry Exhibit I, Schedule 3-2, Column (d), Line 6.
- [6] Based on the recommendation of Public Staff Accountant Johnson
- [7] Henry Exhibit I, Schedule 3-4, Column (d), Line 8.
- [8] Henry Exhibit I, Schedule 3-6, Column (d), Line 5.
- [9] Henry Exhibit I, Schedule 3-7, Column (d), Line 6.
- [10] Henry Exhibit I, Schedule 3-8, Column (d), Line 7.
- [11] Henry Exhibit I, Schedule 3-9, Column (d), Line 6.
- [12] Henry Exhibit I, Schedule 3-10, Column (g), Line 9.
- [13] Henry Exhibit I, Schedule 3-11, Column (d), Line 5.
- [14] Henry Exhibit I, Schedule 3-12, Column (d), Line 11.
- [15] Henry Exhibit I, Schedule 3-13, Column (d), Line 6.
- [16] Henry Exhibit I, Schedule 3-14, Column (d), Line 7.
- [17] Henry Exhibit I, Schedule 3-15, Column (d), Line 5.
- [18] Henry Exhibit I, Schedule 3-15, Column (d), Line 10.
- [19] Henry Exhibit I, Schedule 3-15, Column (d), Line 13.
- [20] Henry Exhibit I, Schedule 3-17, Column (d), Line 5.
- [21] Line 4 column (c) multiplied by 0.14%.
- [22] Based on the recommendation of Public Staff Accountant Boswell.
- [23] Henry Exhibit I, Schedule 3-18(d), Column (a), Line 16.
- [24] Henry Exhibit I, Schedule 3-18(d), Column (a), Line 18.
- [25] Column (e) minus Column (c), unless otherwise footnoted.
- [26] Column (c) plus Column (d), unless otherwise footnoted.
- [27] Henry Exhibit I, Schedule 3-1(d), Column (c), Line 10.
- [28] Henry Exhibit I, Schedule 3-2, Column (d), Line 9.
- [29] Line 4 column (e) multiplied by 0.14%.
- [30] Henry Exhibit I, Schedule 3-18(d), Column (b), Line 16.
- [31] Henry Exhibit I, Schedule 3-18(d), Column (b), Line 18.
- [32] Column (g) minus Column (c), unless otherwise footnoted.
- [33] Column (c) plus Column (f), unless otherwise footnoted.
- [34] Revenue requirement as calculated by the Public Staff.
- [35] Henry Exhibit I, Schedule 3-1(d), Column (c), Line 15.
- [36] Henry Exhibit I, Schedule 3-2, Column (d), Line 12.
- [37] Line 4 column (g) multiplied by 0.14%.
- [38] Henry Exhibit I, Schedule 3-18(d), Column (c), Line 16.
- [39] Henry Exhibit I, Schedule 3-18(d), Column (c), Line 18.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO MISCELLANEOUS REVENUES
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3-1(a)

CWSNC WATER OPERATIONS

Line No.	Item	Amount Per Before Adjustment (a)	Public Staff Adjustments (b)	Amount Per Public Staff (c)
	<u>Present Rates:</u>			
1	Forfeited discounts	\$41,335 [1]	\$4,379	\$45,714 [5]
2	Other water/sewer revenues	94,206 [1]	19,509	113,715 [6]
3	Antenna leases	0 [1]	0	0
4	Sale of utility property	29,225 [1]	571	29,796 [1]
5	Total miscellaneous revenues (Sum of L1 thru L4)	<u>\$164,766</u>	<u>\$24,459</u>	<u>\$189,225</u>
	<u>Company Proposed Rates:</u>			
6	Forfeited discounts	\$45,714 [2]	\$6,753	\$52,467 [7]
7	Other water/sewer revenues	113,715 [2]	0	113,715
8	Antenna leases	0 [2]	0	0
9	Sale of utility property	29,796 [2]	0	29,796
10	Total miscellaneous revenues (Sum of L6 thru L9)	<u>\$189,225</u>	<u>\$6,753</u>	<u>\$195,978</u>
	<u>Public Staff Recommended Rates:</u>			
11	Forfeited discounts	\$45,714 [2]	\$296	\$46,010 [8]
12	Other water/sewer revenues	113,715 [2]	0	113,715
13	Antenna leases	0 [2]	0	0
14	Sale of utility property	29,796 [2]	0	29,796
15	Total miscellaneous revenues (Sum of L11 thru L14)	<u>\$189,225</u>	<u>\$296</u>	<u>\$189,521</u>

- [1] Per examination of Company's financial records.
[2] Adjusted amount per Public Staff, Column (c), Lines 1 thru 4.
[3] Column (c) minus Column (a), unless otherwise footnoted.
[4] Column (a) plus Column (b), unless otherwise footnoted.
[5] Henry Exhibit I, Schedule 3-1(a)(1), Column (a), Line 6.
[6] Reclassify other revenue per examination of Company's records
[7] Henry Exhibit I, Schedule 3-1(a)(1), Column (a), Line 9.
[8] Henry Exhibit I, Schedule 3-1(a)(1), Column (a), Line 12.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO MISCELLANEOUS REVENUES
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3-1(b)

CWSNC SEWER OPERATIONS

Line No.	Item	Amount Per Before Adjustment (a)	Public Staff Adjustments (b)	Amount Per Public Staff (c)
<u>Present Rates:</u>				
1	Forfeited discounts	\$33,518 [1]	\$2,002	\$35,520 [5]
2	Other water/sewer revenues	76,390 [1]	(19,510)	56,880 [6]
3	Antenna leases	0 [1]	0	0
4	Sale of utility property	17,398 [1]	340	17,738 [1]
5	Total miscellaneous revenues (Sum of L1 thru L4)	<u>\$127,307</u>	<u>(\$17,169)</u>	<u>\$110,138</u>
<u>Company Proposed Rates:</u>				
6	Forfeited discounts	\$35,520 [2]	\$2,830	\$38,350 [7]
7	Other water/sewer revenues	56,880 [2]	0	56,880
8	Antenna leases	0 [2]	0	0
9	Sale of utility property	17,738 [2]	0	17,738
10	Total miscellaneous revenues (Sum of L6 thru L9)	<u>\$110,138</u>	<u>\$2,830</u>	<u>\$112,968</u>
<u>Public Staff Recommended Rates:</u>				
11	Forfeited discounts	\$35,520 [2]	(\$302)	\$35,218 [8]
12	Other water/sewer revenues	56,880 [2]	0	56,880
13	Antenna leases	0 [2]	0	0
14	Sale of utility property	17,738 [2]	0	17,738
15	Total miscellaneous revenues (Sum of L11 thru L14)	<u>\$110,138</u>	<u>(\$302)</u>	<u>\$109,836</u>

- [1] Per examination of Company's financial records.
[2] Adjusted amount per Public Staff, Column (c), Lines 1 thru 4.
[3] Column (c) minus Column (a), unless otherwise footnoted.
[4] Column (a) plus Column (b), unless otherwise footnoted.
[5] Henry Exhibit I, Schedule 3-1(a)(1), Column (b), Line 6.
[6] Reclassify other revenue per examination of Company's records
[7] Henry Exhibit I, Schedule 3-1(a)(1), Column (b), Line 9.
[8] Henry Exhibit I, Schedule 3-1(a)(1), Column (b), Line 12.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO MISCELLANEOUS REVENUES
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3-1(c)

BRADFIELD/FAIRFIELD WATER OPERATIONS

Line No.	Item	Amount Per Before Adjustment (a)	Public Staff Adjustments (b)	[3]	Amount Per Public Staff (c)	[4]
<u>Present Rates:</u>						
1	Forfeited discounts	\$1,476 [1]	\$402		\$1,878 [5]	
2	Other water/sewer revenues	6,868 [1]	3,530		10,398 [6]	
3	Antenna leases	31,315 [1]	0		31,315 [1]	
4	Sale of utility property	2,715 [1]	(0)		2,715 [1]	
5	Total miscellaneous revenues (Sum of L1 thru L4)	<u>\$42,375</u>	<u>\$3,931</u>		<u>\$46,306</u>	
<u>Company Proposed Rates:</u>						
6	Forfeited discounts	\$1,878 [2]	\$932		\$2,810 [7]	
7	Other water/sewer revenues	10,398 [2]	0		10,398	
8	Antenna leases	31,315 [2]	0		31,315	
9	Sale of utility property	2,715 [2]	0		2,715	
10	Total miscellaneous revenues (Sum of L6 thru L9)	<u>\$46,306</u>	<u>\$932</u>		<u>\$47,238</u>	
<u>Public Staff Recommended Rates:</u>						
11	Forfeited discounts	\$1,878 [2]	\$459		\$2,337 [8]	
12	Other water/sewer revenues	10,398 [2]	0		10,398	
13	Antenna leases	31,315 [2]	0		31,315	
14	Sale of utility property	2,715 [2]	0		2,715	
15	Total miscellaneous revenues (Sum of L11 thru L14)	<u>\$46,306</u>	<u>\$459</u>		<u>\$46,765</u>	

- [1] Per examination of Company's financial records.
[2] Adjusted amount per Public Staff, Column (c), Lines 1 thru 4.
[3] Column (c) minus Column (a), unless otherwise footnoted.
[4] Column (a) plus Column (b), unless otherwise footnoted.
[5] Henry Exhibit I, Schedule 3-1(a)(1), Column (c), Line 6.
[6] Reclassify other revenue per examination of Company's records
[7] Henry Exhibit I, Schedule 3-1(a)(1), Column (c), Line 9.
[8] Henry Exhibit I, Schedule 3-1(a)(1), Column (c), Line 12.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO MISCELLANEOUS REVENUES
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3-1(d)

BRADFIELD/FAIRFIELD SEWER OPERATIONS

Line No.	Item	Amount Per Before Adjustment (a)	Public Staff Adjustments (b)	[3]	Amount Per Public Staff (c)	[4]
<u>Present Rates:</u>						
1	Forfeited discounts	\$2,582 [1]	\$604		\$3,186 [5]	
2	Other water/sewer revenues	12,011 [1]	(3,530)		8,481 [6]	
3	Antenna leases	0 [1]	0		0	
4	Sale of utility property	2,827 [1]	0		2,827 [1]	
5	Total miscellaneous revenues (Sum of L1 thru L4)	<u>\$17,420</u>	<u>(\$2,926)</u>		<u>\$14,494</u>	
<u>Company Proposed Rates:</u>						
6	Forfeited discounts	\$3,186 [2]	\$708		\$3,894 [7]	
7	Other water/sewer revenues	8,481 [2]	0		8,481	
8	Antenna leases	0 [2]	0		0	
9	Sale of utility property	2,827 [2]	0		2,827	
10	Total miscellaneous revenues (Sum of L6 thru L9)	<u>\$14,494</u>	<u>\$708</u>		<u>\$15,202</u>	
<u>Public Staff Recommended Rates:</u>						
11	Forfeited discounts	\$3,186 [2]	\$527		\$3,713 [8]	
12	Other water/sewer revenues	8,481 [2]	0		8,481	
13	Antenna leases	0 [2]	0		0	
14	Sale of utility property	2,827 [2]	0		2,827	
15	Total miscellaneous revenues (Sum of L11 thru L14)	<u>\$14,494</u>	<u>\$527</u>		<u>\$15,021</u>	

- [1] Per examination of Company's financial records.
[2] Adjusted amount per Public Staff, Column (c), Lines 1 thru 4.
[3] Column (c) minus Column (a), unless otherwise footnoted.
[4] Column (a) plus Column (b), unless otherwise footnoted.
[5] Henry Exhibit I, Schedule 3-1(a)(1), Column (d), Line 6.
[6] Reclassify other revenue per examination of Company's records
[7] Henry Exhibit I, Schedule 3-1(a)(1), Column (d), Line 9.
[8] Henry Exhibit I, Schedule 3-1(a)(1), Column (d), Line 12.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF FORFEITED DISCOUNTS

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 3-1(a)(1)

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
Test Year:					
1	Service revenues	\$15,067,268 [1]	\$11,908,778 [1]	\$817,475 [1]	\$1,429,676 [1]
2	Forfeited discounts	41,335 [1]	33,518 [1]	1,476 [1]	2,582 [1]
3	Forfeited discounts percentage (L2 / L1)	0.27%	0.28%	0.18%	0.18%
Present Rates:					
4	Service revenues	\$16,931,032 [2]	\$12,685,778 [5]	\$1,043,134 [8]	\$1,769,755 [11]
5	Forfeited discounts percentage	0.27%	0.28%	0.18%	0.18%
6	Forfeited discounts (L4 x L5)	\$45,714	\$35,520	\$1,878	\$3,186
Company Proposed Rates:					
7	Service revenues	\$19,432,356 [3]	\$13,696,365 [6]	\$1,560,921 [9]	\$2,163,100 [12]
8	Forfeited discounts percentage	0.27%	0.28%	0.18%	0.18%
9	Forfeited discounts (L7 x L8)	\$52,467	\$38,350	\$2,810	\$3,894
Public Staff Recommended Rates:					
10	Service revenues	\$17,040,786 [4]	\$12,577,992 [7]	\$1,298,191 [10]	\$2,062,943 [13]
11	Forfeited discounts percentage	0.27%	0.28%	0.18%	0.18%
12	Forfeited discounts (L10 x L11)	\$46,010	\$35,218	\$2,337	\$3,713

[1] Per examination of Company's financial records.

[2] Henry Exhibit I, Schedule 3(a), Column (c), Line 1.

[3] Henry Exhibit I, Schedule 3(a), Column (e), Line 1.

[4] Henry Exhibit I, Schedule 3(a), Column (g), Line 1.

[5] Henry Exhibit I, Schedule 3(b), Column (c), Line 1.

[6] Henry Exhibit I, Schedule 3(b), Column (e), Line 1.

[7] Henry Exhibit I, Schedule 3(b), Column (g), Line 1.

[8] Henry Exhibit I, Schedule 3(c), Column (c), Line 1.

[9] Henry Exhibit I, Schedule 3(c), Column (e), Line 1.

[10] Henry Exhibit I, Schedule 3(c), Column (g), Line 1.

[11] Henry Exhibit I, Schedule 3(d), Column (c), Line 1.

[12] Henry Exhibit I, Schedule 3(d), Column (e), Line 1.

[13] Henry Exhibit I, Schedule 3(d), Column (g), Line 1.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
CALCULATION OF UNCOLLECTIBLE ACCOUNTS
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3-2

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
<u>Test Year:</u>					
1	Service revenues	\$15,067,268 [1]	\$11,908,778 [1]	\$817,475 [1]	\$1,429,676 [1]
2	Uncollectible accounts	86,919 [1]	70,482 [1]	12,048 [1]	21,070 [1]
3	Uncollectible accounts percentage (L2 / L1)	<u>0.58%</u>	<u>0.59%</u>	<u>1.47%</u>	<u>1.47%</u>
<u>Present Rates:</u>					
4	Service revenues	\$16,931,032 [2]	\$12,685,778 [5]	\$1,043,134 [8]	\$1,769,755 [11]
5	Uncollectible accounts percentage	0.58%	0.59%	1.47%	1.47%
6	Uncollectible accounts (L4 x L5)	<u>\$98,200</u>	<u>\$74,846</u>	<u>\$15,334</u>	<u>\$26,015</u>
<u>Company Proposed Rates:</u>					
7	Service revenues	\$19,432,356 [3]	\$13,696,365 [6]	\$1,560,921 [9]	\$2,163,100 [12]
8	Uncollectible accounts percentage	0.58%	0.59%	1.47%	1.47%
9	Uncollectible accounts (L7 x L8)	<u>\$112,708</u>	<u>\$80,809</u>	<u>\$22,946</u>	<u>\$31,798</u>
<u>Public Staff Recommended Rates:</u>					
10	Service revenues	\$17,040,786 [4]	\$12,577,992 [7]	\$1,298,191 [10]	\$2,062,943 [13]
11	Uncollectible accounts percentage	0.58%	0.59%	1.47%	1.47%
12	Uncollectible accounts (L10 x L11)	<u>\$98,837</u>	<u>\$74,210</u>	<u>\$19,083</u>	<u>\$30,325</u>

- [1] Per examination of Company's financial records.
[2] Henry Exhibit I, Schedule 3(a), Column (c), Line 1.
[3] Henry Exhibit I, Schedule 3(a), Column (e), Line 1.
[4] Henry Exhibit I, Schedule 3(a), Column (g), Line 1.
[5] Henry Exhibit I, Schedule 3(b), Column (c), Line 1.
[6] Henry Exhibit I, Schedule 3(b), Column (e), Line 1.
[7] Henry Exhibit I, Schedule 3(b), Column (g), Line 1.

- [8] Henry Exhibit I, Schedule 3(c), Column (c), Line 1.
[9] Henry Exhibit I, Schedule 3(c), Column (e), Line 1.
[10] Henry Exhibit I, Schedule 3(c), Column (g), Line 1.
[11] Henry Exhibit I, Schedule 3(d), Column (c), Line 1.
[12] Henry Exhibit I, Schedule 3(d), Column (e), Line 1.
[13] Henry Exhibit I, Schedule 3(d), Column (g), Line 1.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ADJUSTMENT TO PURCHASE POWER

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 3-3

<u>Line No.</u>	<u>Item</u>	<u>CWSNC Water (a)</u>	<u>CWSNC Sewer (b)</u>	<u>BF/FH/TC Water (c)</u>	<u>BF/FH/TC Sewer (d)</u>
1	Purchase power per application	<u>\$959,790</u>	<u>\$748,066</u>	<u>\$70,816</u>	<u>\$155,596</u>
2	Adjustment to remove duplicate recordings	<u>(1,910) [1]</u>	<u>0</u>	<u>0</u>	<u>0</u>
3	Purchase power per Public Staff (L1 + L2)	<u><u>\$957,880</u></u>	<u><u>\$748,066</u></u>	<u><u>\$70,816</u></u>	<u><u>\$155,596</u></u>

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO MAINTENANCE AND REPAIR
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3-4

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
1	Maintenance and repair per application	\$1,194,143	\$1,599,870	\$62,630	\$272,544
2	Adjustment to deferred maintenance and repair	(270,100) [1]	37,205 [4]	(3,634) [5]	(3,975) [6]
3	Adjustments to correct UA adjustments	(64) [2]	(39) [2]	(8) [2]	(8) [2]
4	Adjustment to maintenance and repair expense	(90,972) [3]	(33,675) [3]	0	0
5	Adjustment to sludge hauling	0	4,579 [3]	0	(15,660) [3]
6	Adjustment to permit fees	(4,820) [3]	(1,310) [3]	3,140 [3]	0
7	Total adjustment to maintenance and repair (Sum of L2 thru L6)	(365,957)	6,760	(502)	(19,643)
8	Maintenance and repair per Public Staff (L1 + L7)	\$828,186	\$1,606,630	\$62,128	\$252,901

[1] Henry Exhibit I, Schedule 3-4(a), Column (a), Line 3.

[2] Correct UA adjustments per examination of the Company's financial records

[3] Provided by Public Staff Engineer Casselberry.

[4] Henry Exhibit I, Schedule 3-4(a), Column (b), Line 3.

[5] Henry Exhibit I, Schedule 3-4(a), Column (c), Line 3.

[6] Henry Exhibit I, Schedule 3-4(a), Column (d), Line 3.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO DEFERRED MAINTENANCE AND REPAIR,
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3-4(a)

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
1	Annual deferred maintenance and repair per Public Staff	\$250,238 [1]	\$346,975 [1]	\$18,827 [1]	\$19,408 [1]
2	Deferred maintenance and repair per application	520,338 [2]	309,770 [2]	22,461 [2]	23,383 [2]
3	Adjustment to deferred maintenance and repair (L1 - L2)	<u>(\$270,100)</u>	<u>\$37,205</u>	<u>(\$3,634)</u>	<u>(\$3,975)</u>

[1] Annual depreciation expense of systems that have not been fully retired per reviewing the Company's records

[2] Per examination of Company's financial records.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ADJUSTMENT TO METER READING

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 3-5

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
1	Meter reading per application	\$197,658	\$0	\$28,305	\$0
2	Adjustment to remove Riverbend meter reading expense	(96) [1]	0 [1]	0 [1]	0 [1]
3	Meter reading per Public Staff (L1 + L2)	\$197,562	\$0	\$28,305	\$0

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ADJUSTMENT TO TRANSPORTATION

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 3-6

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
1	Transportation per application	<u>\$240,289</u>	<u>\$143,050</u>	<u>\$32,324</u>	<u>\$33,650</u>
2	Adjustment to remove Riverbend transportation expense	(774) [1]	0 [1]	0 [1]	0 [1]
3	Adjustments to correct UA adjustments	<u>(688) [1]</u>	<u>(410) [1]</u>	<u>(83) [1]</u>	<u>(87) [1]</u>
4	Total adjustments to transportation (L2+L3)	<u>(1,462)</u>	<u>(410)</u>	<u>(83)</u>	<u>(87)</u>
5	Transportation per Public Staff (L1 + L4)	<u><u>\$238,827</u></u>	<u><u>\$142,640</u></u>	<u><u>\$32,241</u></u>	<u><u>\$33,563</u></u>

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO CAPITALIZED TIME ADJUSTMENT
For The Test Year Ended December 31, 2017.

Public Staff
Henry Supp. Exhibit I
Schedule 3-7

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
1	Operating expenses charged to plant per application	<u>(\$389,286)</u>	<u>(\$231,754)</u>	<u>(\$42,523)</u>	<u>(\$44,268)</u>
2	Adjustment to remove Riverbend cap time	72 [1]	0	0	0
3	Adjustments to correct UA adjustments	18,830 [1]	11,214 [1]	2,278 [1]	2,372 [1]
4	Adjustment to correct UA classification adjustments	<u>96 [1]</u>	<u>771 [1]</u>	<u>(434) [1]</u>	<u>(433) [1]</u>
5	Total adjustments to capitalized time (Sum of L2 thru L4)	<u>18,998</u>	<u>11,985</u>	<u>1,844</u>	<u>1,939</u>
6	Operating expenses charged to plant per Public Staff (L1 + L5)	<u><u>(\$370,288)</u></u>	<u><u>(\$219,769)</u></u>	<u><u>(\$40,679)</u></u>	<u><u>(\$42,329)</u></u>

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO OUTSIDE SERVICE OTHER
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3-8

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
1	Outside service other per application	\$273,381	\$162,817	\$22,716	\$23,648
2	Adjustment to remove Riverbend outside services	(16,132) [1]	0	0	0
3	Adjustments to correct UA adjustments	(677) [1]	(413) [1]	(84) [1]	(88) [1]
4	Adjustment to remove legal fees should be capitalized	0	(8,022) [1]	0	0
5	Adjustment to remove legal fees prior to test year	(1,725) [1]	(52) [1]	0	0
6	Total adjustments to outside service other (Sum of L2 thru L5)	(18,534)	(8,487)	(84)	(88)
7	Outside service other per Public Staff (L1 + L6)	\$254,847	\$154,330	\$22,632	\$23,560

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO OFFICE SUPPLIES AND OTHER OFFICE EXPENSE
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3-9

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
1	Office supplies & other office expense per application	<u>\$308,987</u>	<u>\$183,966</u>	<u>\$34,748</u>	<u>\$36,174</u>
2	Adjustment to remove Riverbend office supplies & other office expense	(969) [1]	0	0	0
3	Adjustments to correct UA adjustments	(1,003) [1]	(616) [1]	(124) [1]	(130) [1]
4	Adjustment to remove transaction without invoice support	<u>(670) [1]</u>	<u>0</u>	<u>0</u>	<u>0</u>
5	Total adjustments to office supplies & other (Sum of L2 throu L4)	<u>(2,642)</u>	<u>(616)</u>	<u>(124)</u>	<u>(130)</u>
6	Office supplies & other office expense per Public Staff (L1 + L5)	<u><u>\$306,345</u></u>	<u><u>\$183,350</u></u>	<u><u>\$34,624</u></u>	<u><u>\$36,044</u></u>

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
CALCULATION OF REGULATORY COMMISSION EXPENSE
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3-10

Line No.	Item	Amount Per Application (a)	Public Staff Adjustment [1] (b)	Amount Per Public Staff (c)	CWSNC Water (d)	CWSNC Sewer (e)	BF/FH/TC Water (f)	BF/FH/TC Sewer (g)
1	Rate case expenses for current proceeding	<u>\$449,971</u>	<u>(\$330,191)</u>	\$119,780 [2]				
2	Amortization period in years			5				
3	Annual rate case expense for current proceeding (L1 / L2)			<u>23,956</u>	<u>\$13,006</u> [4]	<u>\$7,743</u> [5]	<u>\$1,572</u> [6]	<u>\$1,636</u> [7]
4	Unamortized balance of rate case expense (L1 - L3)			<u>95,824</u>	<u>52,023</u> [4]	<u>30,970</u> [5]	<u>6,286</u> [6]	<u>6,545</u> [7]
5	Sub 356 and prior rate cases unamortized rate case expense	<u>\$414,327</u>	<u>\$19,733</u>	434,060 [3]				
6	Amortization period in years			5				
7	Sub 356 unamortized annual rate case expense (L5 / L6)			<u>86,812</u>	<u>47,130</u> [4]	<u>28,058</u> [5]	<u>5,695</u> [6]	<u>5,929</u> [7]
8	Unamortized balance of rate case expense (L5 - L7)			<u>347,248</u>	<u>188,521</u> [4]	<u>112,231</u> [5]	<u>22,779</u> [6]	<u>23,717</u> [7]
9	Total annual rate case expense (L3 + L7)			<u>\$110,768</u>	<u>\$60,136</u>	<u>\$35,801</u>	<u>\$7,267</u>	<u>\$7,565</u>
10	Total unamortized balance of rate case expense (L4 + L8)			<u>\$443,072</u>	<u>\$240,544</u>	<u>\$143,201</u>	<u>\$29,065</u>	<u>\$30,262</u>

[1] Column (c) minus Column (a).

[2] Per examination of the company's response to accounting data requests

[3] Calculated base on amount approved in prior rate cases.

[4] Column (c) multiplied by CWSNC Uniform water allocation factor of 54.29%.

[5] Column (c) multiplied by CWSNC Uniform sewer allocation factor of 32.32%.

[6] Column (c) multiplied by BF/FH water allocation factor of 6.56%.

[7] Column (c) multiplied by BF/FH sewer allocation factor of 6.83%.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ADJUSTMENT TO RENT

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 3-11

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
1	Rent per application	\$127,276	\$75,402	\$15,311	\$15,939
2	Adjustment to remove rent expense related to Riverbend	(277) [1]	0	0	0
3	Adjustment to adjust rent proforma expense	(3,710) [1]	(1,840) [1]	(373) [1]	(389) [1]
4	Total adjustments to rent (L2 + L3)	(3,987)	(1,840)	(373)	(389)
5	Rent per Public Staff (L1 + L4)	\$123,289	\$73,562	\$14,938	\$15,550

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ALLOCATION OF INSURANCE

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 3-12

No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)	Total (f) [4]
1.		\$38,059 [1]	\$22,657 [1]	\$4,601 [1]	\$4,790 [1]	\$70,108
2.	Workers compensation	72,071 [1]	42,905 [1]	8,713 [1]	9,071 [1]	132,760
3.	Property insurance	18,580 [1]	11,061 [1]	2,246 [1]	2,338 [1]	34,226
4.	General Liability	38,082 [1]	22,671 [1]	4,604 [1]	4,793 [1]	70,150
5.	Excess Liability	39,513 [1]	23,523 [1]	4,777 [1]	4,973 [1]	72,785
6.	Umbrella insurance	5,567 [1]	3,314 [1]	673 [1]	701 [1]	10,254
7.	Employment Practices insurance	1,950 [1]	1,161 [1]	236 [1]	245 [1]	3,592
8.	Cyber security insurance	2,366 [1]	1,408 [1]	286 [1]	298 [1]	4,358
9.	Pollution liability	16,556 [1]	9,856 [1]	2,002 [1]	2,084 [1]	30,498
10.	Tank liability	328 [1]	195 [1]	40 [1]	41 [1]	604
11.	Total insurance per Public Staff (Sum of L1 thru L10)	233,072	138,751	28,178	29,334	429,335
12.	Less: Insurance expense related to Riverbend	(951) [2]	0	0	0	(951)
13.	Less: Amount per Company	304,639 [3]	181,385 [3]	42,293 [3]	44,028 [3]	572,345
14.	Adjustment to insurance expense (L11 - L12 - L13)	(\$70,616)	(\$42,634)	(\$14,115)	(\$14,694)	(\$142,059)

[1] Column (f) times customer ratios for each rate division.

[2] Based on information provided by the Company.

[3] NCUC Form W-1, Item 10, Schedule B-18, Column (h) for each rate division.

[4] Henry Exhibit I, Schedule 13-12(a), Column (c).

