

**SANFORD LAW OFFICE, PLLC**  
Jo Anne Sanford, Attorney at Law

November 9, 2022

Ms. A. Shonta Dunston, Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4325

**Via Electronic Filing**

Re: In the Matter of Application by Aqua North Carolina, Inc. for Authority  
to Adjust and Increase Rates and Charges for Water and Sewer  
Utility Service in All Service Areas of North Carolina and Approval of  
a Three-Year Water and Sewer Investment Plan  
Docket No. W-218 Sub 573  
- Response to Customer Concerns from October 20, 2022  
Virtual Public Hearing

Dear Ms. Dunston:

Please accept for filing the attached copy of the response by Aqua North  
Carolina, Inc. to customer concerns expressed at the October 20, 2022, virtual  
public hearing. I hereby certify that I have served the parties of record.

As always, thank you and your office for your assistance.

Sincerely,

**Electronically Submitted**

/s/Jo Anne Sanford

State Bar No. 6831

Attorney for Aqua North Carolina, Inc.

c: Parties of Record



**STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
RALEIGH**

DOCKET NO. W-218, SUB 573

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Application by Aqua North Carolina, Inc.,	)	REPORT ON CUSTOMER
202 MacKenan Court, Cary, North	)	COMMENTS FROM
Carolina 27511, for Authority to Adjust and	)	VIRTUAL HEARING
Increase Rates for Water and Sewer Utility	)	HELD ON
Service in All Service Areas in North	)	OCTOBER 20, 2022
Carolina	)	

**NOW COMES Aqua North Carolina, Inc.** (“Aqua” or “Company”) and files this report in response to the hearing held by means of the North Carolina Utilities Commission’s (“NCUC” or “Commission”) on-line WebEx platform, on Thursday October 20, 2022. This hearing provided telephonic access by customers for receipt of sworn testimony.

Commissioner ToNola D. Brown-Bland served as the Presiding Commissioner and was joined by Chair Charlotte A. Mitchell as well as Commissioner Jeffrey A. Hughes.

Staff Attorneys Megan Jost and Elizabeth Culpepper appeared for the Public Staff on behalf of the using and consuming public.

David T. Drooz of Fox Rothschild LLP appeared on behalf of Aqua, joined by Shannon V. Becker, President of Aqua North Carolina. Other Company personnel, in addition to Mr. Becker, were watching and listening to the webcast so that they could better follow up with customers to assist with concerns,



questions, or requests after the hearing.

#### **A. Purpose of Report**

Ordering paragraph 11 of the Commission Order Scheduling Hearings, Establishing Discovery Guidelines, and Requiring Customer Notice issued September 8, 2022, requires Aqua to file reports addressing all customer service or service quality complaints expressed at the customer hearings within 20 days after each hearing wherein the complaint was expressed.

This report summarizes the customer service quality concerns expressed at the virtual public hearing on October 20, 2022, provides an overview of the hearing, submits general responses to topical areas not discussed in Aqua's previously filed Customer Follow-up reports, and includes the Company's specific responses and corrective actions.

#### **B. Organization of Report**

The report provides an overview of the hearing, including information about the eight systems that were discussed, the types of concerns expressed, and the Company's management of these systems and concerns. The report includes a general response for each system and individual responses for each witness. For clarity, the witnesses are grouped by system.

#### **C. Overview of the Public Hearings**

<u>Subdivision</u>	<u>Water System</u>
Chapel Ridge	Chapel Ridge
Cottonfield Village	Flowers Plantation
Park South	Park South
Stoneridge	Stoneridge Master System



Sedgefield	Stoneridge Master System
The Village at Motts Landing	The Cape Master System
Meadow Ridge	Meadow Ridge Master System
Hawthorne	Bayleaf Master System

#### **D. General Responses to Customer Concerns and Issues**

##### **Categories of Customer Concerns**

The customer concerns, variously expressed by the nine testifying customers, were largely addressed in the **General Responses to Customer Concerns and Issues - Categories of Customer Concerns**, in section D of Aqua's Customer follow-up report filed with the Commission on October 24, 2022. Additional General Responses are contained herein, along with specific responses to the witness testimony, in Section E.

##### **Concern - Conservation**

Several customers discussed a lack of incentive to conserve water. As part of Aqua's last rate case (W-278, Sub 526), the Commission approved an investigation of rate design requesting "rate design proposals that may better achieve revenue sufficiency and stability while also sending appropriate efficiency and conservation signals to consumers." In the present case, Docket No. W-218, Sub 573, Aqua has requested the continuation of the approved pilot of tiered conservation rates for four systems so that sufficient data can be obtained.

As part of Aqua's water conservation strategy, Aqua notifies customers in drought affected areas to conserve water so their community wells can continue to provide essential water services. Such conservation notices were issued



several times to the Meadow Ridge Community, with the latest in June of 2022. See Attachment 1. The Aqua America website additionally contains useful drought information and links along with “Water Smart Tips” to aid customers in water conservation techniques. Subjects such as higher water efficiency appliances, checking for leaks, insulating pipes, shower conservation, dishwashing techniques, building and grounds maintenance and more are presented to our customers at (<https://www.aquaamerica.com/our-states/north-carolina.aspx>).

Aqua is also supporting water conservation capabilities via its on-going effort to replace all manual read meters with AMR water meter technology, which are being used to notify customers of potential leaks. When continuous minimum consumption is recorded on a particular meter, the meter produces a leak detection error code that is collected during the company’s monthly meter reading cycles. Aqua provides an Aqua Alert message to notify those customers who may have a leak, which helps identify and make proper corrections to minimize the potential for heightened water loss.

#### **E. Detailed Responses to Customer Testimony**

##### **Stoneridge/Sedgefield:**

The Stoneridge Master System includes the communities of Stoneridge, Sedgefield and Creekwood. Aqua’s description of this system, as well as its responses to most water quality concerns conveyed by the customers who testified from these three communities, were included in the report from the Raleigh public hearing, which was filed with the Commission on October 24, 2022. See



<https://starw1.ncuc.gov/NCUC/ViewFile.aspx?Id=185a1749-555b-448c-abcf-fbcd98800c25> and companion filings from October 24, 2022.

**Customer Testimony:**

1. *Susan Chandler – 217 Longwood Drive, Chapel Hill, NC, Stoneridge Subdivision (water customer of Aqua), Tr. Vol. 2, pp. 36-40.*

Ms. Chandler, a 21-year water customer of Aqua and resident of the Stoneridge/Sedgefield Master System, expressed concern regarding Aqua's rate case request. She stated that water is substandard and that sediment, contaminants, and calcium residue are ruining pipes and causing skin and hair issues. Ms. Chandler went on to state that she had to put in a \$6000 filtration system, which already needs to be replaced. Ms. Chandler stated that when power outages occur, they have no water. Ms. Chandler thinks that not having water is an outrage and the company needs more than five generators to supply all North and South Carolina. Ms. Chandler's last contact with Aqua was on December 9, 2019. Her call was related to a water main break in the subdivision.

**Aqua's Response:** Ms. Chandler has been a water customer in the Stoneridge Subdivision since November 8, 2001. While it is not known that Ms. Chandler is a Stoneridge Ad Hoc Water Committee member, the concerns she expressed are similar to those Aqua has already addressed with her community's Water Committee members.

Upon review of Aqua's Banner records, Aqua notes that there were no discolored water calls made by Ms. Chandler since becoming a customer of Aqua. Of the three calls on record made to Aqua by Ms. Chandler, two concerned water



line breaks (one in 2007 and one in 2019) and another requested a name change on the account.

Ms. Chandler indicated she was “outraged” that Aqua and South Carolina only have five generators. Aqua does not currently have water or service operations in South Carolina. Moreover, Aqua (Central Division where Stoneridge is located) is equipped with ten portable generators that are serviced and tested regularly with access to another 31 portable generators located within Aqua’s surrounding operating divisions. Aqua has multiple generator suppliers and contractors who are able to facilitate the provision of generators, if called into emergency service. Additionally, Aqua Virginia and several other Aqua states share portable generator access if/when needed during times of emergency. Aqua generators are staged in strategic areas of operation for quick access and mobilization response. Currently, generator “quick connects” are being installed at specific well sites in the Stoneridge Master System for quicker and safer emergency connection.