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF INSURANCE

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 3-12 (a)

Line No.	Item	Annual Premium (a)	CWSNC Percentage (b)	CWSNC Insurance Expense (c)	(6)
1.		\$460,350	15.23% [2]	\$70,108	
2.	Workers compensation	602,769	22.03% [3]	132,760	
3.	Property insurance	238,827	14.33% [4]	34,226	
4.	General Liability	400,000	17.54% [5]	70,150	
5.	Excess Liability	415,021	17.54% [5]	72,785	
6.	Umbrella insurance	58,466	17.54% [5]	10,254	
7.	Employment Practices insurance	20,481	17.54% [5]	3,592	
8.	Cyber security insurance	24,850	17.54% [5]	4,358	
9.	Pollution liability	173,900	17.54% [5]	30,498	
10.	Tank liability	3,446	17.54% [5]	604	
11.	Total insurance per Public Staff (Sum of L1 thru L10)			\$429,335	

[1] Based on current insurance policies and information provided by Company.

[2] Percentage of CWSNC automobiles covered under current policy.

[3] Percentage of CWSNC workers compensation insurance based on CSWNC payroll.

[4] Percentage of CWSNC property insurance based on CSWNC value of property covered.

[5] Percentage of CWSNC insurance based on CSWNC customer count.

[6] Column (a) X Column (b).

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ADJUSTMENT TO OFFICE UTILITY

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 3-13

<u>Line No.</u>	<u>Item</u>	<u>CWSNC Water</u> <u>(a)</u>	<u>CWSNC Sewer</u> <u>(b)</u>	<u>BF/FH/TC Water</u> <u>(c)</u>	<u>BF/FH/TC Sewer</u> <u>(d)</u>
1	Office utility per application	<u>\$415,080</u>	<u>\$247,118</u>	<u>\$40,175</u>	<u>\$41,823</u>
2	Adjustment to remove Riverbend office utility expense	(433) [1]	0	0	0
3	Adjustments to correct UA adjustments	(578) [1]	(355) [1]	(72) [1]	(75) [1]
4	Adjustment to remove duplicate recorded transactions	<u>(383) [1]</u>	<u>0</u>	<u>0</u>	<u>0</u>
5	Total adjustments to office utility (Sum of L2 thru L4)	<u>(1,394)</u>	<u>(355)</u>	<u>(72)</u>	<u>(75)</u>
6	Office utility per Public Staff (L1 + L5)	<u><u>\$413,686</u></u>	<u><u>\$246,763</u></u>	<u><u>\$40,103</u></u>	<u><u>\$41,748</u></u>

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO MISCELLANEOUS EXPENSE
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3-14

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
1	Miscellaneous expense per application	<u>\$119,644</u>	<u>\$71,230</u>	<u>\$12,120</u>	<u>\$12,618</u>
2	Adjustments to remove unqualified miscellaneous expense	(3,018) [1]	(2,117) [1]	(350) [1]	(363) [1]
3	Adjustments to remove Riverbend miscellaneous expense	(794) [1]	0	0	0
4	Adjustments to correct UA adjustments	(285) [1]	(173) [1]	(35) [1]	(36) [1]
5	Excess deferred taxes reclassified from depreciation expense	<u>(99,618) [1]</u>	<u>(59,009) [1]</u>	<u>(12,907) [1]</u>	<u>(13,439) [1]</u>
6	Total miscellaneous adjustments (Sum of L2 thru L.5)	<u>(103,715)</u>	<u>(61,299)</u>	<u>(13,292)</u>	<u>(13,838)</u>
7	Miscellaneous expense per Public Staff (L1 + L6)	<u><u>\$15,929</u></u>	<u><u>\$9,931</u></u>	<u><u>(\$1,172)</u></u>	<u><u>(\$1,220)</u></u>

[1] Per examination of Company's financial records.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

**CALCULATION OF DEPRECIATION AND
AMORTIZATION EXPENSE**

For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3-15

Line No.		CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
1	Depreciation on direct plant	\$2,764,881 [1]	\$2,220,708 [8]	\$110,497 [13]	\$324,927 [17]
2	Depreciation on allocated plant	125,066 [2]	69,068 [2]	17,106 [2]	15,053 [2]
3	Gain on sale	0	0	0	0
4	Excess book value	(11,970) [3]	(17,954) [9]	0	0
5	Total depreciation expense (Sum of L1 thru L4)	<u>\$2,877,977</u>	<u>\$2,271,822</u>	<u>\$127,603</u>	<u>\$339,980</u>
6	Contributions in aid of construction	(\$28,597,029) [4]	(\$28,157,914) [10]	(\$2,227,276) [14]	(\$7,088,979) [18]
7	Advances in aid of construction	(23,760) [5]	(9,180) [5]	0	0
8	Depreciable CIAC and AIA (L6 + L7)	<u>(28,620,789)</u>	<u>(28,167,094)</u>	<u>(2,227,276)</u>	<u>(7,088,979)</u>
9	Amortization rate	2.70% [6]	2.75% [11]	2.15% [15]	2.56% [19]
10	CIAC and AIA amortization expense (L8 x L9)	<u>(\$772,761)</u>	<u>(\$774,595)</u>	<u>(\$47,886)</u>	<u>(\$181,478)</u>
11	Purchase acquisition adjustment	(\$4,278,312) [7]	(\$627,070) [12]	\$603,123 [16]	\$1,658,577 [20]
12	Amortization rate	2.70% [6]	2.75% [11]	2.15% [15]	2.56% [19]
13	PAA amortization expense (L11 x L12)	<u>(\$115,514)</u>	<u>(\$17,244)</u>	<u>\$12,967</u>	<u>\$42,460</u>

[1] Henry Exhibit I, Schedule 3-15(a), Column (c), Line 46.

[2] Calculated by the Public Staff based on information provided by the Company.

[3] Henry Exhibit I, Schedule 2-9, Column (b), Line 7.

[4] Henry Exhibit I, Schedule 2-4, Column (a), Line 6.

[5] Per examination of Company's financial records.

[6] Henry Exhibit I, Schedule 3-15(a), Column (d), Line 46.

[7] Henry Exhibit I, Schedule 2-8, Column (a), Line 5.

[8] Henry Exhibit I, Schedule 3-15(b), Column (c), Line 58.

[9] Henry Exhibit I, Schedule 2-9, Column (b), Line 12.

[10] Henry Exhibit I, Schedule 2-4, Column (d), Line 6.

[11] Henry Exhibit I, Schedule 3-15(b), Column (d), Line 58.

[12] Henry Exhibit I, Schedule 2-8, Column (d), Line 5.

[13] Henry Exhibit I, Schedule 3-15(c), Column (c), Line 46.

[14] Henry Exhibit I, Schedule 2-4, Column (g), Line 6.

[15] Henry Exhibit I, Schedule 3-15(c), Column (d), Line 46.

[16] Henry Exhibit I, Schedule 2-8, Column (g), Line 5.

[17] Henry Exhibit I, Schedule 3-15(d), Column (c), Line 58.

[18] Henry Exhibit I, Schedule 2-4, Column (j), Line 6.

[19] Henry Exhibit I, Schedule 3-15(d), Column (d), Line 58.

[20] Henry Exhibit I, Schedule 2-8, Column (j), Line 5.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF DIRECT PLANT

DEPRECIATION EXPENSE

For The Test Year Ended December 31, 2017

CWSNC WATER OPERATIONS

Public Staff

Henry Supp. Exhibit I

Schedule 3-15(a)

Line No.	Account	Item	Plant In Service (a)	Depreciation Rate (b)	Annual Depreciation (c)	Composite Rate (d)
1	1020	Organization	\$458,055	2.50%	\$11,451	
2	1025	Franchises	111,898	2.50%	2,797	
3	1030	Land & land rights pump	71,437	0.00%	0	
4	1035	Land & land rights water tr.	357,109	0.00%	0	
5	1040	Land & land rights trans.	3,194	0.00%	0	
6	1045	Land & land rights gen. plt.	513,502	0.00%	0	
7	1050	Struct & improv. src. supply	4,301,643	2.00%	86,033	
8	1055	Struct & improv. wtr. trt. plt.	1,349,510	2.00%	26,990	
9	1060	Struct & improv. trans. dist.	247,389	2.00%	4,948	
10	1065	Struct & improv. gen. plt.	331,380	2.00%	6,628	
11	1070	Collecting reservoirs	13,139	2.00%	263	
12	1080	Wells & springs	13,753,498	2.00%	275,070	
13	1085	Infiltration gallery	45,185	2.50%	1,130	
14	1090	Supply mains	464,877	1.00%	4,649	
15	1095	Power generation equip.	159,288	10.00%	15,829	
16	1100	Electric pump equip. src. plt.	2,504,141	14.29%	357,842	
17	1105	Electric pump equip. wtp.	8,223,165	3.33%	273,831	
18	1110	Electric pump equip. trans.	2,904,464	14.29%	415,048	
19	1115	Water treatment equip.	4,313,158	2.50%	107,829	
20	1120	Dist. resv. & standpipes	7,917,031	2.00%	158,341	
21	1125	Trans. & distr. mains	31,754,239	1.00%	317,542	
22	1130	Service lines	11,789,469	2.00%	235,789	
23	1135	Meters	5,289,544	3.33%	176,142	
24	1140	Meter installations	1,183,396	3.33%	39,407	
25	1145	Hydrants	1,189,892	2.50%	29,997	
26	1150	Backflow prevention devic.	27,242	10.00%	2,724	
27	1160	Other plt. & misc. equip. src. su.	260	2.50%	7	
28	1165	Other plt. & misc. equip. wtp.	6,262	2.50%	157	
29	1175	Office struct & improv.	98,808	10.00%	9,881	
30	1180	Office furn. & equip.	362,781	10.00%	36,278	
31	1185	Stores equipment	4,055	3.33%	135	
32	1190	Tool shop & misc. equip.	1,365,202	5.00%	68,260	
33	1195	Laboratory equipment	154,374	10.00%	15,437	
34	1200	Power operated equip.	314,236	10.00%	31,424	
35	1205	Communication equip.	321,334	10.00%	32,133	
36	1210	Misc. equipment	183,548	3.33%	6,112	
37	1215	Water plant allocated	207,809	6.67%	13,861	
38	1220	Other tangible plt. water	36,650	2.50%	916	
39	1555	Transportation equip. -	0	0.00%	0	
40	1580	Mainframe computer - wtr	0	2.50%	0	
41	1585	Mini computer - wtr	(7,016)	0.00%	0	
42	1590	Comp. system cost - wtr	59,691	0.00%	0	
43	1595	Micro system cost - wtr	0	0.00%	0	
44	1805	Plt. held for future use	(95,528)	0.00%	0	
45		Pro forma plant additions	0	0.00%	0	
46		Total plant in service (Sum of L1 thru L45)	<u>\$102,298,311</u>		<u>\$2,764,881</u>	<u>2.70% [4]</u>

[1] Henry Exhibit I, Schedule 2-1(a)(1), Column (d).

[2] Depreciation rates approved in Docket No. W-354, Sub 344.

[3] Column (a) multiplied by Column (b).

[4] Column (c) divided by Column (a), Line 46.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

**CALCULATION OF DIRECT PLANT
DEPRECIATION EXPENSE**

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I
Schedule 3-15(b)

CWSNC SEWER OPERATIONS

Line No.	Account No.	Item	Plant In Service [1] (a)	Depreciation Rate [2] (b)	Annual Depreciation [3] (c)	Composite Rate (d)
1	1245	Organization	\$907,534	2.50%	\$22,688	
2	1250	Franchises intang. plt.	127,476	2.50%	3,187	
3	1270	Land & land rights trmnt plt	39,167	0.00%	0	
4	1275	Land & land rights reclaim.	1,150	0.00%	0	
5	1285	Land & land rights gen. plt.	213,811	0.00%	0	
6	1290	Struct/improv. coll. plt.	67,263	2.00%	1,345	
7	1295	Struct/improv. pump plt. ls.	7,139,461	2.00%	142,789	
8	1300	Struct/improv. treat. plt.	19,687,812	2.50%	492,198	
9	1305	Struct/improv. reclaim. wtr.	3,271	2.50%	82	
10	1310	Struct/improv. reclaim. wtr.	179,730	2.50%	4,493	
11	1315	Struct/improv. gen. plt.	1,663,362	2.00%	33,267	
12	1320	Power gen. equip. coll. plt.	215,248	10.00%	21,525	
13	1325	Power gen. equip. pump plt.	52,159	10.00%	5,216	
14	1330	Power gen. equip. treat. plt.	209,729	10.00%	20,973	
15	1345	Sewer force main/serv. lin.	3,555,492	1.33%	47,288	
16	1350	Sewer gravity main	16,621,671	1.00%	166,217	
17	1353	Manholes	738,769	1.00%	7,388	
18	1355	Special coll. structures	6,923	2.00%	138	
19	1360	Services to customers	1,506,296	1.33%	20,034	
20	1365	Flow measure devices	122,282	4.00%	4,891	
21	1370	Flow measure install	1,010	4.00%	40	
22	1375	Receiving wells	89,444	2.00%	1,789	
23	1380	Pumping equipment pump plt.	3,721,651	14.29%	531,824	
24	1385	Pumping equipment reclaim.	30,101	14.29%	4,301	
25	1390	Pumping equipment rcl. wtr.	44,313	14.29%	6,332	
26	1395	Treat./disp. equip. lagoon	577,820	2.50%	14,446	
27	1400	Treat./disp. equip. trt. plt.	18,819,014	2.50%	470,475	
28	1405	Treat./disp. equip. rct. wtp.	13,460	2.50%	337	
29	1410	Plant sewers treat. plt.	3,337,197	2.50%	83,430	
30	1415	Plant sewers reclaim wtp.	5,155	2.50%	129	
31	1420	Outfall lines	98,563	1.00%	986	
32	1425	Other plt. tangible	3,676	2.50%	92	
33	1430	Other plt. collection	21,142	2.50%	529	
34	1435	Other plt. pump	48,131	2.50%	1,203	
35	1440	Other plt. treatment	36,998	2.50%	925	
36	1445	Other plt. reclaim wtr. trt.	650	2.50%	16	
37	1450	Other plt. reclaim wtr. dis.	460	2.50%	12	
38	1455	Office struct & improv.	34,218	10.00%	3,422	
39	1460	Office furn. & equip.	29,554	10.00%	2,955	
40	1465	Stores equipment	4,341	3.33%	145	
41	1470	Tool shop & misc. equip.	189,882	5.00%	9,494	
42	1475	Laboratory equipment	132,463	10.00%	13,246	
43	1480	Power operated equip.	365,003	10.00%	36,500	
44	1485	Communication equip.	73,595	10.00%	7,360	
45	1490	Misc equip. sewer	19,105	3.33%	636	
46	1495	Sewer plant allocated	526,952	6.67%	35,148	
47	1500	Other tangible plt. sewer	1,776	2.50%	44	
48	1535	Reuse dist. reservoirs	3,417	2.00%	68	
49	1540	Reuse transmission & dist.	55,225	2.00%	1,105	
50	1555	Transportation equip.	0	0.00%	0	
51	1575	Desktop computer - wtr	0	0.00%	0	
52	1580	Mainframe computer - wtr	0	0.00%	0	
53	1585	Mini computer - wtr	(4,177)	0.00%	0	
54	1590	Comp. system cost - wtr	35,535	0.00%	0	
55	1595	Micro system cost - wtr	0	0.00%	0	
56	1805	Plt. held for future use	(514,608)	0.00%	0	
57		Pro forma plant additions	0	0.00%	0	
58		Total plant in service (Sum of L1 thru L57)	<u>\$80,859,772</u>		<u>\$2,220,708</u>	<u>2.75% [4]</u>

[1] Henry Exhibit I, Schedule 2-1(b)(1), Column (d).

[2] Depreciation rates approved in Docket No. W-354, Sub 344.

[3] Column (a) multiplied by Column (b).

[4] Column (c) divided by Column (a), Line 58.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360
**CALCULATION OF DIRECT PLANT
DEPRECIATION EXPENSE**
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3-15(c)

BRADFIELD/FAIRFIELD WATER OPERATIONS

Line No.	Account No.	Item	Plant In Service (a)	Depreciation Rate (b)	Annual Depreciation (c)	Composite Rate (d)
1	1020	Organization	\$100,321	2.50%	\$2,508	
2	1025	Franchises	29,653	2.50%	741	
3	1030	Land & land rights pump	0	0.00%	0	
4	1035	Land & land rights water tr.	0	0.00%	0	
5	1040	Land & land rights trans.	0	0.00%	0	
6	1045	Land & land rights gen. plt.	431	0.00%	0	
7	1050	Struct & improv. src. supply	162,909	2.00%	3,258	
8	1055	Struct & improv. wtr. trt. plt.	82,740	2.00%	1,655	
9	1060	Struct & improv. trans. dist.	461	2.00%	9	
10	1065	Struct & improv. gen. plt.	1,671	2.00%	33	
11	1070	Collecting reservoirs	0	2.00%	0	
12	1080	Wells & springs	497,629	2.00%	9,957	
13	1085	Infiltration gallery	0	2.50%	0	
14	1090	Supply mains	839	1.00%	8	
15	1095	Power generation equip.	0	10.00%	0	
16	1100	Electric pump equip. src. plt.	39,995	14.29%	5,715	
17	1105	Electric pump equip. wtp.	346,211	3.33%	11,529	
18	1110	Electric pump equip. trans.	31,088	14.29%	4,442	
19	1115	Water treatment equip.	127,839	2.50%	3,196	
20	1120	Dist. resv. & standpipes	750,433	2.00%	15,009	
21	1125	Trans. & distr. mains	1,768,183	1.00%	17,682	
22	1130	Service lines	633,237	2.00%	12,665	
23	1135	Meters	122,185	3.33%	4,069	
24	1140	Meter installations	134,865	3.33%	4,491	
25	1145	Hydrants	161,575	2.50%	4,039	
26	1150	Backflow prevention devic.	98	10.00%	10	
27	1160	Other plt. & misc. equip. src. su.	0	2.50%	0	
28	1165	Other plt. & misc. equip. wtp.	0	2.50%	0	
29	1175	Office struct & improv.	6,790	10.00%	679	
30	1180	Office furn. & equip.	3,913	10.00%	391	
31	1185	Stores equipment	235	3.33%	8	
32	1190	Tool shop & misc. equip.	92,758	5.00%	4,638	
33	1195	Laboratory equipment	11,419	10.00%	1,142	
34	1200	Power operated equip.	3,464	10.00%	346	
35	1205	Communication equip.	22,756	10.00%	2,276	
36	1210	Misc. equipment	18	3.33%	1	
37	1215	Water plant allocated	0	6.67%	0	
38	1220	Other tangible plt. water	0	2.50%	0	
39	1555	Transportation equip.	0	0.00%	0	
40	1580	Mainframe computer - wtr	0	2.50%	0	
41	1585	Mini computer - wtr	0	0.00%	0	
42	1590	Comp. system cost - wtr	0	0.00%	0	
43	1595	Micro system cost - wtr	0	0.00%	0	
44	1805	Plt. held for future use	0	0.00%	0	
45		Pro forma plant additions	0	0.00%	0	
46		Total plant in service (Sum of L1 thru L45)	<u>\$5,133,916</u>		<u>\$110,497</u>	<u>2.15%</u> [4]

[1] Henry Exhibit I, Schedule 2-1(c)(1), Column (d).

[2] Depreciation rates approved in Docket No. W-354, Sub 344.

[3] Column (a) multiplied by Column (b).

[4] Column (c) divided by Column (a), Line 46.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

**CALCULATION OF DIRECT PLANT
DEPRECIATION EXPENSE**

For The Test Year Ended December 31, 2017

BRADFELD/FAIRFIELD SEWER OPERATIONS

Public Staff

Henry Supp. Exhibit I
Schedule 3-15(d)

Line No.	Account No.	Item	Plant In Service (a)	Depreciation Rate [1] (b)	Annual Depreciation [3] (c)	Composite Rate (d)
1	1245	Organization	\$16,686	2.50%	\$417	
2	1250	Franchises intang. plt.	20,351	2.50%	509	
3	1270	Land & land rights trmnt plt	0	0.00%	0	
4	1275	Land & land rights reclaim.	0	0.00%	0	
5	1285	Land & land rights gen. plt.	0	0.00%	0	
6	1290	Struct/improv. coll. plt.	0	2.00%	0	
7	1295	Struct/improv. pump plt. ls.	890,705	2.00%	17,814	
8	1300	Struct/improv. treat. plt.	1,985,107	2.50%	49,628	
9	1305	Struct/improv. reclaim. wtp.	0	2.50%	0	
10	1310	Struct/improv. reclaim. wtr.	2,477	2.50%	62	
11	1315	Struct/improv. gen. plt.	245,538	2.00%	4,911	
12	1320	Power gen. equip. coll. plt.	0	10.00%	0	
13	1325	Power gen. equip. pump plt.	41,076	10.00%	4,108	
14	1330	Power gen. equip. treat. plt.	0	10.00%	0	
15	1345	Sewer force main/serv. lin.	193,998	1.33%	2,580	
16	1350	Sewer gravity main	5,212,518	1.00%	52,125	
17	1353	Manholes	16,252	1.00%	163	
18	1355	Special coll. structures	775	2.00%	16	
19	1360	Services to customers	37,341	1.33%	497	
20	1365	Flow measure devices	17,011	4.00%	680	
21	1370	Flow measure install	0	4.00%	0	
22	1375	Receiving wells	0	2.00%	0	
23	1380	Pumping equipment pump plt.	729,968	14.29%	104,312	
24	1385	Pumping equipment reclaim.	234	14.29%	33	
25	1390	Pumping equipment rct. wtr.	0	14.29%	0	
26	1395	Treat./disp. equip. lagoon	56	2.50%	1	
27	1400	Treat./disp. equip. trt. plt.	2,782,133	2.50%	69,553	
28	1405	Treat./disp. equip. rct. wtp.	0	2.50%	0	
29	1410	Plant sewers treat. plt.	385,368	2.50%	9,634	
30	1415	Plant sewers reclaim wtp.	0	2.50%	0	
31	1420	Outfall lines	15,379	1.00%	154	
32	1425	Other plt. tangible	0	2.50%	0	
33	1430	Other plt. collection	(224)	2.50%	(6)	
34	1435	Other plt. pump	2,873	2.50%	72	
35	1440	Other plt. treatment	0	2.50%	0	
36	1445	Other plt. reclaim wtr. trt.	5,189	2.50%	130	
37	1450	Other plt. reclaim wtr. dis.	0	2.50%	0	
38	1455	Office struct & improv.	10,136	10.00%	1,014	
39	1460	Office furn. & equip.	699	10.00%	70	
40	1465	Stores equipment	2,752	3.33%	92	
41	1470	Tool shop & misc. equip.	12,142	5.00%	607	
42	1475	Laboratory equipment	6,227	10.00%	623	
43	1480	Power operated equip.	47,069	10.00%	4,707	
44	1485	Communication equip.	993	10.00%	99	
45	1490	Misc equip. sewer	8,603	3.33%	286	
46	1495	Sewer plant allocated	0	6.67%	0	
47	1500	Other tangible plt. sewer	0	2.50%	0	
48	1535	Reuse dist. reservoirs	2,763	2.00%	55	
49	1540	Reuse transmission & dist.	(934)	2.00%	(19)	
50	1555	Transportation equip.	0	0.00%	0	
51	1575	Desktop computer - wtr	0	0.00%	0	
52	1580	Mainframe computer - wtr	0	0.00%	0	
53	1585	Mini computer - wtr	0	0.00%	0	
54	1590	Comp. system cost - wtr	0	0.00%	0	
55	1595	Micro system cost - wtr	0	0.00%	0	
56	1805	Plt. held for future use	0	0.00%	0	
57		Pro forma plant additions	0	0.00%	0	
58		Total plant in service (Sum of L1 thru L57)	\$12,691,261		\$324,927	2.56% [4]

[1] Henry Exhibit I, Schedule 2-1(d)(1), Column (d).

[2] Depreciation rates approved in Docket No. W-354, Sub 344.

[3] Column (a) multiplied by Column (b).

[4] Column (c) divided by Column (a), Line 58.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
ADJUSTMENT TO FRANCHISE TAX & OTHER TAX
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3-16

<u>Line No.</u>	<u>Item</u>	<u>CWSNC Water</u> (a)	<u>CWSNC Sewer</u> (b)	<u>BF/FH/TC Water</u> (c)	<u>BF/FH/TC Sewer</u> (d)
1	Franchise tax & other tax per application	<u>(\$21,941)</u>	<u>(\$17,738)</u>	<u>(\$3,653)</u>	<u>(\$6,368)</u>
2	Adjustment to remove Riverbend franchise tax & other tax	(2) [1]	0 [1]	0 [1]	0 [1]
3	Franchise tax & other tax per Public Staff (L1 + L2)	<u><u>(\$21,943)</u></u>	<u><u>(\$17,738)</u></u>	<u><u>(\$3,653)</u></u>	<u><u>(\$6,368)</u></u>

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

ADJUSTMENT TO PROPERTY TAX

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 3-17

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
1	Property tax per application	<u>\$133,847</u>	<u>\$79,682</u>	<u>\$9,677</u>	<u>\$10,074</u>
2	Adjustment to remove property tax related to Riverbend	794 [1]	0	0	0
3	Adjustments to correct UA adjustments	<u>(271) [1]</u>	<u>(162) [1]</u>	<u>(32) [1]</u>	<u>(34) [1]</u>
4	Total adjustments to property tax (L2 + L3)	<u>523</u>	<u>(162)</u>	<u>(32)</u>	<u>(34)</u>
5	Property tax per Public Staff (L1 + L4)	<u><u>\$134,370</u></u>	<u><u>\$79,520</u></u>	<u><u>\$9,645</u></u>	<u><u>\$10,040</u></u>

[1] Per examination of the company's response to accounting data requests

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF INCOME TAXES

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 3-18(a)

CWSNC WATER OPERATIONS

Line No.	Item	Present Rates [1] (a)	Company Proposed Rates [3] (b)	Public Staff Recommended Rates [5] (c)
1	Operating revenue	\$17,022,057	\$19,515,626	\$17,131,470
	Operating revenue deductions:			
2	Maintenance expenses	6,410,682	6,410,682	6,410,682
3	General expenses	2,936,024	2,936,024	2,936,024
4	Depreciation expense	2,877,977	2,877,977	2,877,977
5	Amortization of CIAC	(772,761)	(772,761)	(772,761)
6	Amortization of PAA	(115,514)	(115,514)	(115,514)
7	Amortization of ITC	(287)	(287)	(287)
8	Franchise and other taxes	(21,943)	(21,943)	(21,943)
9	Property taxes	134,370	134,370	134,370
10	Payroll taxes	285,700	285,700	285,700
11	Regulatory fee	23,831	27,322	23,984
12	Gross receipts tax	0	0	0
13	Interest expense	1,697,821 [2]	1,697,821 [4]	1,697,821 [6]
14	Total deductions (Sum of L2 thru L13)	13,455,901	13,459,392	13,456,054
15	Taxable income (L1 - L14)	3,566,156	6,056,234	3,675,416
16	State income tax (L15 x 3%)	106,985	181,687	110,262
17	Federal taxable income after state income tax (L15 - L16)	3,459,171	5,874,547	3,565,154
18	Federal income tax (L17 x 21%)	726,426	1,233,655	748,682
19	Excess deferred income tax amortization	(35,475)	(35,475)	(35,475)
20	Net amount (L15 - L16 - L18 - L19)	2,768,220	4,676,367	2,851,947
21	Add: Interest expense	1,697,821 [2]	1,697,821 [4]	1,697,821 [6]
22	Net income for a return (L20 + L21)	\$4,466,041	\$6,374,188	\$4,549,768

[1] Henry Exhibit I, Schedule 3(a), Column (c).

[2] Henry Exhibit I, Schedule 1(a), Column (e), Line 1.

[3] Henry Exhibit I, Schedule 3(a), Column (e).

[4] Henry Exhibit I, Schedule 1(a), Column (e), Line 4.

[5] Henry Exhibit I, Schedule 3(a), Column (g).

[6] Henry Exhibit I, Schedule 1(a), Column (e), Line 7.

CAROLINA WATER SERVICE, INC., OF NC
Docket No. W-354, Sub 360
CALCULATION OF INCOME TAXES
For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3-18(b)

CWSNC SEWER OPERATIONS

Line No.	Item	Present Rates (a) [1]	Company Proposed Rates (b) [3]	Public Staff Recommended Rates (c) [5]
1	Operating revenue	\$12,721,070	\$13,728,524	\$12,613,618
	Operating revenue deductions:			
2	Maintenance expenses	5,303,365	5,303,365	5,303,365
3	General expenses	1,750,021	1,750,021	1,750,021
4	Depreciation expense	2,271,822	2,271,822	2,271,822
5	Amortization of CIAC	(774,595)	(774,595)	(774,595)
6		(17,244)	(17,244)	(17,244)
7	Amortization of ITC	(232)	(232)	(232)
8	Franchise and other taxes	(17,738)	(17,738)	(17,738)
9	Property taxes	79,520	79,520	79,520
10	Payroll taxes	170,084	170,084	170,084
11	Regulatory fee	17,809	19,220	17,659
12	Gross receipts tax	0	0	0
13	Interest expense	1,216,332 [2]	1,216,332 [4]	1,216,332 [6]
14	Total deductions (Sum of L2 thru L13)	9,999,144	10,000,555	9,998,994
15	Taxable income (L1 - L14)	2,721,926	3,727,969	2,614,624
16	State income tax (L15 x 3%)	81,658	111,839	78,439
17	Federal taxable income after state income tax (L15 - L16)	2,640,268	3,616,130	2,536,185
18	Federal income tax (L17 x 21%)	554,456	759,387	532,599
19	Excess deferred income tax amortization	(39,571)	(39,571)	(39,571)
20	Net amount (L15 - L16 - L18-L19)	2,125,383	2,896,314	2,043,157
21	Add: Interest expense	1,216,332 [2]	1,216,332 [4]	1,216,332 [6]
22	Net income for a return (L20 + L21)	\$3,341,715	\$4,112,646	\$3,259,489

[1] Henry Exhibit I, Schedule 3(b), Column (c).

[2] Henry Exhibit I, Schedule 1(b), Column (e), Line 1.

[3] Henry Exhibit I, Schedule 3(b), Column (e).

[4] Henry Exhibit I, Schedule 1(b), Column (e), Line 4.

[5] Henry Exhibit I, Schedule 3(b), Column (g).

[6] Henry Exhibit I, Schedule 1(b), Column (e), Line 7.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF INCOME TAXES

For The Test Year Ended December 31, 2017

Public Staff
Henry Supp. Exhibit I
Schedule 3-18(c)

BRADFIELD/FAIRFIELD WATER OPERATIONS

Line No.	Item	Present Rates (a)	[1]	Company Proposed Rates (b)	[3]	Public Staff Recommended Rates (c)	[5]
1	Operating revenue	\$1,074,106		\$1,585,213		\$1,325,873	
	Operating revenue deductions:						
2	Maintenance expenses	530,192		530,192		530,192	
3	General expenses	352,591		352,591		352,591	
4	Depreciation expense	127,603		127,603		127,603	
5	Amortization of CIAC	(47,886)		(47,886)		(47,886)	
6	Amortization of PAA	12,967		12,967		12,967	
7	Amortization of ITC	0		0		0	
8	Franchise and other taxes	(3,653)		(3,653)		(3,653)	
9	Property taxes	9,645		9,645		9,645	
10	Payroll taxes	34,537		34,537		34,537	
11	Regulatory fee	1,504		2,219		1,856	
12	Gross receipts tax	0		0		0	
13	Interest expense	95,987	[2]	95,987	[4]	95,987	[6]
14	Total deductions (Sum of L2 thru L13)	1,113,487		1,114,202		1,113,839	
15	Taxable income (L1 - L14)	(39,381)		471,011		212,034	
16	State income tax (L15 x 3%)	0		14,130		6,361	
17	Federal taxable income after state income tax (L15 - L16)	(38,200)		456,881		205,673	
18	Federal income tax (L17 x 21%)	0		95,945		43,191	
19	Excess deferred income tax amortization	1,245		1,245		1,245	
20	Net amount (L15 - L16 - L18-L19)	(31,423)		359,691		161,237	
21	Add: Interest expense	95,987	[2]	95,987	[4]	95,987	[6]
22	Net income for a return (L20 + L21)	\$64,564		\$455,678		\$257,224	

[1] Henry Exhibit I, Schedule 3(c), Column (c).

[2] Henry Exhibit I, Schedule 1(c), Column (e), Line 1.

[3] Henry Exhibit I, Schedule 3(c), Column (e).

[4] Henry Exhibit I, Schedule 1(c), Column (e), Line 4.

[5] Henry Exhibit I, Schedule 3(c), Column (g).

[6] Henry Exhibit I, Schedule 1(c), Column (e), Line 7.

CAROLINA WATER SERVICE, INC., OF NC

Docket No. W-354, Sub 360

CALCULATION OF INCOME TAXES

For The Test Year Ended December 31, 2017

Public Staff

Henry Supp. Exhibit I

Schedule 3-18(d)

BRADFIELD/FAIRFIELD SEWER OPERATIONS

Line No.	Item	Present Rates (a)	Company Proposed Rates (b)	Public Staff Recommended Rates (c)
1	Operating revenue	\$1,758,234	\$2,146,504	\$2,047,639
	Operating revenue deductions:			
2	Maintenance expenses	799,492	799,492	799,492
3	General expenses	367,056	367,056	367,056
4	Depreciation expense	339,980	339,980	339,980
5	Amortization of CIAC	(181,478)	(181,478)	(181,478)
6	Amortization of PAA	42,460	42,460	42,460
7	Amortization of ITC	0	0	0
8	Franchise and other taxes	(6,368)	(6,368)	(6,368)
9	Property taxes	10,040	10,040	10,040
10	Payroll taxes	35,954	35,954	35,954
11	Regulatory fee	2,462	3,005	2,867
12	Gross receipts tax	0	0	0
13	Interest expense	203,751 [2]	203,751 [4]	203,751 [6]
14	Total deductions (Sum of L2 thru L13)	1,613,349	1,613,892	1,613,754
15	Taxable income (L1 - L14)	144,885	532,612	433,885
16	State income tax (L15 x 3%)	4,347	15,978	13,017
17	Federal taxable income after state income tax (L15 - L16)	140,538	516,634	420,868
18	Federal income tax (L17 x 21%)	29,513	108,493	88,382
19	Excess deferred income tax amortization	(9,769)	(9,769)	(9,769)
20	Net amount (L15 - L16 - L18-L19)	120,794	417,910	342,255
21	Add: Interest expense	203,751 [2]	203,751 [4]	203,751 [6]
22	Net income for a return (L20 + L21)	\$324,545	\$621,661	\$546,006

[1] Henry Exhibit I, Schedule 3(d), Column (c).

[2] Henry Exhibit I, Schedule 1(d), Column (e), Line 1.

[3] Henry Exhibit I, Schedule 3(d), Column (e).

[4] Henry Exhibit I, Schedule 1(d), Column (e), Line 4.

[5] Henry Exhibit I, Schedule 3(d), Column (g).

[6] Henry Exhibit I, Schedule 1(d), Column (e), Line 7.

CAROLINA WATER SERVICE, INC. OF NC

Docket No. W-354, Sub 360

**CALCULATION OF GROSS REVENUE
IMPACT OF PUBLIC STAFF ADJUSTMENTS
For The Test Year Ended December 31, 2017**Public Staff
Henry Supp. Exhibit II
Schedule 1

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
1	Increase/(decrease) in total revenue per Company	\$2,485,612	\$1,022,180	\$511,341	\$386,403
2	Difference in calculation of revenue requirement based on Company amounts	(1)	(2)	(2)	0
3	Adjust capital structure to 49.09% debt and 50.91% equity	(107,329)	(79,687)	(5,105)	(12,930)
4	Adjust debt cost rate to 5.68%	(94,538)	(70,194)	(4,495)	(11,389)
5	Adjust return on equity to 9.2%	(919,584)	(682,785)	(43,727)	(110,782)
6	Adjustment to uncollectibles	10,049	3,366	3,143	4,694
7	Adjustment to forfeited discounts	(4,379)	(2,002)	(402)	(604)
8	Adjustment to miscellaneous revenues	(20,080)	19,170	(3,530)	3,530
9	Update revenues to 6/30/2017	(27,964)	45,470	0	(11,651)
10	Adjustment to include plant held for future use	(8,514)	(45,866)	0	0
11	Adjustment to remove pro forma estimates	(286,501)	(156,324)	0	(16,159)
12	Adjustment to cost center rate base	(498)	(188)	0	0
13	Adjustment to include cost centers GL additions	20,238	10,167	2,236	1,879
14	Adjustment to update rate base	8,532	3,719	29,016	10,541
15	Adjustment to include actual GL additions	271,905	185,284	4,772	30,665
16	Adjustments to add in capitalized legal fees	0	697	0	0
17	Adjustment to remove AA Riverbend	46	0	0	0
18	Adjustment to cash working capital	(10,986)	(1,699)	(665)	(1,058)
19	Adjustment to ADIT	111,373	(10,090)	27,026	(17,178)
20	Adjustment to customer deposits	(1,659)	(988)	(261)	(271)
21	Adjustment to gain on sale	8,025	4,088	0	0
22	Adjustment to excess book value	(1)	0	0	0
23	Adjustment to average tax accruals	(12,171)	(7,345)	(828)	(890)
24	Adjustment for excess deferred taxes	(46,359)	(51,711)	1,627	(12,766)
25	Adjustment to deferred charges	(29,033)	(70,480)	(9,169)	(1,520)
26	Adjustment to maintenance salaries	(83,856)	(42,168)	(8,563)	(8,913)
27	Adjustment to purchased power	(1,913)	0	0	0
28	Adjustment to purchased water/sewer	(125,068)	(1,988)	31,359	0

CAROLINA WATER SERVICE, INC. OF NC

Docket No. W-354, Sub 360

**CALCULATION OF GROSS REVENUE
IMPACT OF PUBLIC STAFF ADJUSTMENTS
For The Test Year Ended December 31, 2017**Public Staff
Henry Supp. Exhibit II
Schedule 1

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
29	Adjustment to maintenance and repair	(366,470)	6,770	(503)	(19,671)
30	Adjustment to maintenance testing	59,523	12,397	3,680	(1,968)
31	Adjustment to meter reading	(96)	0	0	0
32	Adjustment to chemicals	(131,848)	136,058	3,428	(3,427)
33	Adjustment to transportation	(1,464)	(411)	(83)	(87)
34	Adjustment to capitalized time	19,025	12,002	1,847	1,942
35	Adjustment to outside services - other	(18,560)	(8,499)	(84)	(88)
36	Adjustment to general salaries and wages	(78,669)	(43,498)	(8,833)	(9,196)
37	Adjustment to office supplies and other office exp.	(2,646)	(617)	(124)	(130)
38	Adjustment to regulatory commission expense	(178,163)	(105,713)	(20,044)	(21,779)
39	Adjustment to pension and benefits	(21,435)	(12,761)	(2,592)	(2,698)
40	Adjustment to rent	(3,993)	(1,843)	(374)	(390)
41	Adjustment to insurance	(71,667)	(42,694)	(14,135)	(14,715)
42	Adjustment to office utility	(1,396)	(355)	(72)	(75)
43	Adjustment to miscellaneous	(103,860)	(61,385)	(13,310)	(13,857)
44	Adjustment to depreciation expense	(13,823)	87,203	(222,703)	217,394
45	Adjustment to amortization expense - CIAC	(91,880)	(158,721)	(8,739)	(36,886)
46	Adjustment to amortization expense - PAA	(11,563)	7,750	1,397	(35,771)
47	Adjustment to franchise tax	(2)	0	0	0
48	Adjustment to property tax	524	(162)	(32)	(34)
49	Adjustment to payroll tax	(7,470)	(3,597)	(731)	(761)
50	Rounding	0	(1)	1	1
51	Revenue impact of Public Staff adjustments	(2,376,199)	(1,129,632)	(259,573)	(96,998)
52	Increase/(decrease) per Public Staff	\$109,413	(\$107,452)	\$251,767	\$289,405

I/A
v8

CAROLINA WATER SERVICE, INC. OF NORTH CAROLINA
Docket No. W-354, Sub 360
ADJUSTMENT TO SALARIES AND WAGES
For the Test Year Ended December 31, 2017

Public Staff
Johnson Exhibit I
Schedule 1

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)
Maintenance:					
1.	Operator and supervisor salaries	\$ 2,587,126 [1]	\$ 1,540,179 [1]	\$ 312,749 [1]	\$ 325,582 [1]
2.	Maintenance salaries per application	2,670,865	1,582,288	321,300	334,483
3.	Adjustment to maintenance salaries (L1 - L2)	<u>\$ (83,740)</u>	<u>\$ (42,109)</u>	<u>\$ (8,551)</u>	<u>\$ (8,902)</u>
General:					
4.	Customer service salaries	\$ 1,004,028 [1]	\$ 597,723 [1]	\$ 121,374 [1]	\$ 126,354 [1]
5.	General salaries per application	1,149,101	680,757	138,135	143,907
6.	Adjustment to general salaries (L4 - L5)	<u>\$ (145,073)</u>	<u>\$ (83,034)</u>	<u>\$ (16,861)</u>	<u>\$ (17,553)</u>

[1] Calculated by the Public Staff based on information provided by the Company.

CAROLINA WATER SERVICE, INC. OF NORTH CAROLINA
Docket No. W-354, Sub 360
ADJUSTMENT TO PAYROLL TAXES
For the Test Year Ended December 31, 2017

Public Staff
Johnson Exhibit 1
Schedule 2

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH Water (c)	BF/FH Sewer (d)				
1.	Payroll taxes per Public Staff	\$ 280,813	[1] \$ 167,175	[1] \$ 33,947	[1] \$ 35,339	[1]	\$	517,274	
2.	Payroll taxes per application	293,160	173,676	35,267	36,714			538,816	
3.	Adjustment to payroll taxes (L1 - L2)	<u>\$ (12,347)</u>	<u>\$ (6,501)</u>	<u>\$ (1,320)</u>	<u>\$ (1,374)</u>			<u>\$ (21,543)</u>	

[1] Calculated by the Public Staff based on information provided by the Company.

I/A
V8

CAROLINA WATER SERVICE, INC. OF NORTH CAROLINA
Docket No. W-354, Sub 360
ADJUSTMENT TO SALARIES AND WAGES
For the Test Year Ended December 31, 2017

Public Staff
Johnson Supp Exhibit |
Schedule 1
Revised

Line No.	Item	CWSNC Water (a)	CWSNC Sewer (b)	BF/FH/TC Water (c)	BF/FH/TC Sewer (d)
<u>Maintenance:</u>					
1.	Operator and supervisor salaries	\$ 2,587,126 [1]	\$ 1,540,179 [1]	\$ 312,749 [1]	\$ 325,582 [1]
2.	Maintenance salaries per application	2,670,865	1,582,288	321,300	334,483
3.	Adjustment to maintenance salaries (L1 - L2)	<u>\$ (83,740)</u>	<u>\$ (42,109)</u>	<u>\$ (8,551)</u>	<u>\$ (8,902)</u>
<u>General:</u>					
4.	Customer service salaries	\$ 1,070,542 [1]	\$ 637,320 [1]	\$ 129,414 [1]	\$ 134,724 [1]
5.	General salaries per application	1,149,101	680,757	138,235	143,907
6.	Adjustment to general salaries (L4 - L5)	<u>\$ (78,559)</u>	<u>\$ (43,437)</u>	<u>\$ (8,820)</u>	<u>\$ (9,182)</u>

[1] Calculated by the Public Staff based on information provided by the Company.

Carolina Water Service, Inc. of NC
Docket No. W-354, Sub 360
ADJUSTMENT TO FLOWBACK PROTECTED EDIT DUE
TO TAX CUTS AND JOBS ACT
For the Test Year Ended December 31, 2017

Boswell Exhibit 1

Supplemental

I/A
VE

Line No.	Item	Amount
1	<u>Income statement</u>	
2	Regulatory liability for federal tax change related to protected EDIT - NC retail	\$4,907,523 ^{1/}
3	RSGM life of asset	<u>45 ^{2/}</u>
4	Annual amortization of protected EDIT - NC retail (L2 / L3)	<u>109,056</u>
5	Income tax impact	<u>(25,486) ^{3/}</u>
6	Annual amortization of protected EDIT - NC retail, net of tax (L4 + L5)	<u><u>\$83,570</u></u>
7	<u>Rate base</u>	
8	Adjustment to regulatory assets and liabilities (L4)	(\$109,056)
9	Composite income tax rate	<u>23.3700%</u>
10	Impact to accumulated deferred income taxes (L8 x L9)	<u>25,486</u>
11	Adjustment to rate base (L8 + L10)	<u><u>(\$83,570)</u></u>

1/ Based on Company amount of \$4,907,523 grossed up per response to ADR34.4.

2/ Based on information provided by the Company in response to ADR34.4.

3/ Line 4 times composite income tax rate on Line 9.

OFFICIAL COPY

Oct 12 2018

Carolina Water Service, Inc. of NC
Docket No. W-354 Sub 360
CALCULATION OF LEVELIZED FEDERAL
UNPROTECTED EDIT RIDER CREDIT
For the Test Year Ended December 31, 2017

Supplemental / A
Boswell Exhibit 2
v 8

OFFICIAL COPY

Oct 12 2018

Line No.	Item	Year 1 Revenue Requirement (a)	Year 2 Revenue Requirement (b)	Year 3 Revenue Requirement (c)	Total Revenue Requirement (d)
	<u>Annuity Factor</u>				
1	Number of years	3 1/			
2	Payment per period	1			
3	After tax rate of return	6.824% 2/			
4	Present value of 1 dollar over number of years with				
5	with 1 payment per year	2.6328			
6	1 plus (interest rate divided by two)	1.0341			
7	Annuity factor (L4 x L5)	<u>2.7226</u>			
8	Total NC retail regulatory liability to be amortized	\$966,595 3/	\$966,595 3/	\$966,595 3/	
9	Annuity factor (L7)	<u>2.7226</u>	<u>2.7226</u>	<u>2.7226</u>	
10	Levelized rider federal EDIT regulatory liability (L8 / L9)	355,027	355,027	355,027	1,065,081 6/
11	One minus composite income tax rate	76.63% 4/	76.63% 4/	76.63% 4/	76.63% 4/
12	Net operating income effect (L10 x L11)	272,057	272,057	272,057	816,172
13	Retention factor	0.765227 5/	0.765227 5/	0.765227 5/	0.765227 5/
14	Levelized rider federal EDIT credit (L5 / L6)	<u>\$355,525</u>	<u>\$355,525</u>	<u>\$355,525</u>	<u>\$1,066,575</u>

- 1/ Rider period recommended by Public Staff.
2/ Boswell Exhibit 1, Schedule 2(a), Line 3.
3/ \$966,595 Company-determined unprotected Federal EDIT grossed up per response to ADR34.4.
4/ One minus the composite income tax rate of 23.37%.
5/ Net Income retention factor.
6/ Sum of Columns (a) through Column (c).

1/A
v8

Supplemental

Boswell Exhibit I
Schedule 2(a)

Carolina Water Service, Inc. of NC
Docket No. W-354, Sub 360
**CALCULATION OF ANNUITY FACTOR FOR EDIT
LIABILITY RIDER**
For the Test Year Ended December 31, 2017

Line No.	Item	Amount
	<u>Annuity Factor</u>	
1	Number of years	3 1/
2	Payment per period	1
3	After tax rate of return (L9)	6.824%
4	Present value of 1 dollar over number of years with with 1 payment per year	2.6328
5	1 plus (interest rate divided by two)	1.0341
6	Annuity factor (L4 x L5)	<u>2.7226</u>

	Capital Structure (a)	Cost Rates (b)	Overall Rate of Return (c)	6/ Net of Tax Rate (d)
	<u>After Tax Rate of Return</u>			
7	Long-term debt	49.09% 2/	5.68% 4/	2.79%
8	Common equity	50.91% 3/	9.20% 5/	4.68%
9	Total	<u>100.00%</u>	<u>7.47%</u>	<u>6.824%</u>

- 1/ Rider period recommended by Public Staff.
2/ Henry Supplemental Exhibit I, Schedule 1(a), Column (a), Line 7.
3/ Henry Supplemental Exhibit I, Schedule 1(a), Column (a), Line 8.
4/ Henry Supplemental Exhibit I, Schedule 1(a), Column (c), Line 7.
5/ Henry Supplemental Exhibit I, Schedule 1(a), Column (c), Line 8.
6/ Column (a) times Column (b).
7/ Column (c) times 1 minus the combined income tax rate of 23.37%.
8/ Amount from Column (c).

74A
v8
①

Duke Energy Progress LLC
Docket No: E-2; Sub 1142
Adjust O&M for executive compensation.
For the test period ended December 31, 2016

NC-2900
Narrative

E-1 Item 10 Adjustments Requirement

Provide the detail work papers showing calculations supporting all accounting, pro forma, end-of-period, and proposed rate adjustments in the rate application to revenue, expense, investment, and reserve accounts for the test year and a complete detailed narrative explanation of each adjustment, including the reason why each adjustment is required. Explain all components used in each calculation. Index each calculation to the accounting, pro forma, end-of-period, and proposed rate adjustment which it supports.

Detailed Narrative Explanation of Adjustment

This pro-forma adjusts operation and maintenance expense and income taxes for officers' compensation.

The impact to operation and maintenance expense is determined as follows:

Eliminate 50% of the compensation of the four Duke Energy executives with the highest level of compensation allocated to Duke Energy Progress in the test period.

The impact to income taxes is determined by multiplying taxable income by the statutory tax rate.

2

Duke Energy Progress LLC
Docket No. E-2, Sub 1142
Adjust O&M for executive compensation
For the test period ended December 31, 2016
(Dollars in thousands)

NC-2901
Page 1 of 1

Line No.	Description	CEO and Other Group Execs (b)
1		
2		
3	Compensation charged to Duke Energy Progress - 12 Months Ended December 31, 2016	\$ 4,976 [1]
4		
5	Compensation charged to A&G	\$ 4,976 [1]
6		
7		
8	NC Retail Allocation Factor - Wage and Salary Related Items	65.3245% [2]
9	NC retail compensation (L5 x L8)	3,250
10	Exclusion percentage	50.00% [3]
11	Impact to O&M (-L9 x L10)	\$ (1,625)
12		
13	Statutory tax rate	37.0598% [4]
14		
15	Impact to income taxes (-L11 x L13)	\$ 602
16		
17	Impact to operating income (-L11 - L15)	\$ 1,023

[1] Information provided by Duke Energy Corporate Accounting

[2] Allocation Factor - LAB

[3] The percentage of compensation to be excluded for DE Progress's four most highly compensated officers charged to DEP.

[4] NC-0104 - 2017 Tax Rate, Line 10

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1146
Adjust O&M for executive compensation
For the test period ended December 31, 2016

NC-0700
Narrative

E-1 Item 10 Adjustments Requirement

Provide the detail work papers showing calculations supporting all accounting, pro forma, end-of-period, and proposed rate adjustments in the rate application to revenue, expense, investment, and reserve accounts for the test year and a complete detailed narrative explanation of each adjustment, including the reason why each adjustment is required. Explain all components used in each calculation. Index each calculation to the accounting, pro forma, end-of-period, and proposed rate adjustment which it supports.

Detailed Narrative Explanation of Adjustment

This pro forma adjusts operation and maintenance expense and income taxes for officers' compensation.

The impact to operation and maintenance expense is determined as follows:

Eliminate 50% of the compensation of the four Duke Energy executives with the highest level of compensation allocated to Duke Energy Carolinas in the test period.

The impact to income taxes is determined by multiplying taxable income by the statutory tax rate.

4

Duke Energy Carolinas, LLC
Docket No. E-7, Sub 1146
Adjust O&M for executive compensation
For the test period ended December 31, 2016
(Dollars in thousands)

NC-0701
Page 1 of 1

<u>Line</u> <u>No.</u>	<u>Description</u>	<u>CEO and Other</u> <u>Group Execs</u>
1		
2	Compensation charged to Duke Energy Carolinas - 12 Months Ended Dec. 31, 2016	\$ 7,854 [1]
3		
4	Compensation charged to A&G (L2)	\$ 7,854
5	Catawba reimbursement allocation rate	15.218% [2]
6	Non-ownership percentage in Catawba plant	80.754% [2]
7	Costs reimbursed by Catawba Joint Owners (L4 x L5 x L6)	\$ 965
8		
9	Compensation net of Joint Owners' share (L2 - L7)	\$ 6,889
10	NC Retail Allocation Factor - Wage and Salary Related Items	68.0211% [3]
11	NC Retail compensation (L9 x L10)	\$ 4,686
12	Exclusion percentage	50.00% [4]
13	Impact to O&M (-L11 x L12)	\$ (2,343)
14		
15	Statutory tax rate	37.1902% [5]
16	Impact to income taxes (-L13 x L15)	\$ 871
17		
18	Impact to operating income (-L13 - L16)	\$ 1,472

[1] Information provided by Duke Energy Corporate Accounting

[2] NC-2203 - Analysis of Total Labor \$ - Catawba Project (Gross, Allocated \$), 12 Months Ended Dec 31, 2016, Lines 20 and 24

[3] Allocation Factor - Labor [Wage and Salary Related Items] (Factor 59)

[4] The percentage of compensation for Duke Energy Carolina's four most highly compensated to be eliminated from the test year.

[5] NC-0104 - 2017 Calculation of Tax Rates - Statutory Tax Rate, Line 10

7A
vol. 8

*only Ex. 5



Carolina Water Service
of North Carolina™

Clark

Appendix 1 Deborah Clark

Exhibits 1-4 Memorandums

DOCKET NO. W-354, SUB 360

Appendix 1

Exhibit 1

Villages at Nags Head Homeowners Association Meeting Memorandum

Exhibit 2

Elk River Property Owners Association Memorandum

Exhibit 3

Crestview Estates Homeowners Association Meeting Memorandum

Exhibit 4

RiverPointe Homeowners Association Meeting Memorandum

km **Exhibit 5**

Fairfield Harbour Property Owners Association Meeting Memorandum

Exhibit 5

Docket No. W-354, Sub 360



Carolina Water Service
of North Carolina™

Memorandum

To: Matthew Klein, President

From: Deborah S. Clark, Communications Coordinator

Cc: Bryce Mendenhall, Vice President of Operations
Eddie Baldwin, Area Manager

Date: June 11, 2018

Subject: Fairfield Harbour Property Owners Association Meeting

On Tuesday, June 5, 2018, representatives of Carolina Water Service, Inc. of North Carolina (CWSNC) met with the Fairfield Harbour Property Owners Association (POA) Board.

Representing CWSNC was Deborah Clark, Communications Coordinator. Representing the Fairfield Harbour POA was Ann Simpson, President; Jim Cline, Vice President; Richard Miller, Treasurer; Bruce Hice, Director; Bill Beery, Director; Gloria Hodgert, Director; Wayne Strausbaugh, Director; Dan Engelhaupt, Director; and Jennifer Gudaitis, Community Manager.

CWSNC and the Fairfield Harbour POA Board discussed the following:

1. Ann asked questions about getting a map from CWSNC regarding the system for future development. Deb stated that Eddie Baldwin, Area Manager, has copies of the system maps he can share with the community.
2. Jim responded that the residents were confused about the HomeServe letters being sent with the CWSNC logo. All HomeServe programs are voluntary to residents in any community.

3. Wayne asked for additional information regarding an issue with adult diapers and the proper disposal. An informational web-based FAQ was provided for their website on items that cannot flushed.
4. Deb discussed the potential for water conservation efforts, including drought-resistant plants, water-saving faucets for the kitchen and bath, and rain barrels.
5. Deb described her role in the deployment of social media and other new communication tools. CWSNC is now on Facebook, Twitter, and Instagram. CWSNC plans to introduce a customer- friendly application later this year that will allow customers to receive information through various methods and monitor their customer-related information.
6. Deb will also play a role in direct communications around water issues. If any water committee member or other board members know of any problems or concerns that are not being resolved, she can be contacted for a resolution to issues promptly.
7. Ann asked that Eddie Baldwin or Anthony Futrell (Lead Operator) attend a future meeting to discuss projects in the community.

/A

* All pages
previously filed
in the
docket
system on
April 27,
2018

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. W-354, SUB 360

In the Matter of
Application by Carolina Water Service,)
Inc. of North Carolina, 4944 Parkway)
Plaza Boulevard, Suite 375, Charlotte,)
North Carolina 28217, for Authority to)
Adjust and Increase Rates for Water and)
Sewer Utility Service in All Service)
Areas in North Carolina)

APPLICATION FOR
A GENERAL INCREASE
IN RATES

NOW COMES Carolina Water Service, Inc. of North Carolina ("CWSNC" or "Company"), by and through counsel and pursuant to the provisions of G.S. 62-130 *et seq.* and North Carolina Utilities Commission ("Commission" or "NCUC") Rules R1-15 and R1-17, and respectfully requests that the Commission approve the Company's Application to increase rates for all its North Carolina service territories, effective Sunday, May 27, 2018.

In addition to CWSNC's request for a general rate increase, items pertinent to this Application and proceeding, include (but are not limited to) the following:

- Pursuant to G.S. 62-133.11, CWSNC requests continued recognition of its authority to pass through in rates any documented increases in the bulk cost of water or wastewater service incurred by the Company in order to serve its retail customers;
- CWSNC requests authority to implement a "consumption band" water and wastewater rate adjustment mechanism within each of the

Company's Rate Divisions. This is a mechanism that balances the risk and impact on ratepayers and shareholders of levels of water and wastewater consumption that are either significantly higher or significantly lower than those levels of consumption that were used to set base rates;

- The Company's Commission-approved Water and Sewer System Improvement Charge Mechanism ("WSIC/SSIC") will, after being reset to zero in this proceeding, also continue in effect to allow for Commission consideration of surcharge cost recovery of future eligible water and sewer system improvement projects that have not previously been reflected in CWSNC's rates;¹ and
- CWSNC's Application addresses issues related to the appropriate way to implement the applicable provisions of the Federal Tax Cuts and Jobs Act ("Federal Tax Act"), which was signed into law on December 22, 2017, and which is the subject of a generic proceeding initiated by the Commission in NCUC Docket No. M-100, Sub 148.