Severe storms can cause power outages in areas where Aqua has water and or sewer systems, and this can temporarily interrupt water service within some of Aqua’s water systems. Storm related outages typically impact specific areas of Aqua’s operations and not all systems lose power for extended durations. During widespread power outages Aqua mobilizes operations support and its inventory of generators from unaffected areas or states to affected systems to minimize the duration of water outages. Aqua tracks system outages and tank levels using its 24/7 operated SCADA operations to determine if or where a generator needs to



be mobilized. It should be noted that access points to wells may occasionally be blocked or conditions may be unsafe for Aqua employees to approach specific well sites; however, Aqua's employees and contractors attend to all its system sites and provide water service as soon as safely possible.

Aqua sends Water Smart Alerts to all customers who signed up for this service once Aqua is informed that a system loses system pressure. These Water Smart Alerts inform customers to conserve water for essential purposes only, as well as other pertinent information regarding water safety.

It is worth noting that prior to the Customer Hearing, Hurricane Ian impacted a large area of Central North Carolina; however, the Stoneridge community did not lose system pressure throughout this event.

2. *Raigen Padayachee – 15 Litchford Road, Chapel Hill, NC, Sedgefield Subdivision (water customer of Aqua), Tr. Vol. 2, pp. 56-63.*

Mr. Padayachee has been a water customer of Aqua and resident of the Stoneridge/Sedgefield Master System since May 24, 2019. Mr. Padayachee expressed support for Ms. Chandler's earlier testimony. The last contact Aqua had with the Padayachees was with Ms. Padayachee in 2020 when she requested that Mr. Padayachee be added to the account. There are no additional records of calls relating to water quality noted in the system for the Padayachees.

Mr. Padayachee indicated they moved to the area from Dallas in 2019 and were surprised at the poor water quality in their neighborhood. Mr. Padayachee states he installed a water softener/treatment system for \$12,000 to solve this issue. He went on to say that there have been multiple instances of system



flushing by Aqua without prior notice, and he complains of low water pressure and system pressure spikes, which have led him to install a pressure flow valve. He wants Stoneridge Master System projects to be moved up the queue, because the water system is 45 years old.

Aqua provides the following in response to Mr. Padayachee's concerns about advance notice (in addition to information from Aqua's October 24, 2022, filing in this docket). Mr. Padayachee was asked at the hearing if he was aware of Aqua's Water Smart Alert program or if they are receiving prior notice of flushing events from Aqua via Aqua's Water Smart Alert system. Mr. Padayachee stated he was not aware of Water Smart alerts and will look into it. Mr. Padayachee did state that he gets notices through his neighborhood's postings.

Aqua sends notice to all customers who are signed up for Water Smart alerts via email, phone and text, based on the customer's election of a medium for the communication. Aqua's Director of Operations, Joe Pearce, reached out directly to the telephone number associated with Mr. Padayachee's account and left his return contact information to assist in signing up for Aqua Smart Alerts. Messages were left on Friday, October 21, 2022, and again on October 24, 2022. Mr. Pearce had not received a return call so Aqua Operations sent a staff member to the Padayachee residence on October 27, 2022, made contact, and explained how to get signed up for Water Smart Alerts.

Upon further review of Aqua's customer service records for Mr. Padayachee's account, Aqua confirmed that the account holder from this residence called Aqua's customer service requesting the account number to sign



up for Water Smart Alerts and was provided the information on July 5, 2019. See Confidential Attachment 2. Aqua additionally confirmed that the Padayachee residence was signed-up and is receiving Water Smart Alerts via email, text, and phone from Aqua. Attached is the most recent flushing notice that was sent to the community. See Attachment 3. Also attached are records showing that notice was being sent to Ms. Padayachee's contacts. See Confidential Attachments 4.A. through 4.E.

### **Park South**

3. *Stephanie Teran – 2470 Royal York Ave, Charlotte, NC, Park South Station Subdivision (water and wastewater customer of Aqua), Tr. Vol. 2, pp. 14-18.*

Ms. Teran is an Aqua water and wastewater customer. She expressed concerns regarding the cost of her sewer and the purchased sewer rate design. She additionally noted that her sewer base rate ("base facilities charge" or "BFC") in the last case went from \$26 to \$60, which she states is now being raised another \$10 for services they are not utilizing in the same way as others. Ms. Teran requested consideration for a unique rate design.