Accordingly, CWSNC states the following in support of this Application:

¹ The Company's Elk River water and sewer service area is subject to the rate increase proposed in this docket. The Elk River service area is included in CWSNC's Uniform Water and Sewer Rate Divisions. In addition, pursuant to Commission Rules R7-39(m) and R10-26(m), CWSNC is required to file an Ongoing Three-Year WSIC/SSIC Plan ("Ongoing WSIC/SSIC Plan") within 60 days of the end of each water system and sewer system improvement charge period. CWSNC's Ongoing WSIC/SSIC Plan is due to be filed on or before Wednesday, May 30, 2018. Accordingly, the Company will file its Ongoing granted WSIC/SSIC Plan in both this docket and the Sub 336A docket on or before May 30, 2018.

1. CWSNC is a public utility operating in North Carolina engaged in the provision of water and sewer utility service to the public for compensation. The Company's business address is 4944 Parkway Plaza Boulevard, Suite 375, Charlotte, North Carolina 28217. The contact person for CWSNC in this matter is Richard Linneman at richard.linneman@carolinawaterservicenc.com. CWSNC is a wholly-owned subsidiary of Utilities, Inc. ("UI").

2. CWSNC is an investor-owned public utility pursuant to G.S. 62-3, does business as a regulated water and sewer utility in North Carolina, and is subject to the regulatory oversight of this Commission.² The Company presently serves approximately 34,871 water customers and 21,531 sewer customers in North Carolina and operates approximately 93 water systems and 38 sewer systems in the State. The Company's service territory spans 38 counties in North Carolina, from Corolla in Currituck County to Bear Paw in Cherokee County. CWSNC hereby applies for an adjustment in water and sewer rates and charges for all of its service areas in North Carolina.

3. The attorney for CWSNC, on whom all pleadings and notices should be served, is:

Jo Anne Sanford
Sanford Law Office, PLLC
Post Office Box 28085

² On April 22, 2016, CWSNC, Bradfield Farms Water Company (Bradfield Farms), Carolina Trace Utilities, Inc. (Carolina Trace), CWS Systems, Inc. (CWSS), Elk River Utilities, Inc. (Elk River), and Transylvania Utilities, Inc. (Transylvania) filed a Joint Application for Approval of Merger with the Commission in Docket No. W-354, Sub 350 requesting approval of the merger of Bradfield Farms, Carolina Trace, CWSS, Elk River, and Transylvania (all of which, like CWSNC, were wholly-owned subsidiaries of UI) into CWSNC. On August 17, 2016, the Commission entered an Order Approving Merger. The Articles of Merger were filed with the North Carolina Secretary of State on August 30, 2016. Since that date, CWSNC has owned and operated all of the merged water and sewer systems previously owned and operated by the five former UI subsidiaries.

Raleigh, North Carolina 27611-8085
Telephone: 919-210-4900
sanford@sanfordlawoffice.com

4. CWSNC's last general rate case was decided by NCUC Order ("2017 Rate Case Order") entered on November 8, 2017, in Docket No. W-354, Sub 356.

5. This is the second general rate case filed by CWSNC since the Commission approved a merger of all the Company's North Carolina systems on August 17, 2016, in Docket No. W-354 Sub 350. By the Rate Case Application filed in the Sub 356 docket, CWSNC proposed and was allowed by the Commission to establish the following four Rate Divisions for ratemaking purposes in that proceeding:

CWSNC Uniform Water

CWSNC Uniform Sewer

Bradfield Farms/Fairfield Harbour/Treasure Cove Water³

Bradfield Farms/Fairfield Harbour/Treasure Cove Sewer

6. The CWSNC Uniform Water and Sewer Rate Divisions consist of all water and sewer systems currently owned and operated by the Company, excluding the Bradfield Farms, Fairfield Harbour, and Treasure Cove service areas. The Bradfield Farms, Fairfield Harbour, and Treasure Cove water and sewer service areas were combined into separate Water and Sewer Rate Divisions for purposes of the Sub 356 rate case with uniform water and sewer rates within

³ Bradfield Farms is located in Mecklenburg County, Fairfield Harbour is located in Craven County, and Treasure Cove is located in New Hanover County.

each Rate Division. CWSNC's ultimate goal, in future general rate cases, continues to be to ultimately move Bradfield Farms, Fairfield Harbour, and Treasure Cove into the CWSNC Uniform Water and Sewer Rate Divisions.

7. As a matter of rate design in this case, CWSNC proposes no rate changes for customers in the Company's Corolla Light/Monteray Shores service area. Regarding the Corolla Light/Monteray Shores service area, CWSNC's proposal to not increase (but hold constant) the water and sewer rates for those affected customers is consistent with the ratemaking and rate design approved by the Commission in the Company's last three general rate cases (Docket Nos. W-354, Subs 336, 344, and 356) and will continue the orderly process of moving the Corolla Light/Monteray Shores service area toward full inclusion in the Company's uniform water and sewer rates in future general rate cases.

8. The test year for this general rate case is the year ended December 31, 2017. This is the most recent twelve months of data available.

9. CWSNC's currently-authorized overall rate of return on rate base is 7.84%, which is based on an authorized rate of return on common equity of 9.60%, established by the Commission in its 2017 Rate Case Order. Based on per-books results, CWSNC's test year overall return on rate base for the Company's combined water and sewer operations was 4.60% and its per-books test year overall returns were 4.33% for water operations and 7.07% for sewer operations.

10. CWSNC's requested rate increase in this general rate case is premised on a proposed overall rate of return of 8.91% on the Company's rate base for its combined water and sewer operations. The Company's proposed

overall rate of return of 8.91% is based upon a capital structure consisting of 47.11% long-term debt and 52.89% common equity and cost rates of 6.00% for long-term debt and 11.50% for common equity.

11. In accordance with the provisions of G.S. 62-134 and NCUC Rule R1-17, CWSNC herewith files revised, proposed tariffs, copies of which are attached as Appendix A. The new tariffs will be placed into effect on Sunday, May 27, 2018, unless suspended by the Commission.

12. The proposed tariffs are designed to produce additional gross revenues on a company-wide basis of \$4,405,535, a 13.52% increase over the total revenue level generated by the rates currently in effect for CWSNC. For the CWSNC Uniform Water Rate Division, the proposed tariffs are designed to produce additional gross revenues of \$2,485,612, a 14.64% increase over the total revenue level generated by the rates currently in effect for that Rate Division. For the CWSNC Uniform Sewer Rate Division, the proposed tariffs are designed to produce additional gross revenues of \$1,022,180, a 7.99% increase over the total revenue level generated by the rates currently in effect for that Rate Division. For the Bradfield Farms/Fairfield Harbour/Treasure Cove Water Rate Division, the proposed tariffs are designed to produce additional gross revenues of \$511,341, a 47.64% increase over the total revenue level generated by the rates currently in effect for that Rate Division. For the Bradfield Farms/Fairfield Harbour/Treasure Cove Sewer Rate Division, the proposed tariffs are designed to produce additional gross revenues of \$386,403, a 22.03% increase over the total revenue level generated by the rates currently in effect for that Rate Division. CWSNC requires

increased revenues at this level to earn a fair return on its company-wide investment of \$114,815,658.

13. Further, the proposed tariffs include a provision allowing for a pass-through of the cost of water and sewer service, including applicable taxes and fees, required to serve the needs of customers being served by CWSNC in a particular service area, when that water or sewer service is purchased from another supplier. This provision is authorized by G.S. 62-133.11.

14. In accordance with NCUC Rule R1-17(b) and following the prescription of the Commission's Application for Rate Case form, CWSNC attaches hereto and incorporates herein by reference a completed form application, along with the schedules to support the requested adjustments in rates. The schedules include:

Balance sheet as of December 31, 2017 (Appendix B - Schedule A)

Income statement for the Twelve Months Ended December 31, 2017 (Appendix B - Schedule B)

Calculation of Rate Base and Rate of Return (Appendix B - Schedule C)

Calculation of Revenues Under Present Rates (Appendix B - Schedule D)

Proposed Charges, Revenues Under Proposed Rates and Average Bill Calculations (Appendix B - Schedule E)

15. Consumption Adjustment Mechanism Applicable to Water and Wastewater Services - As part of this Application, the Company requests authority

to implement a "Consumption Adjustment Mechanism" or "CAM" within each rate division for non-purchased water and wastewater commodity customers. This is a mechanism that balances the risk and impact on customers and shareholders of levels of water and wastewater consumption that are either significantly higher or significantly lower than those levels of consumption that were used to set rates.

CWSNC's annual average monthly consumption per customer varies due to environmental factors, conservation, and pricing impact. A portion of the requested rate increase in this case is a result of reduced consumption per customer. However, consumption can also increase significantly during extended periods of warm, dry weather. CWSNC is proposing a mechanism that will minimize the revenue impact of significant swings in customer consumption patterns, which would benefit both the Company and its customers.

CWSNC's proposed consumption adjustment mechanism, if authorized by the Commission, would operate as follows:

First, the average monthly consumption per metered bill, as determined and utilized to establish Residential and Commercial metered tariff rates in the Commission's Rate Case Order in this case, will be utilized as the basis ("Base Average Consumption") by which future consumption-related adjustments will be calculated.

Second, at the end of each calendar year, the actual annual average monthly consumption ("Current Average Consumption") per metered bill will be recalculated using the most recent 12 months of billing data. The Current Average Consumption will then be compared to the Base Average Consumption to

determine if a billing adjustment is necessary. If the Current Average Consumption is within a range of 1%, plus or minus, to the Base Average Consumption, no adjustment would be required or allowed. If the Current Average Consumption is outside of a range of 1%, plus or minus, the total annual revenue excess or shortfall (excess or shortfall gallons times the consumption tariff rate) will be computed and divided by the number of bills and then divided by 12 to establish the monthly CAM surcharge or surcredit (increment or decrement).

Third, within 45 days of the most recent year-end, CWSNC will complete the annual consumption calculations with the proposed 12-month adjustment, if any, to be applied to all residential and commercial bills (if needed).

Fourth, if an adjustment is needed, increment or decrement, the applicable surcharge or surcredit will be submitted for Commission approval and, after approval, will be applied to all customer accounts starting 91 days after the end of the annual measurement period and will be assessed for the next 12 months.

Accordingly, CWSNC requests that the Commission find and conclude that it is in the public interest to approve implementation of the Company's proposed water and wastewater CAM as part of its Rate Case Order in this proceeding.

CWSNC requests that the Commission approve the water and wastewater CAM based on the NCUC's inherent regulatory authority to do so in a rate case. The Company submits that the Commission has such authority and acknowledges that, for this request to be considered in this rate case, notice must be given at the outset. That said, CWSNC notes that legislation is currently pending before the North Carolina General Assembly (House Bill 752) which would affirm the NCUC's

authority to implement “customer usage tracking rate adjustment mechanisms for water and wastewater rates.” There is no certainty at this time that House Bill 752 will become law during the upcoming 2018 legislative session. For that reason, CWSNC requests that the Commission approve the CAM pursuant to its inherent regulatory authority under Chapter 62 of the North Carolina General Statutes, in the context of this general rate case. If the water and wastewater CAM is not approved in this case, the Company will have to wait until it files its next general rate to again put forward such a request, which would mean that the Company and its customers would continue to needlessly experience the vicissitudes of significant variances in consumption over a significant period. CWSNC respectfully submits that approval now of the opportunity to true-up those variances, in a reasonable and prudent fashion, is in the best interests of customers and the Company.

16. Water and Sewer System Improvement Charge (“WSIC/SSIC”) Mechanisms - Pursuant to G.S. 62-133.12 and Commission Rules R7-39 and R10-26, the Commission found it to be in the public interest to authorize CWSNC, as part of the Company’s 2014, 2015 and 2017 general rate cases in Docket Nos. W-354, Subs 336, 344, and 356, to implement Water and Sewer System Improvement Charge (“WSIC/SSIC”) Mechanisms applicable to all of the Company’s pre-merger customers. By these statutory and Commission-authorized Mechanisms, the Company is allowed to recover the annual incremental depreciation expense and capital costs of eligible water and sewer system improvements completed and placed in service between rate cases.

As discussed in Footnote No. 1 above, and consistent with NCUC Rules R7-39(c)(1) and R10-26(c)(1), CWSNC will file the Company's Ongoing Three-Year WSIC/SSIC Plan as part of this Rate Case Application on or before May 30, 2018.

Consistent with NCUC Rules R7-39(k) and R10-26(k), CWSNC's Commission-authorized WSIC and SSIC surcharges will be reset to zero as of the effective date of new base rates established in this general rate case. Thereafter, only the incremental depreciation expense and capital costs of new eligible water and sewer system improvements that have not previously been reflected in the Company's rates will be recoverable through the WSIC/SSIC Mechanisms on a going-forward basis.

All of CWSNC's post-merger customers are subject to the application in this general rate case. Therefore, the Company's Commission-authorized WSIC/SSIC Mechanisms will, on a going-forward basis, continue to apply to all customers served by CWSNC, including those customers incorporated into the Company as a result of the Commission-authorized 2016 corporate merger.

By law, the cumulative maximum charges between rate cases that the Company may recover through the use of its Commission-authorized WSIC/SSIC Mechanisms cannot exceed five percent of the total service revenues that the Commission ultimately approves in this general rate case. In this Application, the Company has requested that the Commission allow it to recover total water service revenues of \$19,395,583 and total sewer service revenues of \$13,756,485 from CWSNC Uniform Rate Division customers. In addition, the Company has

requested that the Commission allow it to recover total water service revenues of \$1,559,782 and total sewer service revenues of \$2,148,670 from Bradfield Farms/Fairfield Harbour/Treasure Cove Rate Division customers.

Five percent of these water revenues under the WSIC Mechanism is \$969,779 for the CWSNC Uniform Water Rate Division and \$77,989 for the Bradfield Farms/Fairfield Harbour/Treasure Cove Water Rate Division. Five percent of these sewer revenues under the SSIC Mechanism is \$687,824 for the CWSNC Uniform Sewer Rate Division and \$107,434 for the Bradfield Farms/Fairfield Harbour Sewer Rate Division.

If the Commission permits the Company to recover the revenue requirements requested in the Application, the Company projects that the average monthly water bill for a typical CWSNC Uniform Rate Division residential customer (based upon monthly water usage of 3,605 gallons) would be \$60.14 and the average monthly sewer bill for a typical residential customer (based upon monthly water usage of 2,964 gallons) would be \$60.15. In addition, the Company projects that the average monthly water bill for a typical Bradfield Farms/Fairfield Harbour/Treasure Cove Rate Division residential customer (based upon monthly water usage of 4,077 gallons) would be \$38.13 and the average monthly sewer bill for a typical residential customer would be \$50.81.

Based upon these figures, the Company estimates that the maximum that the average residential customer's monthly water bill in the CWSNC Uniform Water Rate Division could be increased by the WSIC Mechanism between rate cases is \$3.01 and the maximum that the average residential customer's monthly sewer bill

could be increased by the SSIC Mechanism between rate cases is \$3.01. The Company further estimates that the maximum that the average residential customer's monthly water bill in the Bradfield Farms/Fairfield Harbor/Treasure Cove Water Rate Division could be increased by the WSIC Mechanism between rate cases is \$1.91 and the maximum that the average residential customer's monthly sewer bill could be increased by the SSIC Mechanism between rate cases is \$2.54.

17. Federal Tax Cuts and Jobs Act - CWSNC's Application also addresses issues related to the appropriate way to implement the provisions of the recently-enacted Federal Tax Act which is the subject of the generic proceeding initiated by the Commission in NCUC Docket No. M-100, Sub 148 ("Tax Docket"). Specifically, CWSNC has done the following as part of this Rate Case Application in conformity with the applicable provisions of the Federal Tax Act and the requirements of the NCUC Order entered in the generic Tax Docket on January 3, 2018:

- a. CWSNC's proposed rates in this proceeding reflect and incorporate the current federal corporate income tax rate of 21% contained in the Federal Tax Act.
- b. Consistent with the requirements of the January 3, 2018 NCUC Order in the Tax Docket, CWSNC is tracking and will defer any benefit that is recognized as a result of the decrease in the federal corporate income tax rate from 35% to 21% on the currently payable piece of federal income tax included in customer rates. These changes will be recorded

to a regulatory liability account for consideration in this general rate case proceeding.

- c. Regarding the excess deferred income tax issue, CWSNC is accounting for the protected items utilizing the average rate assumption method ("ARAM") in order to not violate normalization accounting. CWSNC is deferring the process of amortizing these excess deferred taxes until they are addressed by the Commission in this rate case. The Company proposes and requests approval to amortize the unprotected excess deferred federal income taxes over the same time period as the reversal of the timing differences that generated the deferred tax.

18. The NCUC Form W-1, Rate Case Information Report, as required by Rule R1-17(b)(12)(d), is submitted herewith and incorporated herein by reference.

19. Average residential water bills in the CWSNC service areas (except where CWSNC purchases water from a third-party supplier), would increase as follows if the rates currently requested are approved:

Entity	Gallons Billed Per Month (Avg)	Current Bill (Based on Avg)	Requested Bill (Based on Avg)
CWSNC Uniform	3,605	\$52.20	\$60.14
Bradfield Farms	4,077	\$25.14	\$38.13
Fairfield Harbor	4,077	\$25.14	\$38.13
Treasure Cove	4,077	\$25.14	\$38.13

20. Average residential sewer bills across the applicable systems (except where CWSNC sub-contracts the cost of sewer treatment to a third party) would increase as follows if the rates currently requested are approved:

Entity	Gallons Billed Per Month (Avg)	Current Bill (Based on Avg)	Requested Bill (Based on Avg)
CWSNC Uniform	2,964	\$55.19	\$60.15
Bradfield Farms	N/A	\$41.40	\$50.81
Fairfield Harbor	N/A	\$41.40	\$50.81
Treasure Cove	N/A	\$41.40	\$50.81

21. G.S. 62-133(c) states that "...the Commission shall consider such relevant, material and competent evidence...tending to show actual changes in costs, revenues or the cost of the public utility's property used and useful, or to be used and useful within a reasonable time after the test period, in providing the service rendered to the public within this State...which is based upon circumstances and events occurring up to the time the hearing is closed." The Company includes in this Application an adjustment based upon its estimates of certain changes in costs that are anticipated to occur up to the time the hearing is closed, and the Company intends to offer evidence to support these changes. As required by Commission Rule R1-17(b), the Company specifically identifies estimates of the terms it intends to update within each W-1, Item 10 section, as applicable, and reserves the right to propose additional updates, as appropriate, through the close of the hearing in this case.

22. The new, proposed rates applied for by CWSNC are necessary because the Company has been confronted with increased capital investments and operating costs required to comply with service obligations, increased operating costs to maintain or upgrade the level of service, and changes in consumption, all occurring during the test year and continuing up through the time of filing of this Application.

23. In Paragraph No. 15 (entitled "Metered Sewer Rates") of the Joint Stipulation between CWSNC and the Public Staff filed in the Sub 356 rate case on September 9, 2017, the Company agreed to:

...consider implementing metered sewer rates for customers in its Fairfield Harbour, Bradfield Farms, and Sapphire Valley service areas in the Company's next general rate case filing and reserves the right to independently propose metered sewer rates for these systems.⁴

CWSNC, after careful consideration, decided to file this Application premised upon continuation of flat rate sewer service for customers in the Company's Fairfield Harbour, Bradfield Farms, and Sapphire Valley service areas. That said, the Company is willing to discuss this matter with the Public Staff and reserves the right, after such consultation, to either affirm the current decision to continue flat rates or, instead, propose metered rates for the three service areas in question. Any consultation with the Public Staff will, however, need to include a

⁴ Decretal Paragraph of the NCUC's 2017 Rate Case Order required:

That CWSNC shall consider implementing metered sewer rates for customers in the Fairfield Harbour, Bradfield Farms, and Sapphire Valley service areas in the Company's next general rate case filing or shall independently propose metered sewer rates for these systems, as stipulated.

comprehensive discussion of, and agreement to, the appropriate fixed-to-variable cost ratio used to design metered sewer rates, if ultimately agreed to and proposed.

24. CWSNC has carefully reviewed the Commission's 2017 Rate Case Order to ensure that the Company has complied with all applicable decretal paragraphs which required Commission-ordered actions. CWSNC hereby confirms that all required actions were taken and implemented as ordered by the Commission in the Company's Sub 356 general rate case.

WHEREUPON, CWSNC hereby requests that the Commission approve (a) the proposed new rates contained in Appendix A effective Sunday, May 27, 2018, and (b) the other requests set forth in this Application.

Respectfully submitted this 27th day of April 2018.

Electronically Submitted

/s/Jo Anne Sanford

North Carolina State Bar No. 6831

Sanford Law Office, PLLC

Post Office Box 28085

Raleigh, North Carolina 27611-8085

Telephone: 919-210-4900

Email: Sanford@sanfordlawoffice.com

/s/Robert H. Bennink, Jr.

Bennink Law Office

North Carolina State Bar No. 6502

130 Murphy Drive

Cary, North Carolina 27513

Telephone: 919-760-3185

Email: BenninkLawOffice@aol.com

**ATTORNEYS FOR CAROLINA WATER
SERVICE, INC. OF NORTH CAROLINA**

DOCKET NO. W-354, SUB 360

APPENDIX 1: Per Rule R1-17(b)(9)f

Summary of All Increases and Changes Affecting Customers

The rates proposed by CWSNC on a company-wide basis are designed to produce a 13.52% increase in total operating revenues, applicable to North Carolina retail operations, as applied to the test year ended December 31, 2017. The rate increase is requested to take place on Sunday, May 27, 2018, unless suspended by the Commission. The net additional revenue which the proposed increase in rates will produce is \$4,405,535 for CWSNC and the proposed impact on customers' retail rates would be as follows:

WATER CUSTOMERS: The average water bills in the CWSNC service area rate divisions, based on average usage as shown below, would increase as follows if the rates currently requested are approved:

Entity	Gallons Billed per Month (Average)	Current Bill (based on average)	Requested Bill (based on average)
CWSNC Uniform	3,605	\$52.20	\$60.14
Bradfield Farms	4,077	\$25.14	\$38.13
Fairfield Harbour	4,077	\$25.14	\$38.13
Treasure Cove	4,077	\$25.14	\$38.13

SEWER CUSTOMERS: Average residential sewer bills in the CWSNC service area rate divisions, based on average usage as shown below, would increase as follows if the rates currently requested are approved:

Entity	Gallons Billed per Month (Average)	Current Bill (based on average)	Requested Bill (based on average)
CWSNC Uniform	2,964	\$55.19	\$60.15
Bradfield Farms	N/A	\$41.40	\$50.81
Fairfield Harbor	N/A	\$41.40	\$50.81
Treasure Cove	N/A	\$41.40	\$50.81

In addition, pursuant to G.S. 62-133.11, the Company requests continued recognition of its authority for a pass-through of any increases in purchased bulk water rates, subject to sufficient proof by the Company of the increase, as well as a pass-through of any increased costs of sewer treatment performed by third parties and billed to CWSNC.

CWSNC's Commission-authorized WSIC/SSIC Mechanisms will apply to all customers currently served by the Company. The WSIC/SSIC Mechanisms, which were authorized and found to be in the public interest by the Commission pursuant to G.S. 62-133.12 in the Company's 2014 Rate Case Order in Docket No. W-354, Sub 336, allows for recovery, between rate cases and up to a maximum overall 5% increase in rates, of qualifying investments in eligible infrastructure, under Commission oversight.

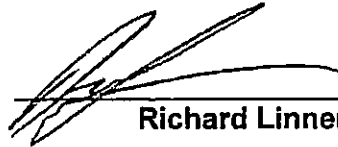
Finally, the Company also requests authority to implement a "consumption collar," which is a rate surcharge mechanism that balances the risk and impact on ratepayers and shareholders of levels of consumption that are either significantly

higher or significantly lower than those levels of consumption that were used to set rates in a general rate case.

VERIFICATION

Richard Linneman, being duly sworn, deposes and says:

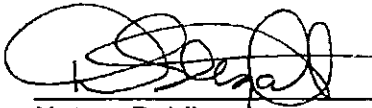
That he is the Financial Planning and Analysis Manager for Carolina Water Service, Inc. of North Carolina; that he is familiar with the facts set out in this **APPLICATION FOR A GENERAL INCREASE IN RATES** filed by Carolina Water Service, Inc. of North Carolina in Docket No. W-354, Sub 360; that he has read the foregoing Application and knows the contents thereof; and that the same is true of his knowledge except as to those matters stated therein on information and belief, and as to those he believes them to be true.



Richard Linneman

North Carolina
Mecklenburg County

Sworn to and subscribed before me this the 25 day of April 2018.

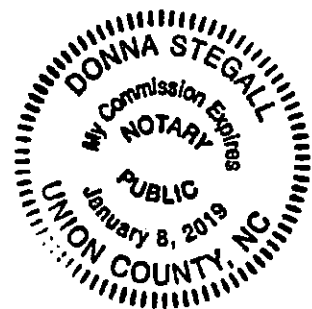


Notary Public

Donna Stegall

Printed Name

My Commission Expires: 01/08/2019
Date



CAROLINA WATER SERVICE, INC. OF NORTH
CAROLINA
NCUC FORM W-1
RATE CASE INFORMATION REPORT
DOCKET NO. W-354, SUB 360
Rate Case Information Report

/A
* All pages filed
in docket
system
on
April 27,
2018

/A
V8

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. W-354, SUB 360

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of

Application by Carolina Water Service,)	
Inc. of North Carolina, 4944 Parkway)	
Plaza Boulevard, Suite 375, Charlotte,)	
North Carolina 28217, for Authority to)	REPORT ON CUSTOMER
Adjust and Increase Rates for Water)	COMMENTS FROM PUBLIC
and Sewer Utility Service in All of Its)	HEARINGS IN NEW BERN AND
Service Areas in North Carolina)	WILMINGTON, NORTH
	CAROLINA, HELD ON AUGUST
	28TH AND 29TH, 2018

NOW COMES Carolina Water Service, Inc. of North Carolina ("CWSNC" or "Company") and files this report in response to customer concerns raised at the New Bern and Wilmington public hearings.

The New Bern hearing was convened at 7:00 p.m. on August 28, 2018 at the Craven County Courthouse. Chairman Edward S. Finley, Jr., presided, joined by Commissioners ToNola Brown-Bland, Jerry C. Dockham, James G. Patterson, Lyons Gray, and Charlotte A. Mitchell.

Staff Attorney Gina Holt appeared for the Public Staff on behalf of the using
and consuming public, accompanied by Public Staff Water Engineer Gina Casselberry. Matthew Klein, President of CWSNC, was joined by other Company personnel who were present and available to assist customers with questions or requests. They included: Bryce Mendenhall, Vice-President of Operations;

Deborah Clark, Communications Coordinator; Eddie Baldwin, Area Manager; Stacy Goff, Lead Operator; and Renee Guay, Health, Safety & Environmental Compliance Manager. Robert H. Bennink of the Bennink Law Firm appeared as counsel for CWSNC.

The Wilmington public hearing was held on August 29, 2018 at 7:00 p.m. at the New Hanover County Courthouse, on Princess Street in Wilmington. Chairman Finley again presided, and was joined by Commissioners Brown-Bland, Dockham, Patterson, Gray and Mitchell. Ms. Holt and Ms. Casselberry appeared for the Public Staff, and Mr. Klein, Mr. Mendenhall, Ms. Clark, Mr. Baldwin, Ms. Goff, and Ms. Guay were there for CWSNC. Jo Anne Sanford appeared as counsel for CWSNC.

GENERAL RESPONSES TO CUSTOMER ISSUES

CWSNC believes it is important to explain some principles and facts that impact both the Company's service obligation and the rules that apply to the rate-setting process for public utilities such as CWSNC, assuring protections to customers. The Company appreciates this opportunity to speak to its concerned customers and to its regulators.

1. Proposed Rates – The legal principles that govern ratemaking are set forth in North Carolina General Statutes, Chapter 62, and in rules promulgated by the North Carolina Utilities Commission under those statutes. By law, CWSNC receives a rate increase only if it proves, in the face of an

investigation by the Public Staff (and any Intervenor opposition), that such an increase is authorized under the law, based on the actual cost and level of prudent and reasonable investment in plant and operation. Further, investment in plant is *only* recoverable after it has been made, placed into service, and audited by the Public Staff. This principle—referred to as the “used and useful” requirement—applies whether costs are recovered in a general rate case or under a system improvement charge.

2. Rate Comparisons – An attempt to make meaningful comparisons between statewide average costs for all water and wastewater service providers and the costs of a provider like CWSNC often results in an “apples to oranges” assessment. The core distinction is found in the concept of “economies of scale.” The costs of serving an individual customer in Raleigh or Charlotte, by a governmental utility enterprise, will likely on average be less than the cost of serving the typical CWSNC customer. The urban areas are densely populated, they generally source water from large surface impoundments or rivers, they treat waste in large central treatment facilities, governmental entities tax their citizens, and they are often not required to utilize “cost-of-service” ratemaking, as are the utilities regulated under Chapter 62 of the General Statutes. Contrast this to the areas served by CWSNC and others like it: often rural, far less densely populated, and frequently served by smaller waste treatment plants and by hundreds of wells, drawing water up

from rock and dispersed across the state. The difference in cost attributes are obvious and should inform any conversation about comparisons in respective average costs.