4. *Daniel Reilly – 4156 Park South Station Blvd, Charlotte, NC, Park South Station Subdivision (water and wastewater customer of Aqua), Tr. Vol. 2, pp. 53-55.*

Mr. Reilly is an Aqua water and wastewater customer. He adopted Ms. Teran's testimony and requested Aqua's rate increase be rejected.



**Aqua's Response:** Aqua's follow-up response to Ms. Teran and Mr. Reilly have been consolidated based on the similarity of concerns related to rates included in each witness' testimony. Both Ms. Teran and Mr. Reilly are water and sewer "pass-through" customers who reside in the Park South community. Their concern appears to be related to the Park South sewer rate design and cost versus their water rate design and cost.

Support justifying the need for Aqua's proposed rate increase is included throughout Aqua's rate case application, testimony, and supplementary filings, and is not addressed in this follow-up report, which primarily addresses service and quality issues.

Some Aqua customers live in subdivisions where Aqua owns and operates portions of the water or sewer infrastructure (e.g., the distribution system, collection system, lift stations) and must purchase water or sewer treatment service from another utility who owns the source water facilities or wastewater treatment plant. These customers, including those in the Park South community, are included in Aqua's purchased water and/or purchased sewer rate structures with the intent that their total bill will represent the full end-to-end cost to provide water or sewer service. Purchased water and sewer customers are billed using Aqua's monthly fixed base facilities charge, but instead of paying Aqua's usage rate per 1,000 gallons, they are billed (passed-through) the same usage rate per 1,000 gallons that Aqua is charged from the utility providing this portion of the service. In this case, that providing utility is the City of Charlotte Utilities. While



water pass-through systems are common, Aqua only has a few systems that utilize purchased sewer, including Park South.

See the charts below for water and sewer bill summary comparisons between the “pass-through” customers and Aqua’s “consolidated” customers during the last three rate change periods, including the current application for a rate increase:

SEWER					WATER				
Park South, Parkway Crossing, Huntley Glen, The Enclave					Park South, Parkway Crossing, Huntley Glen, The Enclave				
	BFC	Usage Rate	Mth Gal	Mth Bill		BFC	Usage Rate	Mth Gal	Mth Bill
Pre- 2020 (Pass-Through)	\$26.11	\$ 6.45	5000	<b>\$58.36</b>	Pre- 2020 (Pass-Through)	\$19.25	\$ 1.81	5000	<b>\$28.30</b>
Current (Pass-Through)	\$60.43	\$ 6.45	5000	<b>\$92.68</b>	Current (Pass-Through)	\$20.70	\$ 2.19	5000	<b>\$31.65</b>
2023 Proposed (Consolidated)	\$70.77	\$ 4.11	5000	<b>\$91.32</b>	2023 Proposed (Pass-Through)	\$25.31	\$ 2.19	5000	<b>\$36.26</b>

SEWER					WATER				
Aqua NC Consolidated Customers					Aqua NC Consolidated Customers				
	BFC	Usage Rate	Mth Gal	Mth Bill		BFC	Usage Rate	Mth Gal	Mth Bill
Pre- 2020	\$72.04	\$ -	5000	<b>\$72.04</b>	Pre- 2020	\$19.25	\$ 5.83	5000	<b>\$48.40</b>
Current	\$60.43	\$ 2.99	5000	<b>\$75.38</b>	Current	\$20.70	\$ 6.38	5000	<b>\$52.60</b>
2023 Proposed	\$70.77	\$ 4.11	5000	<b>\$91.32</b>	2023 Proposed	\$25.31	\$ 7.89	5000	<b>\$64.76</b>

**Park South Water Bills:** Aqua did not recommend a change to the pass-through water rate structure for Park South customers in the current rate case. Aqua is proposing to continue to charge Park South customers its monthly proposed BFC (\$25.31) and will continue to “pass-through” the City of Charlotte’s actual water usage rate (currently \$2.19/1,000 gallons), like it does with its other Bulk Purchased Water System customers. This “pass-through” rate design for water using the City of Charlotte’s water usage rate results in a smaller water bill, compared to Aqua’s consolidated water customers. For example, using the 2023 Proposed data in the chart above, it shows that using an average 5,000 gallons per month will result in a monthly water bill of \$36.26 vs. \$64.76 for Aqua’s



consolidated water customers (Park South water bill is approximately 44% less in this example). Note that the pass-through water usage rates will change when/if the city of Charlotte updates its usage rates.

**Park South Sewer Bills: Pre-2020 (Pass-Through) Rates** - Prior to the October 26, 2020, rate Order in Docket No. W-218, Sub 526, Aqua's consolidated sewer customers were billed a flat monthly sewer rate (no usage charges); this excluded the Park South customers who received a volumetric bill (i.e., a bill that includes a component based on variable usage) that included an approved Aqua BFC along with the City of Charlotte's sewer usage rate. This results in Park South having pass-through sewer rates and a rate design similar to the more common water pass-through customers that includes Aqua's monthly fixed BFC and the City of Charlotte's sewer usage rate (\$6.45/1,000 gallons). Prior to the 2020 rate change, Aqua's BFC for sewer pass-through customers was \$26.11. The City of Charlotte usage rate that Aqua "passed-through" to Park South customers, along with Aqua's lower sewer BFC, resulted in a lower sewer bill than Aqua's flat rate consolidated sewer customers [see chart above for Pre-2020 (Pass-Through) bill summary and comparison to Aqua's "Consolidated" customers].

**Current (Pass-Through) Rates** - In Aqua's last rate case Order (W-218, Sub 526, dated October 26, 2020) the Commission directed that Aqua's volumetric sewer rates be applied to most of its flat rate sewer customers. This entailed application of a new sewer monthly BFC plus a sewer usage rate. While Park South customers were already using a volumetric (usage based) billing rate design, this change resulted in the establishment of a new BFC that was applied



for use with all Aqua's consolidated and pass-through sewer customers. The new BFC for the Park South sewer customers resulted in an approximate 130% (\$26.11 to \$60.43) increase to the previous BFC used to bill Park South sewer customers. Furthermore, while Aqua's consolidated sewer customers' rate design now included a \$2.99/1,000 gallons sewer usage component for most of Aqua's consolidated sewer customers, Park South customers continued to be charged the City's \$6.45/1,000 gallons usage rate and did not realize any offset from the application of Aqua's lower \$2.99/1,000 gallons usage rate. This combination, using the new Aqua BFC plus the City of Charlotte sewer usage rate, resulted in the Park South sewer customers being billed more than the Aqua consolidated sewer customers [see chart above for Current (Pass-Through) bill summary in comparison to Aqua's "Consolidated" customers] effective with the date of the Order.

2023 Proposed Rates –Therefore, in this current rate case, and because of the unique circumstance of only having four total purchased sewer systems, Aqua proposed to consolidate its purchased sewer customers where sewer treatment service was purchased from the City of Charlotte, including Park South, into its consolidated Aqua sewer rate design. This eliminates the sewer pass-through rates for these sewer customers altogether. If approved, this proposed change would minimize the increase in, or even reduce, the purchased sewer customer's monthly bill, which will bring them in line with most of Aqua's consolidated sewer customers. Again, this not a service or water quality issue.



### **Village at Mott's Landing (Cape Master System)**

**Village at Mott's Landing Overview:** The Cape Master System is approximately 30 years old and is comprised of ten wells: four are in the Beau Rivage area and six are in The Cape area. Historically, Beau Rivage and The Cape public water systems were two separate systems. These wells were interconnected to provide system redundancy and supply. The Cape Master System is comprised of 4,550 residential accounts and 663 commercial accounts, with over half of the commercial accounts identified as residential irrigation meters. The Village at Mott's Landing ("Motts") is comprised of 399 residential and 362 irrigation accounts. Motts is located north of Sanders Road in the northern-most section of the Master System and is primarily supplied by the Sanders Road well, the Rivers and Sanders Road Well (one well), the Beau Rivage Driving Range well, and the Beau Rivage Entrance well. The Rivers and Sanders Road well was offline for over 10 years due to elevated iron concentrations. In 2019, system demand had increased and additional supply was needed to satisfy demand. Aqua installed a manganese dioxide filtration system on the Rivers and Sanders Road well in early 2021 so its capacity could be utilized to help meet system demand. The remaining three wells in that area, Sanders Road, Beau Rivage Entrance, and Beau Rivage Driving Range wells, have not experienced iron or manganese concentrations above the U.S. Environmental Protection Agency ("USEPA") secondary maximum contaminant levels ("sMCLs"). The latest Inorganic Chemical analysis ("IOCs") collected on August 25, 2022, were below the 0.3 mg/L sMCL for iron and below 0.05 mg/L sMCL for manganese. Aqua performs a comprehensive



system flush annually. The flushing schedule is announced in advance via the WaterSmart Alert system in addition to being posted on the NCWaterQuality.com website. Due to system size, The Cape's annual flushing activities are scheduled over a three-week period in early spring.