3. Legal Compliance Regarding Notice – In a general rate case, the Public Notice to customers is prescribed by the requirements of statute and is issued by the Commission, based upon the input of CWSNC and the Public Staff. It is a joint effort to provide specific information to all customers about current and proposed rates. In a general rate case like this, the length and complexity of the Public Notice serves the purpose of detail and transparency yet is likely daunting to many customers who attempt to understand all its contents and the personal impact.
4. Level of Service Inquiries – The Company notes that no customer service complaints (as opposed to water quality concerns) were raised by any of the witnesses. More specifically, based upon the Company's review of its records, only one of the witnesses who testified—Mr. Joffre—contacted a CWSNC Customer Service Representative during 2018—once about a billing question and once about a claim of "no water." Finally, according to the Company's records, five (5) of the ten (10) witnesses have never contacted the Company to discuss any billing, service, or other issue.
5. Investment in Replacing Aging Infrastructure – As documented by the U.S. Environmental Protection Agency ("EPA") and the American Water Works

Association ("AWWA"), significant investment is needed throughout North Carolina—more than \$20 billion—to replace aging water and wastewater infrastructure, including drinking water pipes, wastewater collection pipes, lift stations, and wastewater treatment facilities.

6. Water Quality – Water quality can be impacted by, among other things, unplanned water main breaks, unexpected malfunctioning of equipment, and challenges when implementing capital projects. CWSNC's primary focus is on providing the highest level of service related to compliance with primary drinking water quality standards. The Company's latest Annual Water Quality Reports (2017) for Fairfield Harbour and Brandywine Bay reflect "no violations."
7. Secondary Water Quality – The Company is also committed to a high level of service regarding secondary water quality standards. Secondary water quality standards address substances that may impact the taste, odor, or color (i.e., the "aesthetics") of a customer's drinking water.
 - a. Iron – As reflected within the referenced Company's latest Annual Water Quality Reports, the Company's latest testing for Iron reveals levels below the Maximum Contaminant Level ("MCL") of 0.3 parts per million ("ppm"). Specifically, the sampling results for Fairfield Harbour and Brandywine Bay reveal Iron concentrations of 0.132 ppm and 0.144 ppm, respectively.

b. Hardness – Hardness reflects the relative amounts of calcium and magnesium ions within drinking water. Generally, “hard water” can be found throughout North Carolina, including the coastal areas served by groundwater. It is not uncommon for homeowners served by public and private drinking water systems to own and deploy drinking water softeners. The Company measured the hardness for the Brandywine Bay system at 282 ppm, which is considered to be “very hard.” However, hardness is not regulated by the North Carolina Department of Environmental Quality (“DEQ”). The Company’s experience is that many drinking water customers possess their own drinking water softeners. Historically, the Company has heard from customers with in-home drinking water softeners that they do not wish to pay for—i.e., subsidize—an expensive system-wide water softener to support other customers within the community who do not have an in-home water softening system. In summary, traditionally, the Company leaves drinking water hardness solutions to the individual preferences of its customers, unless a clear and substantial demand for such a capital investment is made by a community.

c. Hardness & Fairfield Harbour Community – Concerns about hardness were raised by testifying customers residing within the

Fairfield Harbour community. Previously, in early 2011, the Company responded to customer concerns expressed during a public hearing about the hardness of the drinking water. The Company timely and appropriately responded to the concerns of the Fairfield Harbour customers by preparing a "Water Softening System" proposal and cost estimate for review and discussion with the Public Staff of the North Carolina Utilities Commission. It is the Company's recollection and belief that this proposal was soundly rejected by the customers of Fairfield Harbour community.

- d. The Company's On-Going Commitment to Water Quality – The Company is committed to providing the highest level of service to customers, especially regarding water quality. First, the Company continues to implement its flushing program. For example, in 2018, the Company has flushed Fairfield Harbour on five (5) different days over several months and recently flushed Brandywine Bay in July. Second, the Company has explored purchasing automatic flushing hydrants to install throughout the Fairfield Harbour, Brandywine Bay, and other systems.
-

OVERVIEW OF THE NEW BERN PUBLIC HEARING

Ten (10) witnesses testified, including eight (8) witnesses from the Fairfield Harbour community and one witness each from the Brandywine Bay and Carolina

Pines communities. Generally, each customer who testified expressed concern about: (1) the proposed percentage increase in rates; and (2) water quality in terms of particulate and hardness issues.

SPECIFIC RESPONSES TO CUSTOMER TESTIMONY FROM NEW BERN

Ted Warnock, 5002 Plymouth Court, Fairfield Harbour. *Tr. Vol. 1, pp. 10-13.*

Mr. Warnock spoke to several concerns:

- he opposed a rate increase so soon after the one ordered within the last year;
- he had received no information about the intended projects for this pending rate case;
- he discussed the need for installation of personal water softeners/purification systems for the water to be enjoyable;
- he presented a petition that he submitted was signed by the Fairfield Harbour community in opposition to the rate increase; and
- he compared the rates to the municipal water in the adjacent communities.

Company's Response: The Company refers to and incorporates by reference its "General Responses to Customer Issues." Additionally, the Company has presented for review to the Public Staff its "intended projects" and is willing and able to discuss specific capital projects with Mr. Warnock.

Simon Locke, 6014 Cardinal Drive, Fairfield Harbour. Tr. Vol. 1, pp. 14-18.

Mr. Locke opposed a rate increase due to the back-to-back rate cases. He noted that CWSNC is privately-held and thus not required to post earnings as a determinant of whether rates are appropriate; he contended that all the water providers use the same aquifer and should thus charge approximately the same price for viable water; and he submitted that customers should only pay for the water used and not for any fixed costs, since those costs are excessive, in his view.

Company's Response: The Company refers to and incorporates by reference its "General Responses to Customer Issues."

Dianne Viglianese, 208 Tree Fern Drive, Brandywine Bay. Tr. Vol. 1, pp. 18-23.

Ms. Viglianese opposed a rate increase due to the back-to-back rate cases, and she complained about being penalized for conserving water and lowering consumption of water. She argued there has been no improvement in water quality since the rates were increased, complained of having to use bottled water for cooking and consumption, and objected to having to replace filters and deal with stains in the toilet and sinks. Upon questioning by the Public Staff, Ms. Viglianese stated she never called the Company to complain about any of the above-noted issues.

Company's Response: The Company refers to and incorporates by reference its "General Responses to Customer Issues."

Jim Brown, 801 Navidad Bank Court, Fairfield Harbour. Tr. Vol. 1, pp. 23-25

Mr. Brown opposed a rate increase and he stated that the bills are too high in the community in comparison to the cities in which he previously lived. He had to put in a new water filter system because the water is not drinkable and there is black "crud" in the water. Finally, Mr. Brown would like to see more transparency in the profits.

Company's Response: The Company refers to and incorporates by reference its "General Responses to Customer Issues."

Mike Shannon, 1033 Barkentine Drive, Fairfield Harbour, Tr. Vol 1, pp. 25-27.

Mr. Shannon opposed a rate increase due to the short interval between and frequency of rate cases. He noted that there are fixed income customers, and he objected to paying "availability charges" for three other undeveloped lots he owns.

Company's Response: The Company refers to and incorporates by reference its "General Responses to Customer Issues." An additional explanation of availability charges is the following: the Company is obligated to have infrastructure available to serve these undeveloped lots, should the demand occur. A cost is imposed on the Company for installing and maintaining this ability to serve.

Ralph Tridico, 1100 Kea Court, Fairfield Harbour. Tr. Vol 1, pp. 28--38.

Mr. Tridico opposed an additional rate increase, having experienced others. He disputed the need for an increase, asserting that pumps and parts do not cost that much, and the Company is already making a lot of money. He protested the water quality and the need to change filters monthly due to iron, complaining of black mold on the toilet and his requirement to replace his water heater 8 times. His water pressure is good, he confirmed by his own testing methodology that the Company has not flushed, and he stated there is a sinkhole in front of his house which is getting larger.

Company's Response: CWSNC staff met with Mr. Tridico and performed flushing of the dead-end line. Staff also worked with customer by installing a temporary automatic flushing device to address water quality concerns. Staff is monitoring volume of water and total time flushed so that customer does not incur property damage from flushing efforts. Finally, CWSNC is addressing the "sink hole" via testing procedures and will "skim patch" the area when the Company has a paving contractor available in the area.

Irving Joffee, 1014 Pelican Drive, Fairfield Harbour. Tr. Vol. 1, pp. 38--43.

Mr. Joffee opposed a rate increase. He noted that the price of his water in Long Island, New York, was lower than here, despite the higher cost of living in New

York. He also objected to what he calls poor water quality—including the yellow color and the particles

Company's Response: The Company refers to and incorporates by reference its "General Responses to Customer Issues."

Michael Kaplan, 1213 Santa Lucia Road Fairfield Harbour. Tr. Vol. 1, pp. 43--46

Mr. Kaplan was concerned about the rate increase and asserted that the pricing is "over the top."

Company's Response: The Company refers to and incorporates by reference its "General Responses to Customer Issues."

John Gumbel, 107 Boros Landing, Carolina Pines. Tr. Vol. 1, pp. 46—50.

Mr. Gumbel objected to the rate increase.

Company's Response: The Company refers to and incorporates by reference its "General Responses to Customer Issues."

Benny Thompson, 909 Jewel Court, Fairfield Harbour. Tr. Vol 1, pp. 50—55.

Mr. Thompson opposed the rate increase and spoke as a realtor in this community and a resident. He also objected to the water quality, which he said was bad. He testified to having seen stopped up screens and crusting around the faucets and

water sources that come into the house. To address his issues, he installed a water softening system and multiple filters, including ones specific to his sink and his refrigerator. He has not had any direct communication with anyone with the Company, and he acknowledged that flushing occurred in the past.

Company's Response: The Company refers to and incorporates by reference its "General Responses to Customer Issues." Additionally, Mr. Mendenhall met with Mr. Thompson the night of the hearing to discuss his issues, offering to personally meet with him at a time of his choosing to perform isolated testing at his home. Mr. Mendenhall explained to Mr. Thompson that the use of multiple filters in his home system was most likely consuming any free chlorine residual in the water provided to facilitate disinfection to the end tap used in the residence. Mr. Thompson was provided Mr. Mendenhall's business card with company contact, including cell phone.

WILMINGTON HEARING

Mr. David Holsinger (Belvedere Subdivision) was the sole witness to appear to testify in Wilmington, and he expressed surprise that CWSNC was asking for a rate increase so soon after the last one, particularly in light of the federal tax reduction. He noted that his rates had gone up significantly, with no changes in his household, and that flushing had sometimes resulted in staining to his belongings.

Company's Response: The Company refers to and incorporates by reference its "General Responses to Customer Issues."

CWSNC appreciates the willingness of its customers to participate in this process, and the Company understands customers' opposition to rate increases. However, this is a capital-intensive industry and since the last rate case, CWSNC has spent \$18,235,630 in North Carolina. Therefore, if the investments made by CWSNC are proved to be necessary and prudent, recovery of those costs is required in order for the Company to continue to provide good service. The public's assurance of fairness is found in the strict, highly skilled oversight of the Public Staff and the Commission.

Respectfully submitted, this the 18th day of September 2018.

SANFORD LAW OFFICE, PLLC

Electronically Submitted

/s/Jo Anne Sanford

State Bar No. 6831

Post Office Box 28085

Raleigh, North Carolina 27611

T: 919-210-4900

e-mail: sanford@sanfordlawoffice.com

Robert H. Bennink, Jr.

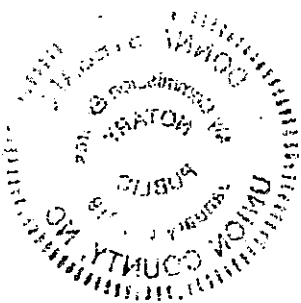
Bennink Law Office

State Bar No. 6502

130 Murphy Drive

Cary, North Carolina 27513
e-mail: benninklawoffice@aol.com

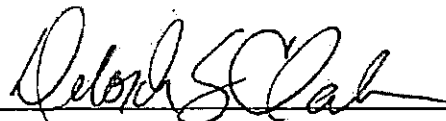
**ATTORNEYS FOR CAROLINA WATER SERVICE, INC.
OF NORTH CAROLINA**



VERIFICATION

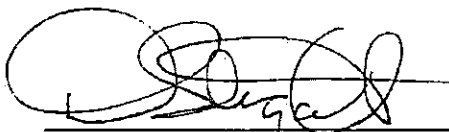
Deborah Clark, being duly sworn, deposes and says:

That she is the Communications Coordinator for Carolina Water Service, Inc. of North Carolina; that she is familiar with the facts set out in this **REPORT ON CUSTOMER COMMENTS FROM NCUC PUBLIC HEARINGS IN NEW BERN and WILMINGTON, NORTH CAROLINA**, filed in Docket No. W-354, Sub 360; that he has read the foregoing Report and knows the contents thereof; and that the same is true of her knowledge except as to those matters stated therein on information and belief, and as to those he believes them to be true.



Deborah Clark

Sworn to and subscribed before me this
the 14 day of September 2018.



Donna Stegall

Notary Public



My commission expires:

01/08/2019

CERTIFICATE OF SERVICE

I hereby certify that on this the 18th day of September 2018, a copy of the foregoing **REPORT ON CUSTOMER COMMENTS** has been duly served upon all parties of record by electronic service, as follows:

Gina C. Holt
Staff Attorney, Legal Division
North Carolina Utilities Commission - Public Staff
gina.holt@psncuc.nc.gov

John Little
Staff Attorney, Legal Division
North Carolina Utilities Commission – Public Staff
John.little@psncuc.nc.gov

Electronically Submitted
/s/Jo Anne Sanford
State Bar No. 6831
SANFORD LAW OFFICE, PLLC
Post Office Box 28085
Raleigh, North Carolina 27611-8085
Tel: (919) 210-4900
sanford@sanfordlawoffice.com

1A
18

OFFICIAL COPY

Oct 04 2018

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. W-354, SUB 360

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of)
Application by Carolina Water Service, Inc. of North Carolina, 4944 Parkway Plaza Boulevard, Suite 375, Charlotte, North Carolina 28217, for Authority to Adjust and Increase Rates for Water and Sewer Utility Service in All of Its Service Areas in North Carolina)
	REPORT ON CUSTOMER COMMENTS FROM PUBLIC HEARING IN CHARLOTTE, NORTH CAROLINA, HELD ON SEPTEMBER 19, 2018

NOW COMES Carolina Water Service, Inc. of North Carolina ("CWSNC" or "Company") and files this report in response to customer concerns raised at the Charlotte public hearing.

The hearing was convened at 7:00 p.m. on September 19, 2018, at the Mecklenburg County Courthouse in Charlotte, North Carolina. Commission Staff Attorney Lemuel Hinton presided on behalf of the North Carolina Utilities Commission ("NCUC" or "Commission").

Staff Attorney John Little appeared for the Public Staff on behalf of the using and consuming public, accompanied by Public Staff Water Engineer Gina Casselberry. Matthew Klein, President of CWSNC, was joined by other Company personnel who were present and available to assist customers with questions or requests. They included: Tony Konsul, Regional Manager; Mark Haver, Area Manager; Jack Jones, Area Manager; and Deborah Clark, Communications

Coordinator. Robert H. Bennink, Jr. of the Bennink Law Office appeared as counsel for CWSNC.

GENERAL RESPONSES TO CUSTOMER ISSUES

CWSNC believes it is important to explain some principles and facts that impact both the Company's service obligation and the rules that apply to the rate-setting process for public utilities such as CWSNC, assuring protections to customers. The Company appreciates this opportunity to speak to its concerned customers across its service areas and to its regulators. These general principles were previously set forth in the Company's Response to Customer Concerns from the New Bern and Wilmington Public Hearings, filed in this docket on September 18, 2018. A discussion of these general principles is attached hereto as Appendix A and they are referred to throughout as "General Responses."

OVERVIEW OF THE CHARLOTTE PUBLIC HEARING

Ten customer witnesses testified, including seven witnesses from the Bradfield Farms community, one from the Hemby Acres community, and two from the Yachtsman ("Queens Harbor") community. Generally, customers who testified expressed concern about: (1) the proposed percentage increase in rates; and/or (2) water quality in terms of particulate and hardness issues.

Patricia Marquardt, 6005 Rockwell Drive, Hemby Acres. Tr. Vol. 3, pp. 12-15.

Ms. Marquardt, who receives only sewer service from the Company, raised several concerns:

- She opposed a rate increase so soon after her rates went up last year;

- She noted that her monthly flat rate is based on water usage that is much higher than hers, and stated that she should get a refund at the end of the year based on her actual usage; and
- She noted that, if Union County provided her sewer service in addition to her water service, she would pay Union County approximately half of what she is paying CWSNC for sewer service.

CWSNC's Response:

- CWSNC's rates require approval from the Commission, which are set after a contested case hearing.
- The base rate for each customer allows for the maintenance and operational costs associated with the water and wastewater facilities across the CWSNC systems. Customers from each community pay the base rate according to the Commission-approved rate structure.
- Union County is afforded the ability to structure utility fees according to the economies of scale associated with a larger customer base. CWSNC's fees for service are based upon the usage of the customers and the rates for wastewater approved for this community.
- Witness Marquardt described no service quality complaints during her testimony. In addition, CWSNC's records indicate that Ms. Marquardt has not heretofore contacted the Company about the quality of the sewer service provided by CWSNC.

William Colyer, 7201 Maitland Lane, Bradfield Farms. Tr. Vol. 3, pp. 17-21.

Mr. Colyer stated that his testimony was representative of other residents of Bradfield Farms, and he presented a letter from the officers of the Bradfield Farms Homeowners' Association ("HOA") which objected to the proposed rate increase. He stated that the quality of service being provided by the Company is satisfactory; however, his concerns and objections included the following.

- Opposition to the rate increase as unreasonable, particularly after rate increases in 2010, 2012, and 2017;
- The fact that the federal tax legislation enacted in 2017 will result in tax reductions and savings for the Company, which should be passed on to customers; and
- His view that the percentage profit under the proposed rate increase is unreasonable.

CWSNC's Response:

- CWSNC's rates require approval of the Commission, which are set after a contested case hearing.
- The rate increases mentioned by Mr. Colyer were approved by the Commission to allow CWSNC to charge rates based on documented operational and capital expenditures, including a return on rate base, which were evaluated for reasonableness and necessity in transparent, public, contested rate cases. As a public utility, CWSNC

is allowed cost recovery (depreciation and a return on rate base) for capital projects only after projects are "used and useful," and in service to customers.

- Mr. Coyer brought forward no service quality complaints in his testimony. He specifically testified that CWSNC provides satisfactory service. In addition, witness Coyer has not heretofore contacted the Company to complain about either the water quality or level of service provided by CWSNC.

Nikki Howell, 7219 Duchamp Drive, Bradfield Farms. Tr. Vol. 3, pp. 22-24.

Ms. Howell, the President of the Bradfield Farms HOA, objected to another rate increase, noting that her water bill has nearly doubled, while her Social Security benefits have only slightly increased. She stated that another rate increase would negatively impact Bradfield Farms residents.

CWSNC's Response:

- CWSNC's rates require approval of the Commission, which are set after a contested case hearing.
- Witness Howell described no service quality complaints in her testimony. In addition, the CWSNC's records reflect that Ms. Howell has not contacted the Company regarding either the quality of the water or the level of service received.

Griffin Rice, 7109 Scuppernong Court, Bradfield Farms. Tr. Vol. 3, pp. 25-27.

Mr. Rice, a Bradfield Farms customer for two years, asserted that, if CWSNC receives the water and sewer rate increases that it is requesting in this case, his total monthly water and sewer bill will be 104% higher than the average bill he was charged just eleven months ago. He opposed another increase in rates for water and sewer service and noted that his average usage has actually declined.

CWSNC's Response:

- CWSNC's rates require approval of the Commission, which are set after a contested case hearing.
- CWSNC's records indicate that witness Rice's average gallon usage has been the same from 2017 through 2018.
- Witness Rice described no service quality complaints in his testimony.

Margaret Quan, 10645 Jardin Way, Bradfield Farms. Tr. Vol. 3, pp. 27-29.

Ms. Quan opposed the Company's proposed rate increase and claimed that infrastructure investments have not been made within Bradfield Farms. She questioned why the residents of Bradfield Farms should have to pay for improvements from which they do not benefit.

CWSNC's Response:

- CWSNC's water and sewer rates require approval of the Commission, which are set after a contested case hearing.

- CWSNC has provided Bradfield Farms various services and other investments, including maintenance of water lines, meter replacements/repairs, replacement of motors and pumps, a manhole rehabilitation and replacement project, meter box replacement projects, and road repairs resulting from water line repairs, as well as the daily maintenance of the water and sewer service provided to the customers. This service also includes providing safe, reliable, and abundant supplies of water and sewage treatment that meets all state and federal testing requirements.
- Witness Quan described no service quality complaints in her testimony. In addition, according to the Company's records, Ms. Quan has not contacted the Company to register a complaint concerning either the quality of the water or the level of water and sewer service being provided.

Deborah Atkinson, 11008 Scrimshaw Lane, Bradfield Farms. Tr. Vol. 3, pp. 29-31.

Ms. Atkinson opposed a rate increase so soon after the one ordered within the last year, noting that another rate increase would mean two rate increases in less than twelve months with "no additional benefits."

CWSNC's Response:

- CWSNC filed this rate increase application to seek Commission approval of the recovery of expenditures that are not reflected in the current rates. The application for a rate increase is contested by the Public Staff and is subject to examination by two additional intervenors—including the North Carolina

Attorney General. Any rate increase will only be allowed by the Commission after a full series of both public and evidentiary hearings.

- Witness Atkinson described no service quality complaints in her testimony. In addition, Ms. Atkinson has not contacted CWSNC regarding either water quality concerns or the level of water and sewer services being delivered.

Nicholas Steven Kirkley, 6800 Brancusi Court, Bradfield Farms. Tr. Vol. 3, pp. 31-34.

Mr. Kirkley presented both a petition signed by approximately 175 residents of the Bradfield Farms community and a letter he sent to the Commission—both in opposition to the rate increase.

CWSNC's Response:

- The petition and letter of opposition have been received and reviewed by CWSNC staff.
- CWSNC's water and sewer rates require approval of the Commission, which are set after a contested case hearing.
- Witness Kirkley described no service quality complaints his testimony. In addition, Mr. Kirkley has, to date, not contacted CWSNC to complain about either the quality of the water or the level of water and sewer utility service he receives from CWSNC.

Tom Moody, 14615 Waterside Drive, The Yachtsman. Tr. Vol. 3, pp. 35-42.

Mr. Moody presented a petition in opposition to the rate increase, which he testified was signed by 95% of The Yachtsman community representatives. He also spoke to the following:

- His observation that The Yachtsman subdivision bills are much higher than those in Bradfield Farms, despite his view that the usage is probably lower in The Yachtsman, which contains small townhomes without yards;
- The rate comparisons between CWSNC and those of other utility providers (referenced in his letter to the Attorney General and the Public Staff opposing the proposed rate increase);
- An allegation that incorrect meter reads in The Yachtsman community lead to bills that are erroneously high;
- CWSNC's failure to provide billing relief associated with a water softener filter event in May 2018;
- The hardness of the water in The Yachtsman community, which he alleged impacts property values because of harmful "erosion" in pipes and build-up around faucets; and
- The fact that his bill has quadrupled since he became a customer of the Company, despite his lowered consumption.

CWSNC's Response:

- The rates for this community and all other CWSNC service communities are set by the Commission based on its full examination of the Company's Applications.
- This subdivision has two HOA's. In the first HOA, the customers are billed off a master meter. Thus, all those customers are billed the same amount.
- In the second HOA, all the customers have meters for each home and thus are charged a base fee and a volumetric fee for the amount of water they use. CWSNC has no records of meters being incorrectly read, resulting in erroneous billing.
- On May 31, 2018, the Company found that Water Softener B required a replacement piston and, on June 6, 2018, the new piston was installed by the Company's contractor. However, the contractor also found that the motor had burned out due to the bent piston. The contractor ordered a new motor which was installed on June 14, 2018. CWSNC has not experienced any other issues with Water Softener B since the motor was replaced. No billing relief was given to the customers because water service was never disrupted by the repair.
- Water hardness is not regulated by the North Carolina Department of Environmental Quality ("DEQ"); therefore, CWSNC is not required to provide water softening. Nonetheless, CWSNC has a water softening

system in place to resolve the hardness concern for the customers in The Yachtsman community.

- CWSNC's records indicate that Mr. Moody's consumption averages 3,600 to 4,600 gallons a month (over the last 16 months). Mr. Moody's usage during this timeframe has remained unchanged in that it has not materially increased or decreased.

Karen Cynowa, 14009 Queen's Harbor Rd, The Yachtsman. Tr. Vol. 3, pp. 44-47.

Ms. Cynowa alleged that in 2012, a study was performed on the water in The Yachtsman community which she believes showed evidence of carcinogens in the water. She echoed concerns about the hardness of the water, stating that the water had corroded her hot water heater over a short period of time. She also noted concerns about the age, quality, and accessibility of the Company's meters in the Yachtsman community. Ms. Cynowa appeared to suggest the installation of "smart meters" which could eliminate the need to access the meters at The Yachtsman community.

CWSNC's Response:

- CWSNC conducts required state and federal testing of the water provided to its customer communities and the results of such testing are included in the Annual Water Quality Report to customers.
- There is no indication of any receipt of a report indicating a carcinogen in the water at The Yachtsman community. The water is safe.

- Again, hardness is not regulated by DEQ. However, CWSNC has water softening systems in service within The Yachtsman community to provide this service to our customers.
- There is no indication that the age of or access to the existing water meters is an issue for The Yachtsman community. The future implementation of Automated Meter Reading ("AMR") or Advanced Metering Infrastructure ("AMI") in The Yachtsman community will be considered by the Company.
- Ms. Cynowa has not contacted the Company to complain about either the water quality or level of service she receives.

Michael Tepedino, 10729 Schooner Bay Lane, Bradfield Farms. Tr. Vol. 3, pp. 48-50.

Mr. Tepedino raised concerns about the hardness of the water in Bradfield Farms, stating that it damages the paint on his vehicles and clogs and "corrodes" his showerheads and other appliances.

CWSNC's Response:

- Hardness is not regulated by DEQ. Therefore, CWSNC is not required to provide water softening service to customers.
- For the Company to address the water hardness concerns within the Bradfield Farms community, a water softening system would need to be installed. The cost of a water softening system would be approximately \$800,000. CWSNC is willing to consider such a project after receiving the clear support of the Bradfield Farms community.

- The Company's records show that Mr. Tepedino has not contacted CWSNC concerning any water quality issues regarding the hardness of the water. Also, Mr. Tepedino has not contacted CWSNC to complain about the level of service he receives from the Company.

CWSNC appreciates the willingness of its customers to participate in this process, and the Company understands customers' opposition to rate increases. However, this is a capital-intensive industry and, since the last rate case, CWSNC has invested \$18,235,630 in North Carolina. Therefore, if the investments made by CWSNC are proved to be necessary and prudent, recovery of those costs is required in order for the Company to continue to provide adequate service. The public's assurance of fairness is found in the strict, highly-skilled oversight of the Public Staff and the Commission.

Respectfully submitted, this the 4th day of October 2018.

**ATTORNEYS FOR CAROLINA WATER SERVICE, INC.
OF NORTH CAROLINA**

SANFORD LAW OFFICE, PLLC

Electronically Submitted

/s/Jo Anne Sanford

State Bar No. 6831

Post Office Box 28085

Raleigh, North Carolina 27611

Telephone: 919-210-4900

e-mail: sanford@sanfordlawoffice.com

/s/Robert H. Bennink, Jr.
Bennink Law Office
State Bar No. 6502
130 Murphy Drive
Cary, North Carolina 27513
Telephone: 919-760-3185
e-mail: BenninkLawOffice@aol.com

OFFICIAL COPY

Oct 04 2018

APPENDIX A

**CWSNC RESPONSE TO CUSTOMER CONCERNS
CHARLOTTE PUBLIC HEARING: W-354, SUB 360****GENERAL RESPONSES TO CUSTOMER ISSUES**

1. Proposed Rates – The legal principles that govern ratemaking are set forth in North Carolina General Statutes, Chapter 62, and in rules promulgated by the North Carolina Utilities Commission under those statutes. By law, CWSNC receives a rate increase only if it proves, in the face of an investigation by the Public Staff (and any Intervenor opposition), that such an increase is authorized under the law, based on the actual cost and level of prudent and reasonable investment in plant and operation. Further, investment in plant is *only* recoverable after it has been made, placed into service, and audited by the Public Staff. This principle—referred to as the “used and useful” requirement—applies whether costs are recovered in a general rate case or under a system improvement charge.
2. Rate Comparisons – An attempt to make meaningful comparisons between statewide average costs for all water and wastewater service providers and the costs of a provider like CWSNC often results in an “apples to oranges” assessment. The core distinction is found in the concept of “economies of scale.” The costs of serving an individual customer in Raleigh or Charlotte, by

a governmental utility enterprise, will likely on average be less than the cost of serving the typical CWSNC customer. The urban areas are densely populated, they generally source water from large surface impoundments or rivers, they treat waste in large central treatment facilities, governmental entities tax their citizens, and they are often not required to utilize “cost-of-service” ratemaking, as are the utilities regulated under Chapter 62 of the General Statutes. Contrast this to the areas served by CWSNC and others like it: often rural, far less densely populated, and frequently served by smaller waste treatment plants and by hundreds of wells, drawing water up from rock and dispersed across the state. The difference in cost attributes are obvious and should inform any conversation about comparisons in respective average costs.

3. Legal Compliance Regarding Notice – In a general rate case, the Public Notice to customers is prescribed by the requirements of statute and is issued by the Commission, based upon the input of CWSNC and the Public Staff. It is a joint effort to provide specific information to all customers about current and proposed rates. In a general rate case like this, the length and complexity of the Public Notice serves the purpose of detail and transparency yet is likely daunting to many customers who attempt to understand all its contents and the personal impact.

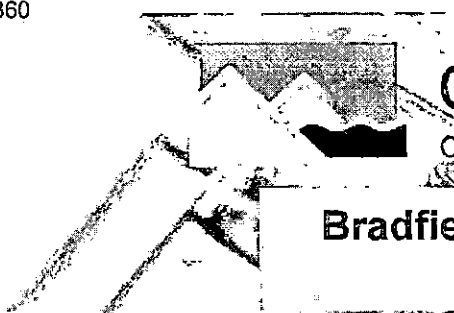
4. Investment in Replacing Aging Infrastructure – As documented by the U.S. Environmental Protection Agency (“EPA”) and the American Water Works Association (“AWWA”), significant investment is needed throughout North

Carolina—more than \$20 billion—to replace aging water and wastewater infrastructure, including drinking water pipes, wastewater collection pipes, lift stations, and wastewater treatment facilities.

5. Water Quality – Water quality can be impacted by, among other things, unplanned water main breaks, unexpected malfunctioning of equipment, and challenges when implementing capital projects. CWSNC's primary focus is on providing the highest level of service related to compliance with primary drinking water quality standards. The Company's latest Annual Water Quality Reports for Bradfield Farms and The Yachtsman (Queens Harbour) reflect "no violations." (See Exhibits 1 and 2)
6. Secondary Water Quality – The Company is also committed to a high level of service regarding secondary water quality standards. Secondary water quality standards address substances that may impact the taste, odor, or color (i.e., the "aesthetics") of a customer's drinking water.
 - a. Iron – As reflected within the referenced Company's latest Annual Water Quality Reports, the Company's latest testing for Iron reveals levels below the Maximum Contaminant Level ("MCL") of 0.3 parts per million ("ppm"). Specifically, the sampling results for Bradfield Farms and The Yachtsman reveal Iron concentrations of 0.377 ppm and 0.124 ppm, respectively.
 - b. Hardness – Hardness reflects the relative amounts of calcium and magnesium ions within drinking water. Generally, "hard water" can

be found throughout North Carolina, including the coastal areas served by groundwater. It is not uncommon for homeowners served by public and private drinking water systems to own and deploy drinking water softeners. However, hardness is not regulated by the North Carolina Department of Environmental Quality ("DEQ"). The Company's experience is that many drinking water customers possess their own drinking water softeners. Historically, the Company has heard from customers with in-home drinking water softeners that they do not wish to pay for—i.e., subsidize—an expensive system-wide water softener to support other customers within the community who do not have an in-home water softening system. In summary, traditionally, the Company leaves drinking water hardness solutions to the individual preferences of its customers, unless a clear and substantial demand for such a capital investment is made by a community.

- c. The Company's On-Going Commitment to Water Quality – The Company is committed to providing the highest level of service to customers, especially regarding water quality. First, the Company continues to implement its flushing program. Second, the Company has explored purchasing automatic flushing hydrants to install throughout Bradfield Farms and other systems.



Carolina Water Service of North Carolina™

Bradfield Farms Water System

PWS ID# 01-60-264

OFFICIAL COPY

Oct 04 2018

Annual Water Quality Report 2017

Message from Matthew Klein, President

Dear Carolina Water Service, Inc. of North Carolina (CWSNC) Customers,

I am pleased to share your Annual Water Quality Report for 2017. This report is designed to inform you of the quality of water we delivered to you over the past year. As the President of your water utility, I fully appreciate our role in the local community. We want you to understand the investments and other efforts we undertake to continually improve the water treatment process and protect our water resources.

Our team is committed to providing safe, reliable, and cost-effective service to you. All of our employees share in our commitment to act with integrity, protect the environment, and enhance the local community.

We are proud to share this report which is based on water quality testing through December 2017. We continually strive to supply water that meets or exceeds all federal and state water quality regulations.

Our local dedicated team of water quality experts is working within your community every day ensuring that you, our customer, are our top priority and that we are providing the highest quality service - now and in the years to come.

Best regards,

Sign up for e-billing now at
www.carolinawaterservicenc.com

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

The Safe Drinking Water Act

The Safe Drinking Water Act was passed in 1974 due to congressional concerns about organic chemical contaminants in drinking water and the inefficient manner by which states supervised and monitored drinking water supplies. Congress' aim was to assure that all citizens served by public water systems would be provided high quality water. As a result, the EPA set enforceable standards for health-related drinking water contaminants. The Act also established programs to protect underground sources of drinking water from contamination.

Source of Drinking Water

Your water comes from several wells located in Mecklenburg County which draw water from a fractured bedrock aquifer. An aquifer is a geological formation that contains water.

Water Conservation

Please be reminded that our water systems in North Carolina are always in some stage of either voluntary or mandatory water conservation restriction. These restrictions may vary weekly due to drought conditions and are dictated by a system established by the North Carolina Utilities Commission in an order dated May 23, 2008. The customers are encouraged to keep informed of current restrictions by checking the CWSNC web page at www.carolinawaterservicenc.com and clicking on the "Community Drought Status" link on the front page. CWSNC posts drought conditions on our Twitter account at [@CarolinaWaterNC](https://twitter.com/CarolinaWaterNC) and on Facebook at [@CarolinaWaterNC](https://www.facebook.com/CarolinaWaterNC). If you do not have access to a computer, call our customer service at (800) 525-7990.

Help Protect our Resources

Help put a stop to the more than **1 trillion gallons of water lost annually** nationwide due to household leaks. These easy to fix leaks waste the average family the amount of water used to fill a backyard swimming pool each year. Plumbing leaks can run up your family's water bill an extra 10 percent or more, but chasing down these water and money wasting culprits is as easy as 1—2—3. Simply check, twist, and replace your way to fewer leaks and more water savings:

- ⇒ **Check** for silent leaks in the toilet with a few drops of food coloring in the tank, and check your sprinkler system for winter damage.
- ⇒ **Twist** faucet valves; tighten pipe connections; and secure your hose to the spigot. For additional savings, twist a WaterSense labeled aerator onto each bathroom faucet to save water without noticing a difference in flow. They can save a household more than 500 gallons each year—equivalent to the amount water used to shower 180 times!
- ⇒ **Replace** old plumbing fixtures and irrigation controllers that are wasting water with WaterSense labeled models that are independently certified to use 20 percent less water and perform well.

We ask that all our customers help us protect our water sources which are the heart of our community, our way of life and our children's future.

EPA Wants You To Know

The sources of drinking water; both tap water and bottled water; include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and may pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- A. **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B. **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- C. **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- D. **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- E. **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

What measures are in place to ensure water is safe to drink?

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. FDA regulations establish limits for contaminants in bottled water that shall provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

Special notice from EPA for the elderly, infants, cancer patients and people with HIV/AIDS or other immune system problems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Information Concerning Lead in Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Carolina Water Service, Inc. of NC is responsible for providing high quality drinking water, but cannot control the variety of

materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Water that remains stationary within your home plumbing for extended periods of time can leach lead out of pipes joined with lead-containing solder as well as brass fixtures or galvanized pipes. Flushing fixtures has been found to be an effective means of reducing lead levels. The flushing process could take from 30 seconds to 2 minutes or longer until it becomes cold or reaches a steady temperature. Faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. Consumers should be aware of this when choosing fixtures and take appropriate precautions. Visit the NSF Web site at www.nsf.org to learn more about lead-containing plumbing fixtures.

If You Have Questions Or Want To Get Involved

Carolina Water Service, Inc. of NC does not hold regular public meetings. If you have any questions about this report or would like a company representative to attend an upcoming homeowners association meeting, please contact Customer Service at 1-800-525-7990.

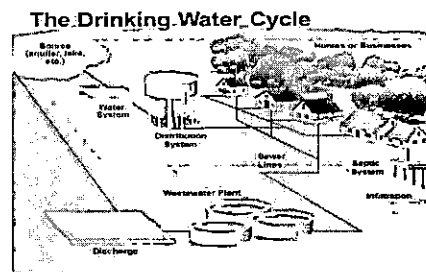
Drain Disposal Information

Sewer overflows and backups can cause health hazards, damage home interiors, and threaten the environment. A common cause is sewer pipes blocked by grease, which gets into the sewer from household drains. Grease sticks to the insides of pipes. Over time, the grease can build up and block the entire pipe. Help solve the grease problem by keeping this material out of the sewer system in the first place:

- Never pour grease down sink drains or into toilets. Scrape grease into a can or trash.
- Put strainers in sink drains to catch food scraps/solids for disposal.

Prescription Medication and Hazardous Waste

Household products such as paints, cleaners, oils, and pesticides, are considered to be household hazardous waste. Prescription and over-the-counter drugs poured down the sink or flushed down the toilet can pass through the wastewater treatment system and enter rivers and lakes (or leach into the ground and seep into groundwater in a septic system). Follow the directions for proper disposal procedures. **Do not flush hazardous waste or prescription and over-the-counter drugs down the toilet or drain.** They may flow downstream to serve as sources for community drinking water supplies. Many communities offer a variety of options for conveniently and safely managing these items. For more information, visit the EPA website at: www.epa.gov/hw/household-hazardous-waste-hhw.



Key to Water Quality Terms

In order to help you understand this report, we want you to understand a few terms and abbreviations that are contained in it.

- **Action level (AL)** - action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Locational Running Annual Average (LRAA)** - The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.
- **Maximum contaminant level (MCL)** - The maximum contaminant level is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- **Maximum contaminant level goal (MCLG)** - The "goal" is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.
- **Maximum Residual Disinfectant Level (MRDL)** - The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Goal (MRDLG)** - The Level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.
- **Non-Detects (ND)** - laboratory analysis indicates that the constituent is not present.
- **Not-Applicable (N/A)** - Information not applicable/not required for that particular water system or for that particular Rule.
- **Parts per million (ppm) or milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion (ppb) or micrograms per liter (ug/l)** - one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.
- **Parts per trillion (ppt) or Nanograms per liter (nanograms/L)** - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- **Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.
- **Running Annual Average (RAA)** - Average of four consecutive quarters of sample analytical results used to determine compliance.
- **Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Source Water Assessment Program (SWAP)

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower.

The relative susceptibility rating of each source for Bradfield Farms was determined by combining the contaminant rating (number and location of PCS's within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area.). The assessment findings are summarized in the table below:

Susceptibility of Sources to Potential Contaminant Sources (PCSs)

The complete SWAP Assessment report for Bradfield Farms

Source Name	Susceptibility Rating	SWAP Report Date
Well #1	Higher	04/21/2017
Well #2	Moderate	04/21/2017
Well #3	Moderate	04/21/2017
Well #4	Moderate	04/21/2017
Well #6	Moderate	04/21/2017
Well #7	Moderate	04/21/2017

may be viewed on the Web at: <https://deg.nc.gov/swap-nextgen>. Please note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this web site may differ from the results that were available at the time this CCR was prepared.

To obtain a printed copy of this report, please mail a written request to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh 27699-1634, or email request to swap@ncdenr.gov. Please indicate your system name, PWSID, and provide your name, mailing address and phone number. If you have any questions about the SWAP report please contact the Source Water Assessment staff by phone at 919-707-9098.

It is important to understand that a susceptibility rating of "higher" does not imply poor water quality, only the systems' potential to become contaminated by PCS's in the assessment area.

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The table below lists all the drinking water contaminants that we detected in the last round of sampling for the particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2017. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.



Note: The Environmental Protection Agency (EPA) requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table below are the only contaminants detected in your drinking water.

Water Quality Test Results

Radioactive Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Alpha emitters excluding radon and uranium (pCi/L)	2012/2013	N	1.48	ND – 1.48	0	15	Erosion of natural deposits
Uranium (pCi/L)	2012/2013	N	2.25	ND – 2.25	0	20.1	Erosion of natural deposits
Combined radium (pCi/L)	2010/2013	N	1.0	ND – 1.0	0	5	Erosion of natural deposits

Disinfectant Residuals Summary

Contaminant (units)	Year Sampled	MCL/MRDL Violation Y/N	Your Water (highest RAA)	Range Low High	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	2017	N	1.09	0.6 -1.47	4	4	Water additive used to control microbes

Inorganic Contaminants

Contaminant (units)	Date Sampled	MCL Violation Y/N	Your Water	Range Low High	MRDLG	MRDL	Likely Source of Contamination
Fluoride (ppm)	2015/2017	N	0.79	ND - 0.79	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.

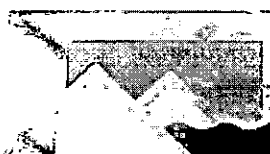
Lead and Copper Contaminants

Contaminant (units)	Sample Date	Your Water	# of sites found above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) (90 th percentile)	Aug 2015	0.221	0	1.3	AL= 1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.

Violations

In 2017, Carolina Water Service, Inc. of North Carolina performed all required monitoring for contaminants. In addition, no violations from the North Carolina Department of Environmental Quality were received and we were in compliance with applicable testing and reporting requirements.





Carolina Water Service of North Carolina™

Queens Harbor Water System

PWS ID# 01-60-249

Annual Water Quality Report 2017

Message from Matthew Klein, President

Dear Carolina Water Service, Inc. of North Carolina (CWSNC) Customers,

I am pleased to share your Annual Water Quality Report for 2017. This report is designed to inform you of the quality of water we delivered to you over the past year. As the President of your water utility, I fully appreciate our role in the local community. We want you to understand the investments and other efforts we undertake to continually improve the water treatment process and protect our water resources.

Our team is committed to providing safe, reliable, and cost-effective service to you. All of our employees share in our commitment to act with integrity, protect the environment, and enhance the local community.

We are proud to share this report which is based on water quality testing through December 2017. We continually strive to supply water that meets or exceeds all federal and state water quality regulations.

Our local dedicated team of water quality experts is working within your community every day ensuring that you, our customer, are our top priority and that we are providing the highest quality service - now and in the years to come.

Best regards,

Sign up for e-billing now at
www.carolinawaterservicenc.com

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

The Safe Drinking Water Act

The Safe Drinking Water Act was passed in 1974 due to congressional concerns about organic chemical contaminants in drinking water and the inefficient manner by which states supervised and monitored drinking water supplies. Congress' aim was to assure that all citizens served by public water systems would be provided high quality water. As a result, the EPA set enforceable standards for health-related drinking water contaminants. The Act also established programs to protect underground sources of drinking water from contamination.

Source of Drinking Water

Your water comes from several wells located in Mecklenburg County which draw water from a fractured bedrock aquifer. An aquifer is a geological formation that contains water.

Water Conservation

Please be reminded that our water systems in North Carolina are always in some stage of either voluntary or mandatory water conservation restriction. These restrictions may vary weekly due to drought conditions and are dictated by a system established by the North Carolina Utilities Commission in an order dated May 23, 2008. The customers are encouraged to keep informed of current restrictions by checking the CWSNC web page at www.carolinawaterservicenc.com and clicking on the "Community Drought Status" link on the front page. CWSNC posts drought conditions on our Twitter account at @CarolinaWaterNC and on Facebook at @CarolinaWaterNC. If you do not have access to a computer, call our customer service at (800) 525-7990.

Help Protect our Resources

Help put a stop to the more than 1 trillion gallons of water lost annually nationwide due to household leaks. These easy to fix leaks waste the average family the amount of water used to fill a backyard swimming pool each year. Plumbing leaks can run up your family's water bill an extra 10 percent or more, but chasing down these water and money wasting culprits is as easy as 1—2—3. Simply check, twist, and replace your way to fewer leaks and more water savings:

- ⇒ **Check** for silent leaks in the toilet with a few drops of food coloring in the tank, and check your sprinkler system for winter damage.
- ⇒ **Twist** faucet valves; tighten pipe connections; and secure your hose to the spigot. For additional savings, twist a WaterSense labeled aerator onto each bathroom faucet to save water without noticing a difference in flow. They can save a household more than 500 gallons each year—equivalent to the amount water used to shower 180 times!
- ⇒ **Replace** old plumbing fixtures and irrigation controllers that are wasting water with WaterSense labeled models that are independently certified to use 20 percent less water and perform well.

We ask that all our customers help us protect our water sources which are the heart of our community, our way of life and our children's future.

OFFICIAL COPY

Oct 04 2018

EPA Wants You To Know

The sources of drinking water; both tap water and bottled water; include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and may pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- A. **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B. **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- C. **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- D. **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- E. **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

What measures are in place to ensure water is safe to drink?

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. FDA regulations establish limits for contaminants in bottled water that shall provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

Special notice from EPA for the elderly, infants, cancer patients and people with HIV/AIDS or other immune system problems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Information Concerning Lead in Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Carolina Water Service, Inc. of NC is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes

before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Water that remains stationary within your home plumbing for extended periods of time can leach lead out of pipes joined with lead-containing solder as well as brass fixtures or galvanized pipes. Flushing fixtures has been found to be an effective means of reducing lead levels. The flushing process could take from 30 seconds to 2 minutes or longer until it becomes cold or reaches a steady temperature. Faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. Consumers should be aware of this when choosing fixtures and take appropriate precautions. Visit the NSF Web site at www.nsf.org to learn more about lead-containing plumbing fixtures.

If You Have Questions Or Want To Get Involved

Carolina Water Service, Inc. of NC does not hold regular public meetings. If you have any questions about this report or would like a company representative to attend an upcoming homeowners association meeting, please contact Customer Service at 1-800-525-7990.

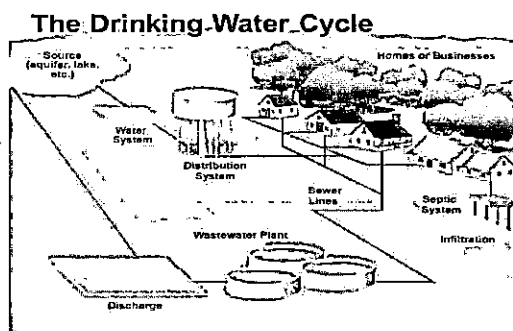
Drain Disposal Information

Sewer overflows and backups can cause health hazards, damage home interiors, and threaten the environment. A common cause is sewer pipes blocked by grease, which gets into the sewer from household drains. Grease sticks to the insides of pipes. Over time, the grease can build up and block the entire pipe. Help solve the grease problem by keeping this material out of the sewer system in the first place:

- Never pour grease down sink drains or into toilets. Scrape grease into a can or trash.
- Put strainers in sink drains to catch food scraps/solids for disposal.

Prescription Medication and Hazardous Waste

Household products such as paints, cleaners, oils, and pesticides, are considered to be household hazardous waste. Prescription and over-the-counter drugs poured down the sink or flushed down the toilet can pass through the wastewater treatment system and enter rivers and lakes (or leach into the ground and seep into groundwater in a septic system). Follow the directions for proper disposal procedures. **Do not flush hazardous waste or prescription and over-the-counter drugs down the toilet or drain.** They may flow downstream to serve as sources for community drinking water supplies. Many communities offer a variety of options for conveniently and safely managing these items. For more information, visit the EPA website at: www.epa.gov/hw/household-hazardous-waste-hhw.



Key to Water Quality Terms

In order to help you understand this report, we want you to understand a few terms and abbreviations that are contained in it.

- **Action level (AL)** - action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Locational Running Annual Average (LRAA)** - The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.
- **Maximum contaminant level (MCL)** - The maximum contaminant level is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- **Maximum contaminant level goal (MCLG)** - The "goal" is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.
- **Maximum Residual Disinfectant Level (MRDL)** - The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Goal (MRDLG)** - The Level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.
- **Non-Detects (ND)** - laboratory analysis indicates that the constituent is not present.
- **Not-Applicable (N/A)** - Information not applicable/not required for that particular water system or for that particular Rule.
- **Parts per million (ppm) or milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion (ppb) or micrograms per liter (ug/l)** - one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.
- **Parts per trillion (ppt) or Nanograms per liter (nanograms/L)** - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- **Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.
- **Running Annual Average (RAA)** - Average of four consecutive quarters of sample analytical results used to determine compliance.
- **Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- **Avg** - Regulatory compliance with some MCLs is based on running annual average of monthly samples.

Source Water Assessment Program (SWAP)

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower.

The relative susceptibility rating of each source for Queens Harbor was determined by combining the contaminant rating (number and location of PCS's within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area.). The assessment findings are summarized in the table below:

Susceptibility of Sources to Potential Contaminant Sources (PCSs)

Source Name	Susceptibility Rating	SWAP Report Date
Well #1	Moderate	04/21/2017
Well #2	Moderate	04/21/2017
Well #3	Moderate	04/21/2017

The complete SWAP Assessment report for Queens Harbor may be viewed on the Web at: <https://deq.nc.gov/swap-nextgen>. Please note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this web site may differ from the results that were available at the time this CCR was prepared.

To obtain a printed copy of this report, please mail a written request to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh 27699-1634, or email request to swap@ncdenr.gov. Please indicate your system name, PWSID, and provide your name, mailing address and phone number. If you have any questions about the SWAP report please contact the Source Water Assessment staff by phone at 919-707-9098.

It is important to understand that a susceptibility rating of "higher" does not imply poor water quality, only the systems' potential to become contaminated by PCS's in the assessment area.

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The table below lists all the drinking water contaminants that we detected in the last round of sampling for the particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2017. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.



Note: The Environmental Protection Agency (EPA) requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table below are the only contaminants detected in your drinking water.

Water Quality Test Results

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants							
Fluoride (ppm)	11/02/2015	N	0.31	0.26- 0.31	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.

Radioactive Contaminants

Alpha emitters (pCi/L)	2013	N	3.92	2.31-3.92	0	15	Erosion of natural deposits
Uranium (pCi/L)	2013	N	0.79	0.78-0.79	0	20.1	Erosion of natural deposits

Stage 2 Disinfection Byproduct Compliance (Collected from the Distribution System)

TTHM (ppb) [Total Trihalomethanes]	2017	N	12.6	N/A	N/A	80	By-product of drinking water chlorination
HAA5 (ppb) [Total Haloacetic Acids]	2017	N	1.8	N/A	N/A	60	By-product of drinking water disinfection

Disinfectant Residuals Summary (Collected from the Distribution System)

Contaminant (units)	Year Sampled	MRDL Violation Y/N	Your Water (highest RAA)	Range Low High	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	2017	N	0.82	0.40-1.04	4	4	Water additive used to control microbes

Lead and Copper Contaminants (Collected from the Distribution System)

Contaminant (units)	Sample Date	Your Water	# of sites found above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) (90 th percentile)	Aug 2015	0.388	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Violations

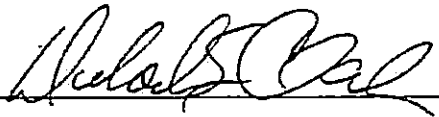
In 2017, Carolina Water Service, Inc. of North Carolina performed all required monitoring for contaminants. In addition, no violations from the North Carolina Department of Environmental Quality were received and we were in compliance with applicable testing and reporting requirements.



VERIFICATION

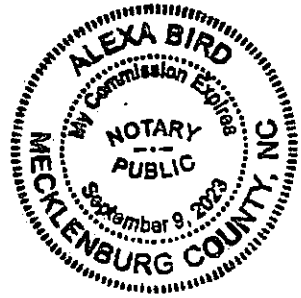
Deborah Clark, being duly sworn, deposes and says:

That she is the Communications Coordinator for Carolina Water Service, Inc. of North Carolina; that she is familiar with the facts set out in this **REPORT ON CUSTOMER COMMENTS FROM PUBLIC HEARING IN CHARLOTTE, NORTH CAROLINA, HELD ON SEPTEMBER 19, 2018**, filed in Docket No. W-354, Sub 360; that she has read the foregoing Report and knows the contents thereof; and that the same is true of her knowledge except as to those matters stated therein on information and belief, and as to those she believes them to be true.


Deborah Clark

Sworn to and subscribed before me this
the 4 day of October 2018.


Notary Public



My Commission Expires: 09.09.2023

CERTIFICATE OF SERVICE

I hereby certify that on this the 4th day October 2018, a copy of the foregoing
**REPORT ON CUSTOMER COMMENTS FROM PUBLIC HEARING IN
CHARLOTTE, NORTH CAROLINA, HELD ON SEPTEMBER 19, 2018**, has been
duly served upon all parties of record by electronic service, as follows:

Gina C. Holt
Staff Attorney, Legal Division
North Carolina Utilities Commission - Public Staff
gina.holt@psncuc.nc.gov

William Grantmyre
Staff Attorney, Legal Division
North Carolina Utilities Commission – Public Staff
william.grantmyre@psncuc.nc.gov

John Little
Staff Attorney, Legal Division
North Carolina Utilities Commission – Public Staff
john.little@psncuc.nc.gov

Margaret A. Force
Assistant Attorney General
North Carolina Department of Justice
pforce@ncdoj.gov

Dwight W. Allen, Britton H. Allen, and Brady W. Allen
The Allen Law Offices, PLLC
dallen@theallenlawoffices.com
bballen@theallenlawoffices.com
brady.allen@theallenlawoffices.com
Attorneys for Corolla Light Community Association, Inc.

Electronically Submitted
/s/Jo Anne Sanford
State Bar No. 6831
SANFORD LAW OFFICE, PLLC
Post Office Box 28085
Raleigh, North Carolina 27611-8085
Telephone: (919) 210-4900

1A
v8

OFFICIAL COPY

Oct 15 2018

STATE OF NORTH CAROLINA

**UTILITIES COMMISSION
RALEIGH**

DOCKET NO. W-354, SUB 360

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of

Application by Carolina Water Service,)
Inc. of North Carolina, 4944 Parkway)
Plaza Boulevard, Suite 375, Charlotte,)
North Carolina 28217, for Authority to)
Adjust and Increase Rates for Water)
and Sewer Utility Service in All of Its)
Service Areas in North Carolina)

**REPORT ON CUSTOMER
COMMENTS FROM PUBLIC
HEARING IN ASHEVILLE,
NORTH CAROLINA, HELD ON
SEPTEMBER 26, 2018**

NOW COMES Carolina Water Service, Inc. of North Carolina ("CWSNC" or "Company") and files this report in response to customer concerns raised at the Asheville public hearing.

The hearing was convened at 7:00 p.m. on September 26, 2018 at the Buncombe County Courthouse in Asheville, North Carolina. Chairman Edward Finley presided on behalf of the North Carolina Utilities Commission ("NCUC" or "Commission"), and was joined by Commissioners James G. Patterson, Jerry C. Dockham, Lyons Gray, Daniel Clodfelter, and Charlotte A. Mitchell.

Staff Attorney Gina Holt appeared for the Public Staff on behalf of the using and consuming public, accompanied by Public Staff Water Engineer Gina Casselberry. Matthew Klein, President of CWSNC, was accompanied by other

Company personnel who were available to assist customers with questions or requests. They included: Tony Konsul, Regional Manager; Neal Reece, Stacy Adcock, Gary Peacock, and Philip Murphy, Area Managers; Renee Guay, Health, Safety and Environmental Officer; Dewayne Lightle, Lead Operator; and Deborah Clark, Communications Coordinator. Jo Anne Sanford of Sanford Law Office, PLLC appeared as counsel for CWSNC.

GENERAL RESPONSES TO CUSTOMER ISSUES

CWSNC believes it important to explain some principles and facts that impact both the Company's service obligation and the rules that apply to the rate-setting process for public utilities such as CWSNC, assuring protections to customers. The Company appreciates this opportunity to speak to concerned customers across its service areas and to its regulators. These general principles were set forth in the Company's *Response to Customer Concerns* from the New Bern and Wilmington Public Hearing, filed in this docket on September 18, 2018. They are attached hereto as Appendix A and are referred to throughout as "General Responses."

OVERVIEW OF THE ASHEVILLE PUBLIC HEARING

Five (5) witnesses testified, including two (2) witnesses from the Fairfield Mountain of Lake Lure community, one (1) from the Mt. Carmel community and one (1) from the Woodhaven community. Generally, customers who testified expressed concern about: (1) the proposed percentage increase in rates; and—in one instance—(2) water quality.

SPECIFIC RESPONSES TO CUSTOMER TESTIMONY FROM ASHEVILLE

Jack Zinselmeier, 157 Bluebird Road, Fairfield Community of Lake Lure. *Tr. Vol. 5, pp. 11-15.*

Mr. Zinselmeier noted that there have been six rate increases since 2004, adding up to a 120% increase. He stated that a guaranteed profit margin does nothing to increase the Company's productivity and noted that there have been increases in salaries for the Company's employees as a result of prior rate increases. Finally, Mr. Zinselmeier stated that the rate increases are not resulting in better service and raised an issue about a road in his subdivision that had a hole in it from a major water leak. Mr. Zinselmeier submitted a photo of the road and stated that it took the Company six months to repair it.

Company Response:

First, it should be reiterated that neither CWSNC nor any other regulated utility in North Carolina is guaranteed a specific return or profit. Chapter 62 of the North Carolina General Statutes provides, generally, that after a contested case evaluation in a rate case and upon a decision by the Commission, a utility has the *opportunity* to earn an "authorized" return. It is an opportunity, not a guarantee.

Second, the Company's employees experienced a salary increase based on the cost of living and performance, which is in accordance with comparable utilities. Employee retention is a concern and to keep certified, professional employees in most areas, the Company must pay competitive wages. Additionally,

the reference to concern about "increases" in "salaries and wages" could be attributed to the Company hiring new staff (i.e., the Company's Communications Coordinator and Health, Safety and Environmental Compliance Manager).

The Company's records indicate that there was a fire hydrant tee that was leaking at 197 Obrien, the leak was repaired on January 16, 2018, and paving for the repair was completed on or before January 31, 2018.

Finally, the investments to the Fairfield Mountain water system included: (1) meter repairs and installations; (2) pump replacements; (3) daily required chemical treatments; and (4) water main repairs, including associated paving of roads, required tests, and inspections.

Phil Reitano, 135 Hawk's Nest Trail, Fairfield Communities of Lake Lure, Tr.
Vol. 5, pp. 16-20.

Mr. Reitano, representing the Property Owner's Association, indicated that residents of the community, many of whom are retired and on fixed incomes, object strongly to another rate increase. He added that the Company has not provided justification or quantitative information regarding infrastructure improvements or long-range plans for improved water resources that could justify the increase. He noted that there have been six rate increases in ten years, and that this requested increase of approximately 15% exceeds any increase in inflation. He stated that information about the Apple Valley project would help the residents understand more about the Company's investments in the area.

Company's Response:

First, CWSNC's rates require approval from the Commission, which are set after a contested rate hearing. The base rates for each customer support the maintenance and operational costs associated with the water or wastewater facilities, respectively, across the CWSNC systems. Customers from each community pay the base rate according to the Commission-approved rate structure.

Second, the investments to the Fairfield Mountain water system included: (1) meter repairs and installations; (2) pump replacements; (3) daily required chemical treatments; and (4) water main repairs, including associated paving of roads, required tests, and inspections.

Third, the Company recently completed a major capital project within the community. The Apple Valley Radium Treatment System capital project was a \$325,000 radium treatment system, concluded in August 2018. The purpose of this capital project was to install a permanent treatment system to remove radium from Apple Valley Well No. 8. The treatment consists of softening by ion exchange using two 36" diameter softeners and one 50" diameter brine tank.

Other work performed included the addition of a new well/filter building, well pump, booster pumps, associated piping, new electrical installation, and the addition of a 15,000-gallon back wash tank. The Company has worked closely with POA Member Helen Martin for approximately two (2) years regarding the design, construction, and implementation of this capital project.

Gerard Worster, 107 Friendly Lane, Mt. Carmel Community, Tr. Vol.5, pp. 20-26.

Mr. Worster, who receives sewage collection services from the Company, objected to the rate increase. He stated that many residents of his community are on fixed incomes and are struggling. He stated that the Company's rates for sewage collection (only) have gone up four times as quickly as the City of Asheville's water charges, and further stated that the Company has not made improvements that would justify the rate increase. Mr. Worster objected to the impact of consolidated rates and requested that his community be removed from the consolidated ratemaking structure because they only receive partial services. He requested that the Commission do a study on whether it would be possible for the Company to consolidate rates based on costs that are allocated into categories based on the level and kinds of services required. Mr. Worster said that he did not have any service problems.

Company Response:

The Commission allowed CWSNC to move towards a consolidated rate structure for reasons that were and are solidly supportive of rational management and administration of this company. The essential support for this kind of rate structure is found in the fact that virtually every system will sooner or later require significant investment, and a consolidated rate structure smooths the financial

result of that fact and mitigates the impact—potentially catastrophic—on any one system at any given time.

In 2017, the Commission approved a consolidated rate structure for the Company. In 2018, approximately \$112,000 has been expended for general maintenance of the sewer collection system within the community. More specifically, in 2018, the Company completed a \$172,000 collection system rehabilitation capital project within the community.

According to the Company's records, Mr. Worster has not complained about the level of service received from the Company.

Chuck Van Rens, 109 Woodhaven Dr., Woodhaven Subdivision. *Tr. Vol. 5, pp. 26-30.*

Mr. Van Rens objected to "year-on-year double-digit rate increases" and submitted a document into evidence providing detailed information about previous rate increases. He commended several employees of the Company for providing exceptional service and responding to problems efficiently and effectively.

Company Response:

As Mr. Van Rens acknowledged, the Company works diligently with the Woodhaven community to provide the customers with a very high level of service. The Company listened to and followed up on Woodhaven's suggestions on many issues, including planting vegetation to shield a water tank from view of an adjacent customer, moving a security light to keep it from shining into a window, and moving a water main pipe to assist with a legal issue in the community.

Connie Brown, 15 Lynwood Circle, Lee's Ridge Subdivision, Mt. Carmel Service Area. *Tr. Vol. 5, pp. 30-36.*

Ms. Brown, a sewer and wastewater customer of the Company, discussed a service issue in her neighborhood resulting from the frequent Saturday morning pumping by an Asheville Metropolitan Service District ("MSD") truck of a septic line at a location at Erwin Drive. She stated that the lines have sunk too low and do not drain properly, resulting in an offensive smell, and explained that one of her neighbors sometimes flushes the line himself if the MSD truck does not come. Asserting that this issue should have been fixed years ago, Ms. Brown noted that she rarely sees the Company's trucks in the neighborhood. She also objected to the requested rate increase, noting that her sewer bill is twice as high as her water bill, and questioned whether there is a less expensive way for Mt. Carmel residents to receive these services.

Company Response:

First, the Company initially believed its recently-completed sewer collection system capital project addressed Ms. Brown's concerns. However, upon a lengthy discussion with Ms. Brown after the public hearing, the Company realized that the area of concern for Ms. Brown was on a different street. The Company is preparing a capital project to resolve the issue identified by Ms. Brown.

Second, consistent with the Company's maintenance guidelines, 10% of the Company's sewers are cleaned on an annual basis. The Company has "jetted" or

cleaned the sewer line of concern by Ms. Brown to prevent the line from clogging.

Third, the Company is concerned that a well-intended individual is accessing the collection system and will contact him to address the safety and security issue and to provide a Company contact for concerns.

Fourth, concerning rates, the City of Asheville provides water to several thousand customers, thereby employing a significant economy of scale for the rates charged for the service.

Finally, the Company's records do not indicate the receipt of any report of offensive smells by Ms. Brown; that said, CWSNC recognizes and is acting on the issue.

CWSNC appreciates the willingness of its customers to participate in this process, and the Company understands customers' opposition to rate increases. However, this is a capital-intensive industry and since the last rate case, CWSNC has spent \$18,235,630 in North Carolina. Therefore, if the investments made by CWSNC are proved to be necessary and prudent, recovery of those costs is required in order for the Company to continue to provide good service. The public's assurance of fairness is found in the strict, highly skilled oversight of the Public Staff and the Commission.

Respectfully submitted, this the 15th day of October 2018.

SANFORD LAW OFFICE, PLLC

Electronically Submitted

/s/Jo Anne Sanford

State Bar No. 6831

Post Office Box 28085

Raleigh, North Carolina 27611

T: 919-210-4900

e-mail: sanford@sanfordlawoffice.com

Robert H. Bennink, Jr.

Bennink Law Office

State Bar No. 6502

130 Murphy Drive

Cary, North Carolina 27513

e-mail: benninklawoffice@aol.com

**ATTORNEYS FOR CAROLINA WATER SERVICE, INC.
OF NORTH CAROLINA**

APPENDIX A
CWSNC RESPONSE TO CUSTOMER CONCERNS-
ASHEVILLE PUBLIC HEARING: W-354 SUB 360

GENERAL RESPONSES TO CUSTOMER ISSUES

1. Proposed Rates – The legal principles that govern ratemaking are set forth in North Carolina General Statutes, Chapter 62, and in rules promulgated by the North Carolina Utilities Commission under those statutes. By law, CWSNC receives a rate increase only if it proves, in the face of an investigation by the Public Staff (and any Intervenor opposition), that such an increase is authorized under the law, based on the actual cost and level of prudent and reasonable investment in plant and operation. Further, investment in plant is *only* recoverable after it has been made, placed into service, and audited by the Public Staff. This principle—referred to as the “used and useful” requirement—applies whether costs are recovered in a general rate case or under a system improvement charge.
2. Rate Comparisons – An attempt to make meaningful comparisons between statewide average costs for all water and wastewater service providers and the costs of a provider like CWSNC often results in an “apples to oranges” assessment. The core distinction is found in the concept of “economies of scale.” The costs of serving an individual customer in Raleigh or Charlotte,

by a governmental utility enterprise, will likely on average be less than the cost of serving the typical CWSNC customer. The urban areas are densely populated, they generally source water from large surface impoundments or rivers, they treat waste in large central treatment facilities, governmental entities tax their citizens, and they are often not required to utilize “cost-of-service” ratemaking, as are the utilities regulated under Chapter 62 of the General Statutes. Contrast this to the areas served by CWSNC and others like it: often rural, far less densely populated, and frequently served by smaller waste treatment plants and by hundreds of wells, drawing water up from rock and dispersed across the state. The difference in cost attributes are obvious and should inform any conversation about comparisons in respective average costs.

3. Legal Compliance Regarding Notice – In a general rate case, the Public Notice to customers is prescribed by the requirements of statute and is issued by the Commission, based upon the input of CWSNC and the Public Staff. It is a joint effort to provide specific information to all customers about current and proposed rates. In a general rate case like this, the length and complexity of the Public Notice serves the purpose of detail and transparency yet is likely daunting to many customers who attempt to understand all its contents and the personal impact.
4. Investment in Replacing Aging Infrastructure – As documented by the U.S. Environmental Protection Agency (“EPA”) and the American Water Works

Association (“AWWA”), significant investment is needed throughout North Carolina—more than \$20 billion—to replace aging water and wastewater infrastructure, including drinking water pipes, wastewater collection pipes, lift stations, and wastewater treatment facilities.

5. Water Quality – Water quality can be impacted by, among other things, unplanned water main breaks, unexpected malfunctioning of equipment, and challenges when implementing capital projects. CWSNC’s primary focus is on providing the highest level of service related to compliance with primary drinking water quality standards. The Company’s latest Annual Water Quality Reports for Fairfield Mountain, Fairfield Apple Valley, and Woodhaven reflect “no violations.”



Carolina Water Service of North Carolina™

Fairfield Mountain Water System

PWS ID# 01-81-126

Annual Water Quality Report 2017

quality of water we delivered to you over the past year. As the President of your water utility, I fully appreciate our role in the local community. We want you to understand the investments and other efforts we undertake to continually improve the water treatment process and protect our water resources.

Our team is committed to providing safe, reliable, and cost-effective service to you. All of our employees share in our commitment to act with integrity, protect the environment, and enhance the local community.

We are proud to share this report which is based on water quality testing through December 2017. We continually strive to supply water that meets or exceeds all federal and state water quality regulations.

Our local dedicated team of water quality experts is working within your community every day ensuring that you, our customer, are our top priority and that we are providing the highest quality service - now and in the years to come.

Best regards,

Sign up for e-billing now at
www.carolinawaterservicenc.com

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

The Safe Drinking Water Act

The Safe Drinking Water Act was passed in 1974 due to congressional concerns about organic chemical contaminants in drinking water and the inefficient manner by which states supervised and monitored drinking water supplies. Congress' aim was to assure that all citizens served by public water systems would be provided high quality water. As a result, the EPA set enforceable standards for health-related drinking water contaminants. The Act also established programs to protect underground sources of drinking water from contamination.

Source of Drinking Water

Your water comes from several wells located in Rutherford County which draw water from a fractured bedrock aquifer. An aquifer is a geological formation that contains water.

Water Conservation

Please be reminded that our water systems in North Carolina are always in some stage of either voluntary or mandatory water conservation restriction. These restrictions may vary weekly due to drought conditions and are dictated by a system established by the North Carolina Utilities Commission in an order dated May 23, 2008. The customers are encouraged to keep informed of current restrictions by checking the CWSNC web page at www.carolinawaterservicenc.com and clicking on the "Community Drought Status" link on the front page. CWSNC posts drought conditions on our Twitter account at [@CarolinaWaterNC](https://twitter.com/CarolinaWaterNC) and on Facebook at [@CarolinaWaterNC](https://www.facebook.com/CarolinaWaterNC). If you do not have access to a computer, call our customer service at (800) 525-7990.

Help Protect our Resources

Help put a stop to the more than **1 trillion gallons of water lost annually** nationwide due to household leaks. These easy to fix leaks waste the average family the amount of water used to fill a backyard swimming pool each year. Plumbing leaks can run up your family's water bill an extra 10 percent or more, but chasing down these water and money wasting culprits is as easy as 1—2—3. Simply check, twist, and replace your way to fewer leaks and more water savings:

- ⇒ **Check** for silent leaks in the toilet with a few drops of food coloring in the tank, and check your sprinkler system for winter damage.
- ⇒ **Twist** faucet valves; tighten pipe connections; and secure your hose to the spigot. For additional savings, twist a WaterSense labeled aerator onto each bathroom faucet to save water without noticing a difference in flow. They can save a household more than 500 gallons each year—equivalent to the amount water used to shower 180 times!
- ⇒ **Replace** old plumbing fixtures and irrigation controllers that are wasting water with WaterSense labeled models that are independently certified to use 20 percent less water and perform well.

We ask that all our customers help us protect our water sources which are the heart of our community, our way of life and our children's future.

OFFICIAL COPY

Oct 15 2018

EPA Wants You To Know

The sources of drinking water; both tap water and bottled water; include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and may pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- A. **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B. **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- C. **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- D. **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- E. **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

What measures are in place to ensure water is safe to drink?

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. FDA regulations establish limits for contaminants in bottled water that shall provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

Special notice from EPA for the elderly, infants, cancer patients and people with HIV/AIDS or other immune system problems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Information Concerning Lead in Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Carolina Water Service, Inc. of NC is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has

been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Water that remains stationary within your home plumbing for extended periods of time can leach lead out of pipes joined with lead-containing solder as well as brass fixtures or galvanized pipes. Flushing fixtures has been found to be an effective means of reducing lead levels. The flushing process could take from 30 seconds to 2 minutes or longer until it becomes cold or reaches a steady temperature. Faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. Consumers should be aware of this when choosing fixtures and take appropriate precautions. Visit the NSF Web site at www.nsf.org to learn more about lead-containing plumbing fixtures.

If You Have Questions Or Want To Get Involved

Carolina Water Service, Inc. of NC does not hold regular public meetings. If you have any questions about this report or would like a company representative to attend an upcoming homeowners association meeting, please contact Customer Service at 1-800-525-7990.

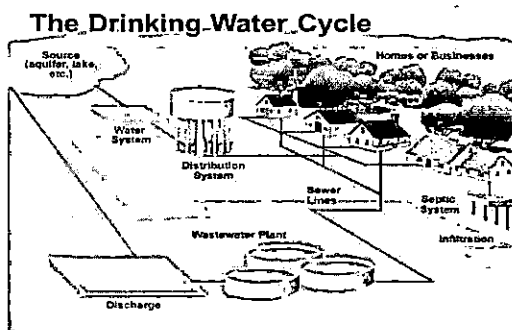
Drain Disposal Information

Sewer overflows and backups can cause health hazards, damage home interiors, and threaten the environment. A common cause is sewer pipes blocked by grease, which gets into the sewer from household drains. Grease sticks to the insides of pipes. Over time, the grease can build up and block the entire pipe. Help solve the grease problem by keeping this material out of the sewer system in the first place:

- Never pour grease down sink drains or into toilets. Scrape grease into a can or trash.
- Put strainers in sink drains to catch food scraps/solids for disposal.

Prescription Medication and Hazardous Waste

Household products such as paints, cleaners, oils, and pesticides, are considered to be household hazardous waste. Prescription and over-the-counter drugs poured down the sink or flushed down the toilet can pass through the wastewater treatment system and enter rivers and lakes (or leach into the ground and seep into groundwater in a septic system). Follow the directions for proper disposal procedures. **Do not flush hazardous waste or prescription and over-the-counter drugs down the toilet or drain.** They may flow downstream to serve as sources for community drinking water supplies. Many communities offer a variety of options for conveniently and safely managing these items. For more information, visit the EPA website at: www.epa.gov/hw/household-hazardous-waste-hhw.



Key to Water Quality Terms

In order to help you understand this report, we want you to understand a few terms and abbreviations that are contained in it.

- **Action level (AL)** - action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Locational Running Annual Average (LRAA)** - The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.
- **Maximum contaminant level (MCL)** - The maximum contaminant level is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- **Maximum contaminant level goal (MCLG)** - The "goal" is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.
- **Maximum Residual Disinfectant Level (MRDL)** - The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Goal (MRDLG)** - The Level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.
- **mrem/year** - millirems per year (a measure of radiation absorbed by the body).
- **Non-Detects (ND)** - laboratory analysis indicates that the constituent is not present.
- **Not-Applicable (N/A)** - Information not applicable/not required for that particular water system or for that particular Rule.
- **Parts per million (ppm) or milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion (ppb) or micrograms per liter (ug/l)** - one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.
- **Parts per trillion (ppt) or Nanograms per liter (nanograms/L)** - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- **Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.
- **Running Annual Average (RAA)** - Average of four consecutive quarters of sample analytical results used to determine compliance.
- **Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- **Avg** - Regulatory compliance with some MCLs is based on running annual average of monthly samples.

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The table below lists all the drinking water contaminants that we detected in the last round of sampling for the particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2017. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Source Water Assessment Program (SWAP)

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower.

The relative susceptibility rating of each source for Fairfield Mountain was determined by combining the contaminant rating (number and location of PCS's within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area.). The assessment findings are summarized in the table below:

Susceptibility of Sources to Potential Contaminant Sources (PCSs)

Source Name	Susceptibility Rating	SWAP Report Date
Well #1	Lower	04/26/2017
Well #2	Lower	04/26/2017
Well #3	Lower	04/26/2017
Well #4	Lower	04/26/2017
Well #5	Lower	04/26/2017

The complete SWAP Assessment report for Fairfield Mountain may be viewed on the Web at: <https://deq.nc.gov/swap-nextgen>. Please note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this web site may differ from the results that were available at the time this CCR was prepared.

To obtain a printed copy of this report, please mail a written request to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh 27699-1634, or email request to swap@ncdenr.gov. Please indicate your system name, PWSID, and provide your name, mailing address and phone number. If you have any questions about the SWAP report please contact the Source Water Assessment staff by phone at 919-707-9098.

It is important to understand that a susceptibility rating of "higher" does not imply poor water quality, only the systems' potential to become contaminated by PCS's in the assessment area.



Note: The Environmental Protection Agency (EPA) requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table below are the only contaminants detected in your drinking water.

Water Quality Test Results

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Inorganics Contaminants							
Fluoride (ppm)	4/13/15	N	1.7	ND - 1.7	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.

Radioactive Contaminants

Alpha emitters (pCi/L)	2013 - 2016	N	6.5	ND - 6.5	0	15	Erosion of natural deposits
Combined radium (pCi/L)	2013 - 2016	N	2.30	ND - 2.30	0	5	Erosion of natural deposits
Uranium (pCi/L)	2013 - 2016	N	7.04	ND - 7.04	0	20.1	Erosion of natural deposits

Disinfectant Residuals Summary

Contaminant (units)	Year Sampled	MRDL Violation Y/N	Your Water (highest RAA)	Range Low High	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	2017	N	0.72	0.3-1.2	4	4.0	Water additive used to control microbes.

Stage 2 Disinfection Byproduct Compliance

Contaminant (units)	Sample Location Code	Year Sampled	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb) [Total Trihalomethanes]	B01	2017	N	8.3	N/A	N/A	80	Byproduct of drinking water disinfection.
HAA5 (ppb) [Total Haloacetic Acids]	B01	2017	N	3.7	N/A	N/A	60	Byproduct of drinking water disinfection.

Lead and Copper Contaminants

Contaminant (units)	Sample Date	Your Water	Number of sites found above the AL	MCLG	AL	Likely Source of Contamination
Copper (ppm) (90 th percentile)	Jun 2015	0.108	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits.

Secondary Contaminants. The PWS Section requires monitoring for other misc. contaminants, some for which the EPA has set national secondary drinking water standards (SMCLs) because they may cause cosmetic effects or aesthetic effects (such as taste, odor, and/or color) in drinking water. The contaminants with SMCLs normally do not have any health effects and normally do not affect the safety of your water.

Water Characteristics Contaminants

Contaminant (units)	Sample Date	Your Water	Range Low High	Secondary MCL
Sulfate (ppm)	2015	36.3	ND - 36.3	250 mg/l

Violations

In 2017, Carolina Water Service, Inc. of North Carolina performed all required monitoring for contaminants. In addition, no violations from the North Carolina Department of Environmental Quality were received and we were in compliance with applicable testing and reporting requirements.





Carolina Water Service of North Carolina™

Fairfield Mountain – Apple Valley

PWS ID #01-81-133

Annual Water Quality Report 2017

OFFICIAL COPY

Oct 15 2018

quality of water we delivered to you over the past year. As the President of your water utility, I fully appreciate our role in the local community. We want you to understand the investments and other efforts we undertake to continually improve the water treatment process and protect our water resources.

Our team is committed to providing safe, reliable, and cost-effective service to you. All of our employees share in our commitment to act with integrity, protect the environment, and enhance the local community.

We are proud to share this report which is based on water quality testing through December 2017. We continually strive to supply water that meets or exceeds all federal and state water quality regulations.

Our local dedicated team of water quality experts is working within your community every day ensuring that you, our customer, are our top priority and that we are providing the highest quality service - now and in the years to come.

Best regards,

Sign up for e-billing now at
www.carolinawaterservicenc.com

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

The Safe Drinking Water Act

The Safe Drinking Water Act was passed in 1974 due to congressional concerns about organic chemical contaminants in drinking water and the inefficient manner by which states supervised and monitored drinking water supplies. Congress' aim was to assure that all citizens served by public water systems would be provided high quality water. As a result, the EPA set enforceable standards for health-related drinking water contaminants. The Act also established programs to protect underground sources of drinking water from contamination.

Source of Drinking Water

Your water comes from several wells located in Rutherford County which draw water from a fractured bedrock aquifer. An aquifer is a geological formation that contains water.

Water Conservation

Please be reminded that our water systems in North Carolina are always in some stage of either voluntary or mandatory water conservation restriction. These restrictions may vary weekly due to drought conditions and are dictated by a system established by the North Carolina Utilities Commission in an order dated May 23, 2008. The customers are encouraged to keep informed of current restrictions by checking the CWSNC web page at www.carolinawaterservicenc.com and clicking on the "Community Drought Status" link on the front page. CWSNC posts drought conditions on our Twitter account at [@CarolinaWaterNC](https://twitter.com/CarolinaWaterNC) and on Facebook at [@CarolinaWaterNC](https://www.facebook.com/CarolinaWaterNC). If you do not have access to a computer, call our customer service at (800) 525-7990.

Help Protect our Resources

Help put a stop to the more than **1 trillion gallons of water lost annually** nationwide due to household leaks. These easy to fix leaks waste the average family the amount of water used to fill a backyard swimming pool each year. Plumbing leaks can run up your family's water bill an extra 10 percent or more, but chasing down these water and money wasting culprits is as easy as 1—2—3. Simply check, twist, and replace your way to fewer leaks and more water savings:

- ⇒ **Check** for silent leaks in the toilet with a few drops of food coloring in the tank, and check your sprinkler system for winter damage.
- ⇒ **Twist** faucet valves; tighten pipe connections; and secure your hose to the spigot. For additional savings, twist a WaterSense labeled aerator onto each bathroom faucet to save water without noticing a difference in flow. They can save a household more than 500 gallons each year—equivalent to the amount water used to shower 180 times!
- ⇒ **Replace** old plumbing fixtures and irrigation controllers that are wasting water with WaterSense labeled models that are independently certified to use 20 percent less water and perform well.

We ask that all our customers help us protect our water sources which are the heart of our community, our way of life and our children's future.

EPA Wants You To Know

The sources of drinking water; both tap water and bottled water; include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and may pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- A. **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B. **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- C. **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- D. **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- E. **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

What measures are in place to ensure water is safe to drink?

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. FDA regulations establish limits for contaminants in bottled water that shall provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

Special notice from EPA for the elderly, infants, cancer patients and people with HIV/AIDS or other immune system problems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Information Concerning Lead in Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Carolina Water Service, Inc. of NC is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes

before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Water that remains stationary within your home plumbing for extended periods of time can leach lead out of pipes joined with lead-containing solder as well as brass fixtures or galvanized pipes. Flushing fixtures has been found to be an effective means of reducing lead levels. The flushing process could take from 30 seconds to 2 minutes or longer until it becomes cold or reaches a steady temperature. Faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. Consumers should be aware of this when choosing fixtures and take appropriate precautions. Visit the NSF Web site at www.nsf.org to learn more about lead-containing plumbing fixtures.

If You Have Questions Or Want To Get Involved

Carolina Water Service, Inc. of NC does not hold regular public meetings. If you have any questions about this report or would like a company representative to attend an upcoming homeowners association meeting, please contact Customer Service at 1-800-525-7990.

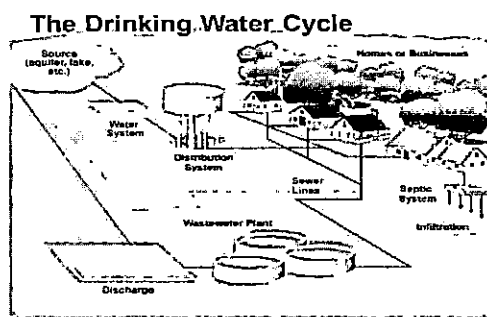
Drain Disposal Information

Sewer overflows and backups can cause health hazards, damage home interiors, and threaten the environment. A common cause is sewer pipes blocked by grease, which gets into the sewer from household drains. Grease sticks to the insides of pipes. Over time, the grease can build up and block the entire pipe. Help solve the grease problem by keeping this material out of the sewer system in the first place:

- Never pour grease down sink drains or into toilets. Scrape grease into a can or trash.
- Put strainers in sink drains to catch food scraps/solids for disposal.

Prescription Medication and Hazardous Waste

Household products such as paints, cleaners, oils, and pesticides, are considered to be household hazardous waste. Prescription and over-the-counter drugs poured down the sink or flushed down the toilet can pass through the wastewater treatment system and enter rivers and lakes (or leach into the ground and seep into groundwater in a septic system). Follow the directions for proper disposal procedures. **Do not flush hazardous waste or prescription and over-the-counter drugs down the toilet or drain.** They may flow downstream to serve as sources for community drinking water supplies. Many communities offer a variety of options for conveniently and safely managing these items. For more information, visit the EPA website at: www.epa.gov/hw/household-hazardous-waste-hhw.



Key to Water Quality Terms

In order to help you understand this report, we want you to understand a few terms and abbreviations that are contained in it.

- **Action level (AL)** - action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Maximum contaminant level (MCL)** - The maximum contaminant level is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- **Maximum contaminant level goal (MCLG)** - The "goal" is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.
- **Maximum Residual Disinfectant Level (MRDL)**: The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Goal (MRDLG)**: The Level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.
- **mrem/year** - millirems per year (a measure of radiation absorbed by the body)
- **Non-Detects (ND)** - laboratory analysis indicates that the constituent is not present.
- **Not-Applicable (N/A)** - Information not applicable/not required for that particular water system or for that particular Rule.
- **Parts per million (ppm) or milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion (ppb) or micrograms per liter (ug/l)** - one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.
- **Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.
- **Running Annual Average (RAA)** - Average of four consecutive quarters of sample analytical results used to determine compliance.
- **Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- **Avg** - Regulatory compliance with some MCLs is based on running annual average of monthly samples.

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The table below lists all the drinking water contaminants that we detected in the last round of sampling for the particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2017. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Source Water Assessment Program (SWAP)

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower.

The relative susceptibility rating of each source for Fairfield Mountain – Apple Valley was determined by combining the contaminant rating (number and location of PCS's within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area.). The assessment findings are summarized in the table below:

Susceptibility of Sources to Potential Contaminant Sources (PCSs)

Source Name	Susceptibility Rating	SWAP Report Date
Well #8	Moderate	04/26/2017
Well #12	Moderate	04/26/2017
Well #13	Lower	04/26/2017
Well #14	Lower	04/26/2017

The complete SWAP Assessment report for Fairfield Mountain – Apple Valley may be viewed on the Web at: <https://deq.nc.gov/swap-nextgen>. Please note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this web site may differ from the results that were available at the time this CCR was prepared.

To obtain a printed copy of this report, please mail a written request to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh 27699-1634, or email request to swap@ncdenr.gov. Please indicate your system name, PWSID, and provide your name, mailing address and phone number. If you have any questions about the SWAP report please contact the Source Water Assessment staff by phone at 919-707-9098.

It is important to understand that a susceptibility rating of "higher" does not imply poor water quality, only the systems' potential to become contaminated by PCS's in the assessment area.



Note: The Environmental Protection Agency (EPA) requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table below are the only contaminants detected in your drinking water.

Water Quality Test Results

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants							
Fluoride (ppm)	2015	N	1.5 (Highest result)	0.44 - 1.5	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Radioactive Contaminants (Highest AVG Result)							
Alpha emitters (pCi/L)	2015	N	10.4	N/A	0	15	Erosion of natural deposits
Combined radium (pCi/L)	2017	Y	5.7*	4.2 - 5.9*	0	5	Erosion of natural deposits
Uranium (pCi/L)	2015	N	12.3	N/A	0	20.1	Erosion of natural deposits
*The above table for the Radioactive Contaminants reports the highest annual average from any one of the three treatment plants (total of four active wells) in the water system. On February 16, 2017, our customers in Apple Valley were notified that one of the three treatment plants had exceeded the MCL for combined radium during the 1st quarter 2017 sampling with an average level of 5.7 pCi/L. The average level for combined radium returned to compliance after 2nd quarter 2017 monitoring, and has remained in compliance since that time. Installation of the treatment system to remove the combined radium has begun and will be completed in 2018. Please see the following EPA health effects for Combined Radium (Radium 226 and Radium 228): <i>Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.</i>							
Stage 2 Disinfection Byproduct Compliance							
TTHM [Total Trihalomethanes] (ppb) Location Code B01	2017	N	6.4	N/A	N/A	80	By-product of drinking water chlorination
Disinfectants Residuals (*highest RAA)							
Chlorine (ppm)	2017	N	0.81	0.4 - 1.4	MRDLG = 4	MRDL = 4	Water additive used to control microbes.

The PWS Section requires monitoring for other misc. contaminants, some for which the EPA has set national *secondary drinking water standards* (SMCLs) because they may cause cosmetic effects or aesthetic effects (such as taste, odor, and/or color) in drinking water. The contaminants with SMCLs normally do not have any health effects and normally do not affect the safety of your water.

Other Miscellaneous Water Characteristics Contaminants

Contaminant (units)	Sample Date	Your Water	Range Low High	SMCL
Sulfate (mg/l)	2015	20.1	ND - 20.1	250 mg/l

Violations

During 2017, Carolina Water Service, Inc. of NC received a violation from the North Carolina Department of Environmental Quality for exceeding the MCL for Combined Radium. The level has since returned to compliance. The installation of the treatment system to remove combined radium continues and will be completed in 2018.





Carolina Water Service of North Carolina™

Woodhaven Water System

PWS ID# 01-45-147

Annual Water Quality Report 2017

OFFICIAL COPY

Oct 15 2018

quality of water we delivered to you over the past year. As the President of your water utility, I fully appreciate our role in the local community. We want you to understand the investments and other efforts we undertake to continually improve the water treatment process and protect our water resources.

Our team is committed to providing safe, reliable, and cost-effective service to you. All of our employees share in our commitment to act with integrity, protect the environment, and enhance the local community.

We are proud to share this report which is based on water quality testing through December 2017. We continually strive to supply water that meets or exceeds all federal and state water quality regulations.

Our local dedicated team of water quality experts is working within your community every day ensuring that you, our customer, are our top priority and that we are providing the highest quality service - now and in the years to come.

Best regards,

Sign up for e-billing now at
www.carolinawaterservicenc.com

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

The Safe Drinking Water Act

The Safe Drinking Water Act was passed in 1974 due to congressional concerns about organic chemical contaminants in drinking water and the inefficient manner by which states supervised and monitored drinking water supplies. Congress' aim was to assure that all citizens served by public water systems would be provided high quality water. As a result, the EPA set enforceable standards for health-related drinking water contaminants. The Act also established programs to protect underground sources of drinking water from contamination.

Source of Drinking Water

Your water comes from several wells located in Henderson County which draw water from a fractured bedrock aquifer. An aquifer is a geological formation that contains water.

Water Conservation

Please be reminded that our water systems in North Carolina are always in some stage of either voluntary or mandatory water conservation restriction. These restrictions may vary weekly due to drought conditions and are dictated by a system established by the North Carolina Utilities Commission in an order dated May 23, 2008. The customers are encouraged to keep informed of current restrictions by checking the CWSNC web page at www.carolinawaterservicenc.com and clicking on the "Community Drought Status" link on the front page. CWSNC posts drought conditions on our Twitter account at @CarolinaWaterNC and on Facebook at @CarolinaWaterNC. If you do not have access to a computer, call our customer service at (800) 525-7990.

Help Protect our Resources

Help put a stop to the more than 1 trillion gallons of water lost annually nationwide due to household leaks. These easy to fix leaks waste the average family the amount of water used to fill a backyard swimming pool each year. Plumbing leaks can run up your family's water bill an extra 10 percent or more, but chasing down these water and money wasting culprits is as easy as 1—2—3. Simply check, twist, and replace your way to fewer leaks and more water savings:

- ⇒ **Check** for silent leaks in the toilet with a few drops of food coloring in the tank, and check your sprinkler system for winter damage.
- ⇒ **Twist** faucet valves; tighten pipe connections; and secure your hose to the spigot. For additional savings, twist a WaterSense labeled aerator onto each bathroom faucet to save water without noticing a difference in flow. They can save a household more than 500 gallons each year—equivalent to the amount water used to shower 180 times!
- ⇒ **Replace** old plumbing fixtures and irrigation controllers that are wasting water with WaterSense labeled models that are independently certified to use 20 percent less water and perform well.

We ask that all our customers help us protect our water sources which are the heart of our community, our way of life and our children's future.

EPA Wants You To Know

The sources of drinking water; both tap water and bottled water; include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and may pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- A. **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B. **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- C. **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- D. **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- E. **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

What measures are in place to ensure water is safe to drink?

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. FDA regulations establish limits for contaminants in bottled water that shall provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

Special notice from EPA for the elderly, infants, cancer patients and people with HIV/AIDS or other immune system problems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Information Concerning Lead in Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Carolina Water Service, Inc. of NC is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has

been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Water that remains stationary within your home plumbing for extended periods of time can leach lead out of pipes joined with lead-containing solder as well as brass fixtures or galvanized pipes. Flushing fixtures has been found to be an effective means of reducing lead levels. The flushing process could take from 30 seconds to 2 minutes or longer until it becomes cold or reaches a steady temperature. Faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. Consumers should be aware of this when choosing fixtures and take appropriate precautions. Visit the NSF Web site at www.nsf.org to learn more about lead-containing plumbing fixtures.

If You Have Questions Or Want To Get Involved

Carolina Water Service, Inc. of NC does not hold regular public meetings. If you have any questions about this report or would like a company representative to attend an upcoming homeowners association meeting, please contact Customer Service at 1-800-525-7990.

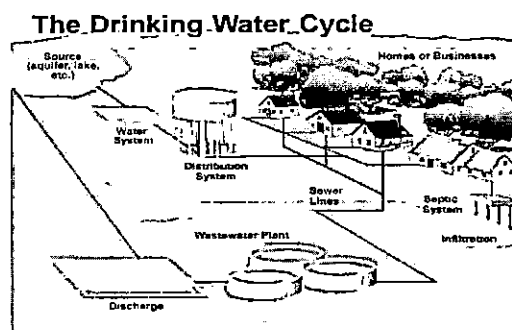
Drain Disposal Information

Sewer overflows and backups can cause health hazards, damage home interiors, and threaten the environment. A common cause is sewer pipes blocked by grease, which gets into the sewer from household drains. Grease sticks to the insides of pipes. Over time, the grease can build up and block the entire pipe. Help solve the grease problem by keeping this material out of the sewer system in the first place:

- Never pour grease down sink drains or into toilets. Scrape grease into a can or trash.
- Put strainers in sink drains to catch food scraps/solids for disposal.

Prescription Medication and Hazardous Waste

Household products such as paints, cleaners, oils, and pesticides, are considered to be household hazardous waste. Prescription and over-the-counter drugs poured down the sink or flushed down the toilet can pass through the wastewater treatment system and enter rivers and lakes (or leach into the ground and seep into groundwater in a septic system). Follow the directions for proper disposal procedures. **Do not flush hazardous waste or prescription and over-the-counter drugs down the toilet or drain.** They may flow downstream to serve as sources for community drinking water supplies. Many communities offer a variety of options for conveniently and safely managing these items. For more information, visit the EPA website at: www.epa.gov/hw/household-hazardous-waste-hhw.



Key to Water Quality Terms

In order to help you understand this report, we want you to understand a few terms and abbreviations that are contained in it.

- **Action level (AL)** - action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Locational Running Annual Average (LRAA)** - The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.
- **Maximum contaminant level (MCL)** - The maximum contaminant level is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- **Maximum contaminant level goal (MCLG)** - The "goal" is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.
- **Maximum Residual Disinfectant Level (MRDL)** - The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Goal (MRDLG)** - The Level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.
- **mrem/year** - millirems per year (a measure of radiation absorbed by the body).
- **Non-Detects (ND)** - laboratory analysis indicates that the constituent is not present.
- **Not-Applicable (N/A)** - Information not applicable/not required for that particular water system or for that particular Rule.
- **Parts per million (ppm) or milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion (ppb) or micrograms per liter (ug/l)** - one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.
- **Parts per trillion (ppt) or Nanograms per liter (nanograms/L)** - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- **Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.
- **Running Annual Average (RAA)** - Average of four consecutive quarters of sample analytical results used to determine compliance.
- **Treatment Technique (TT)** - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- **Avg** - Regulatory compliance with some MCLs is based on running annual average of monthly samples.

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The table below lists all the drinking water contaminants that we detected in the last round of sampling for the particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2017. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Source Water Assessment Program (SWAP)

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower.

The relative susceptibility rating of each source for Woodhaven was determined by combining the contaminant rating (number and location of PCS's within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area.). The assessment findings are summarized in the table below:

Susceptibility of Sources to Potential Contaminant Sources (PCSs)

Source Name	Susceptibility Rating	SWAP Report Date
Well #1	Moderate	04/20/2017
Well #2	Moderate	04/20/2017

The complete SWAP Assessment report for Woodhaven may be viewed on the Web at: <https://deq.nc.gov/swap-nextgen>. Please note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this web site may differ from the results that were available at the time this CCR was prepared.

To obtain a printed copy of this report, please mail a written request to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh 27699-1634, or email request to swap@ncdenr.gov. Please indicate your system name, PWSID, and provide your name, mailing address and phone number. If you have any questions about the SWAP report please contact the Source Water Assessment staff by phone at 919-707-9098.

It is important to understand that a susceptibility rating of "higher" does not imply poor water quality, only the systems' potential to become contaminated by PCS's in the assessment area.



Note: The Environmental Protection Agency (EPA) requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table below are the only contaminants detected in your drinking water.

Water Quality Test Results

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Inorganics Contaminants							
Fluoride (ppm)	2015	N	0.16	N/A	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Volatile Organic Chemical (VOC) Contaminants							
Xylenes, Total (ppm)	2017	N	0.00023	ND - 0.0007	10	10	Discharge from petroleum factories; discharge from chemical factories
Radioactive Contaminants							
Uranium (pCi/L)	2013	N	1.10	N/A	0	20.1	Erosion of natural deposits
Nitrate/Nitrite Contaminants							
Nitrate (as Nitrogen) (ppm)	Apr 10th 2017	N	1.69	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Disinfectant Residuals Summary							
Contaminant (units)	Year Sampled	MRDL Violation Y/N	Your Water (highest RAA)	Range Low High	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	2017	N	1.14	0.8-1.5	4	4.0	Water additive used to control microbes.
Lead and Copper Contaminants							
Contaminant (units)	Sample Date	Your Water	Number of sites found above the AL	MCLG	AL	Likely Source of Contamination	
Copper (ppm) (90 th percentile)	2017	0.288	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	

Violations

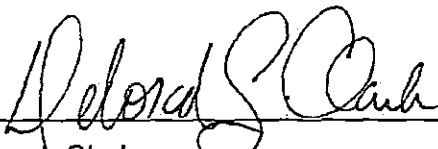
In 2017, Carolina Water Service, Inc. of North Carolina performed all required monitoring for contaminants. In addition, no violations from the North Carolina Department of Environmental Quality were received and we were in compliance with applicable testing and reporting requirements.



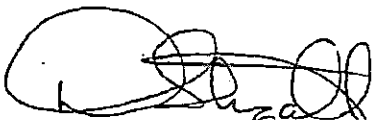
VERIFICATION

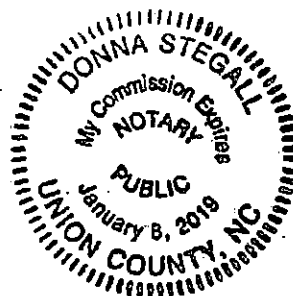
Deborah Clark, being duly sworn, deposes and says:

That she is the Communications Coordinator for Carolina Water Service, Inc. of North Carolina; that she is familiar with the facts set out in this **REPORT ON CUSTOMER COMMENTS FROM NCUC PUBLIC HEARINGS IN ASHEVILLE, NORTH CAROLINA**, filed in Docket No. W-354, Sub 360; that she has read the foregoing Report and knows the contents thereof; and that the same is true of her knowledge except as to those matters stated therein on information and belief, and as to those she believes them to be true.


Deborah Clark

Sworn to and subscribed before me this
the 12 day of October 2018.


Donna Stegall
Notary Public



My commission expires: 01/08/2019

CERTIFICATE OF SERVICE

I hereby certify that on this the 15th day October 2018, a copy of the foregoing **REPORT ON CUSTOMER COMMENTS FROM ASHEVILLE PUBLIC HEARING** has been duly served upon all parties of record by electronic service, as follows:

Gina C. Holt
Staff Attorney, Legal Division
North Carolina Utilities Commission - Public Staff
gina.holt@psncuc.nc.gov

John Little
Staff Attorney, Legal Division
North Carolina Utilities Commission – Public Staff
John.little@psncuc.nc.gov

Dwight Allen
Britton Allen
Brady Allen
The Allen Law Firm
dallen@theallenlawoffices.com

Margaret A. Force
Assistant Attorney General
NC Department of Justice
pforce@ncdoj.gov

Electronically Submitted
/s/Jo Anne Sanford
State Bar No. 6831
SANFORD LAW OFFICE, PLLC
Post Office Box 28085
Raleigh, North Carolina 27611-8085
Tel: (919) 210-4900
sanford@sanfordlawoffice.com

SEWER RATES AND CHARGES

Monthly Metered Sewer Service:

A. Base Facility Charge:

Residential (zero usage) \$ 50.10

Commercial (based on meter size with zero usage)

< 1" meter	\$ 50.10
1" meter	\$ 125.25
1 1/2" meter	\$ 250.50
2" meter	\$ 400.80
3" meter	\$ 751.50
4" meter	\$1,252.50
6" meter	\$2,504.99

B. Usage Charge, per 1,000 gallons
(based on metered water usage) \$ 3.39

Commercial customers, including condominiums or other property owner associations who bill their members directly, shall have a separate account set up for each meter and each meter shall be billed separately based on the size of the meter and usage associated with the meter.

Monthly Metered Purchased Sewer Service:

Collection Charge (Residential and Commercial/per SFE
(Single Family Equivalent) \$ 40.05

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

<u>Service Area</u>	<u>Bulk Provider</u>	
White Oak Plantation/ Lee Forest/Winston Pt.	Johnston County	\$ 4.82
Kings Grant	Two Rivers Utilities	\$ 3.80
College Park	Town of Dallas	\$ 5.70

Monthly Flat Rate Sewer Service: \$ 61.65

Multi-residential customers who are served by a master meter shall be charged the flat rate per unit. \$ 61.65

Three-year WSIC/SSIC Plan
/A
Vol 8

SANFORD LAW OFFICE, PLLC
Jo Anne Sanford, Attorney at Law

May 30, 2018

Ms. M. Lynn Jarvis, Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4325

Via Electronic Delivery

Re: Docket Nos. W-354, Subs 356A and 360
Carolina Water Service, Inc. of North Carolina
Ongoing Three-Year WSIC/SSIC Plan for Carolina Water Service Inc.
of North Carolina, Including All Rate Divisions and Service Areas

Dear Ms. Jarvis:

Pursuant to Commission Rules R7-39(m) and R10-26(m), Carolina Water Service, Inc. of North Carolina ("CWSNC" or "Company") is required to file an Ongoing Three-Year WSIC/SSIC Plan within 60 days of the end of each water system and sewer system improvement charge period ("WSIC/SSIC Period") containing the following information:

a. A detailed description of all proposed eligible water [sewer] system improvements expected to be completed in the initial WSIC [SSIC] Period and an estimate of the cost of the improvements and dates when the improvements will be placed into service; and

b. A brief description of the proposed eligible water [sewer] system improvements, estimated costs, and completion dates for improvements that the Company plans to complete during the two years following the initial WSIC [SSIC] Period.

Pursuant to Commission Rules R7-39(b)(7) and R10-26(b)(7), the WSIC/SSIC Period for CWSNC is the 12-month period ending March 31. Attached please find for filing CWSNC's Ongoing Three-Year WSIC/SSIC Plan, which is a comprehensive Company-wide plan which covers CWSNC as consolidated after

the Commission-approved merger. The attached Ongoing Plan is applicable to all of the Company's Rate Divisions and service areas.

As always, thank you and your staff for your assistance; please feel free to contact me if there are any questions or suggestions.

Sincerely,

Electronically Submitted

/s/Jo Anne Sanford

State Bar No. 6831

Attorney for Carolina Water Service,
Inc. of North Carolina

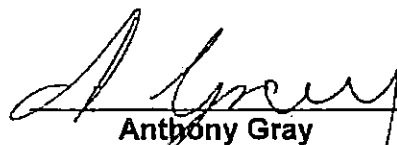
c: Parties of Record

OFFICIAL COPY


May 30 2018

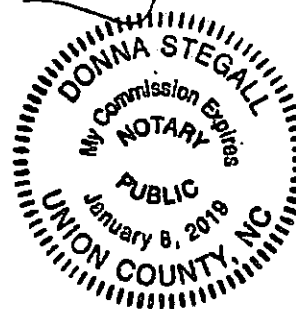
VERIFICATION

Anthony Gray, being duly sworn, deposes and says that he is Senior Financial & regulatory Analysis for Carolina Water Service, Inc. of North Carolina ("CWSNC"); that he is familiar with the facts set out in the Ongoing Three-Year WSIC/SSIC Plan for Carolina Water Service Inc. of North Carolina, filed by CWSNC in Docket Nos. W-354, Subs 356A and 360; that he has read the foregoing Ongoing Three-Year WSIC/SSIC Plan and knows the contents thereof; and that the same are true of his knowledge except as to those matters stated therein on information and belief, and as to those he believes them to be true.


Anthony Gray

Sworn to and subscribed before me this
the 30 day of May, 2018.


Notary Public



My Commission Expires: 01/08/2019

Carolina Water Service, Inc. of North Carolina
W-354, Sub 360
Test Year: December 31, 2017

Three-Year Plan for Projects Proposed for "Water and Sewer System Improvement Charge" Eligibility

Initial Period WSIC/SSIC Projects (2018)
Year Two WSIC/SSIC Projects (2019)
Year Three WSIC/SSIC Projects (2020)

Rate Group	Business Unit	Sub Name	Project	Statutory eligibility section	Year	WSIC/SSIC Filing	Water/Sewer	Total Estimated Water	Total Estimated Sewer
BF/FH/TC	183106	Fairfield Harbour S	Sewer main replacement due to 1&1	62-133.12[d][2]	2018	2019 Feb	S		\$95,000
BF/FH/TC	183106	Fairfield Harbour S	Sewer main replacement due to 1&1	62-133.12[d][2]	2019	2019 Jun	S		\$95,000
BF/FH/TC	183106	Fairfield Harbour S	Replace 4 Lift Stations- change to above-ground suction (15,16,13,12)	62-133.12[d][4]	2019	2020 Feb	S		350000
BF/FH/TC	183106	Fairfield Harbour S	Sewer main replacement due to 1&1	62-133.12[d][2]	2020	2020 Jun	S		\$95,000
BF/FH/TC	183106	Fairfield Harbour S	Replace 4 Lift Stations- change to above-ground suction (5,3,2,17)	62-133.12[d][4]	2020	2021 Feb	S		350000
CWSNC Uniform	182138	Bent Creek	Sewer main replacement due to 1&1	62-133.12[d][2]	2018	2019 Feb	S		\$80,000
CWSNC Uniform	181101	Elk River	Sewer main replacement due to 1&1	62-133.12[d][2]	2018	2019 Feb	S		\$50,000
CWSNC Uniform	188101	Connectee Falls S	Lift Station Replacement (3)	62-133.12[d][4]	2018	2019 Feb	S		600000
CWSNC Uniform	182179	High Meadows	Main replacement to reduce high frequency repair area	62-133.12[c][1]	2018	2019 Feb	W	\$50,000	
CWSNC Uniform	183100	Sapphire Valley	Main replacement to reduce high frequency repair area	62-133.12[c][1]	2018	2019 Feb	W	\$45,000	
CWSNC Uniform	182129	Wolf Laurel	Main replacement to reduce high frequency repair area	62-133.12[c][1]	2018	2019 Feb	W	\$150,000	
CWSNC Uniform	182238	Watauga Vista	Main replacement to reduce high frequency repair area	62-133.12[c][1]	2018	2019 Feb	W	\$150,000	
CWSNC Uniform	181100	Elk River	Replace approx. 500 feet of 2 inch galvanized main serving Greystone Condos.	62-133.12[c][1]	2018	2019 Feb	W	\$50,000	
CWSNC Uniform	182105	Belvedere Plantation	Install Softener System	62-133.12[c][1]	2018	2019 Feb	W	850000	
CWSNC Uniform	182138	Bent Creek	Sewer main replacement due to 1&1	62-133.12[d][2]	2019	2019 Jun	S		\$80,000
CWSNC Uniform	181101	Elk River	Sewer main replacement due to 1&1	62-133.12[d][2]	2019	2019 Jun	S		\$50,000
CWSNC Uniform	182179	High Meadows	Main replacement to reduce high frequency repair area	62-133.12[c][1]	2019	2019 Jun	W	\$50,000	
CWSNC Uniform	183100	Sapphire Valley	Main replacement to reduce high frequency repair area	62-133.12[c][1]	2019	2019 Jun	W	\$45,000	
CWSNC Uniform	183100	Sapphire Valley	Water Service Replacement Program	62-133.12[c][1]	2019	2019 Jun	W	\$106,600	
CWSNC Uniform	182129	Wolf Laurel	Main replacement to reduce high frequency repair area	62-133.12[c][1]	2019	2019 Jun	W	\$50,000	
CWSNC Uniform	182238	Watauga Vista	Main replacement to reduce high frequency repair area	62-133.12[c][1]	2019	2019 Jun	W	\$50,000	
CWSNC Uniform	182141	Whispering Pines	Main replacement identified by engineering assessment	62-133.12[c][1]	2019	2019 Jun	W	\$100,000	
CWSNC Uniform	181100	Elk River	Main replacement to reduce high frequency repair area	62-133.12[c][1]	2019	2019 Jun	W	\$50,000	
CWSNC Uniform	182140	Mt. Carmel	Sewer Collection System Rehabilitation Project	62-133.12[d][2]	2019	2020 Feb	S		75000
CWSNC Uniform	182106	Sugar Mountain	Sewer Collection System Rehabilitation Project	62-133.12[d][2]	2019	2020 Feb	S		125000
CWSNC Uniform	187101	Carolina Trace	Sewer Collection System Rehabilitation Project	62-133.12[d][2]	2019	2020 Feb	S		200000
CWSNC Uniform	182117	Corolla Light	Sewer Collection System Rehabilitation Project	62-133.12[d][2]	2019	2020 Feb	S		75000
CWSNC Uniform	182123	Hounds Ear	Sewer Collection System Rehabilitation Project	62-133.12[d][2]	2019	2020 Feb	S		75000
CWSNC Uniform	182236	Riverpointe S	Sewer Collection System Rehabilitation (1500 LF)	62-133.12[d][2]	2019	2020 Feb	S		150000
CWSNC Uniform	183101	Connectee Falls S	Lift Station Replacement (3)	62-133.12[d][4]	2019	2020 Feb	S		600000
CWSNC Uniform	182199	Pinnacle Shores	Relocate Distribution Main due to Highway 150 widening by DOT	62-133.12[c][1]	2019	2020 Feb	W	\$250,000	
CWSNC Uniform	188100	Connectee Falls W	Water Distribution Main Replacement	62-133.12[c][1]	2019	2020 Feb	W	125000	
CWSNC Uniform	182138	Bent Creek	Sewer main replacement due to 1&1	62-133.12[d][2]	2020	2020 Jun	S		\$80,000
CWSNC Uniform	181101	Elk River	Sewer main replacement due to 1&1	62-133.12[d][2]	2020	2020 Jun	S		\$50,000
CWSNC Uniform	182179	High Meadows	Main replacement to reduce high frequency repair area	62-133.12[c][1]	2020	2020 Jun	W	\$50,000	
CWSNC Uniform	183100	Sapphire Valley	Main replacement to reduce high frequency repair area	62-133.12[c][1]	2020	2020 Jun	W	\$45,000	
CWSNC Uniform	183100	Sapphire Valley	Water Service Replacement Program	62-133.12[c][1]	2020	2020 Jun	W	\$106,600	

Rate Group	Business Unit	Sub Name	Project	Statutory eligibility section	Year	WSIC/SSIC Filing	Water/Sewer	Total cost	Total Estimated Water	Total Estimated Sewer
CWSNC Uniform	182129	Wolf Laurel	Main replacement to reduce high frequency repair area	62-133.12(g)(1)	2020	2020 Jun	W	\$50,000	\$50,000	
CWSNC Uniform	182238	Watauga Vista	Main replacement to reduce high frequency repair area	62-133.12(g)(1)	2020	2020 Jun	W	\$50,000	\$50,000	
CWSNC Uniform	182141	Whispering Pines	Main replacement to reduce high frequency repair area	62-133.12(g)(1)	2020	2020 Jun	W	\$50,000	\$50,000	
CWSNC Uniform	181100	Elk River	Main replacement to reduce high frequency repair area	62-133.12(g)(1)	2020	2020 Jun	W	\$125,000		75000
CWSNC Uniform	182123	Hounds Ear	Water Distribution Main Replacement	62-133.12(g)(1)	2020	2020 Jun	W			
CWSNC Uniform	182123	Hounds Ear S	Sewer Collection System Rehabilitation (8000 lf)	62-133.12(d)(2)	2020	2021 Feb	S			
CWSNC Uniform	182123	Sapphire Valley S	Sewer Collection System Rehabilitation (8000 lf)	62-133.12(d)(2)	2020	2021 Feb	S			
CWSNC Uniform	182107	Sugar Mountain	Sewer Collection System Rehabilitation (2,300 LF)	62-133.12(d)(2)	2020	2021 Feb	S			
CWSNC Uniform	182299	Village Of Neaps Head	Water Distribution Main Replacement	62-133.12(g)(1)	2020	2021 Feb	W	\$100,000		
CWSNC Uniform	191101	Bradfield Farms	Water Distribution Main Replacement	62-133.12(g)(1)	2020	2021 Feb	W	\$125,000		
CWSNC Uniform	187101	Carolina Trace	Water Distribution Main Replacement	62-133.12(g)(1)	2020	2021 Feb	W	\$200,000		
CWSNC Uniform	183102	Fairfield Saphire	Water Distribution Main Replacement	62-133.12(g)(1)	2020	2021 Feb	W	\$100,000		
CWSNC Uniform	188101	Conestee Falls	Water Distribution Main Replacement	62-133.12(g)(1)	2020	2021 Feb	W	\$75,000		
CWSNC Uniform	182102	Brandywine Bay	Water Distribution Main Replacement	62-133.12(g)(1)	2020	2021 Feb	W	\$75,000		
CWSNC Uniform	183121	Neuse Woods	Water Distribution Main Replacement	62-133.12(g)(1)	2020	2021 Feb	W	75000		
									\$3,473,200	\$3,600,000

CERTIFICATE OF SERVICE

I hereby certify that I have served a copy of the foregoing **Ongoing Three-Year WSIC/SSIC Plan for Carolina Water Service Inc. of North Carolina**, filed in Docket Nos. W-354, Subs 356A and 360, on all parties of record in these proceedings, in accordance with North Carolina Utilities Commission Rule R1-39, either by: United States mail, first class postage pre-paid; by hand delivery; or by means of electronic delivery upon agreement of the receiving party.

This the 30th day of May, 2018.

**Electronically Submitted
/s/Jo Anne Sanford**

State Bar No. 6831
SANFORD LAW OFFICE, PLLC
Post Office Box 28085
Raleigh, North Carolina 27611-8085
Tel: (919) 210-4900
sanford@sanfordlawoffice.com

**Attorney for Carolina Water Service, Inc. of North
Carolina**

OFFICIAL COPY

May 30 2018