From April 2020 through September 2022, Aqua has invested approximately \$9.2M in The Cape Master System. Multiple projects are also scheduled for future capital years that include the completion of two new wells to be located within the Mott's area in 2023 (adding capacity), a booster pump station, and a new well in the southern section of The Cape Master. Additionally, Aqua is currently reviewing additional parcels of land within the Motts area for additional supply. These improvements are based on a Master Plan that was prepared for the water system in 2021 by the professional engineers at McKim and Creed.

Aqua's management team has had regular communications with the president of the Motts Homeowners Association ("HOA") and property management company over the last several years on projects and customer concerns. Historic communications have been productive and important to both Aqua and the residents.

In May 2022, Aqua began to receive an increase in Lab Discolored ("Lab D") calls reporting discolored water and/or water pressure concerns within the Motts community. Aqua has a dedicated Technical Services Specialist ("TSS") who responds to Lab D calls during business hours, and the TSS notified operations and compliance of the increase in calls and requested an investigation as this community does not have a sustained history of Lab D calls. A review of



the calls identified that The Village of Motts Landing was the neighborhood reporting most of the discolored water issues, and the Operations team began an investigation to determine the source of the concerns. Operations investigation reported that there had been a significant increase in irrigation demand during peak consumption hours between 7:00 a.m. and 9:00 a.m. This was also confirmed by customers reporting discolored water and pressure concerns to the TSS. The compliance and engineering team began a review of system demand and Lab D calls. Historically, Lab D and pressure calls increase in late April and early May from a winter peak (December – February) of one call to a peak in March 2020 of 12 Lab D calls when the HOA was pressure testing the irrigation systems. The peak recorded in May 2022 was 23 Lab D calls, primarily isolated to three streets within the Motts community. The Motts subdivision monthly system demand had increased by 70% to just under nine million gallons/month for 399 constructed residences from January to May 2022, when the increased volume of calls began. The demand averaged 4.1 million gallons for the period and peaked at just under nine million gallons/month for 399 constructed residences. This resulted in an average usage in May for each of the 399 customers in this area in excess of 22,000 gallons/month. This equates to nearly twice the average daily demand standard ( $400 \text{ gallons/day} \times 30 \text{ days} = 12,000 \text{ gallons/month}$ ), as recognized by the NC Rule Governing Public Water Systems. Recognizing that this demand is occurring at peak hours and utilizing system hydraulic information about the system, it was determined that the irrigation demand of the community was exceeding the design of the distribution system and scouring the pipe; thus,



driving an increase in customers experiencing decreased water pressure, and the likely driver of water discoloration. Aqua's Environmental Compliance Director, Amanda Berger and TSS Dawn Markarian, contacted the HOA Board President to discuss the residents' concerns and provided an update on Aqua's investigation and data. See Attachment 5. Communication continued through the end of June, including advance notice of the June 30, 2022, conservation notice issued to all Aqua Coastal Public Water Systems due to the North Carolina Drought Management Advisory Council (NC-DMAC) designation of a D1-Moderate Drought in that area. See Attachment 6.

Between June and August 2022, Aqua management, engineering, and operations reviewed data, conducted aged water jar testing, performed additional sampling, flushed the subdivision twice, and requested assistance with data review from contracted engineers and hydrogeologists. Aqua also sought counsel from Public Staff and the North Carolina Department of Environmental Quality (NCDEQ). The conclusion from each interaction was that the distribution system's capacity was being exceeded during the summit of the neighborhood's daily irrigation demands.

On October 11, 2022, Aqua personnel met with the Motts HOA Board to discuss concerns and formulate actionable items to develop a collaborative team approach to address the challenges identified by the community. Aqua had representation from communications, compliance, operations, and engineering. The HOA Board attended, in addition to their privately contracted consultant. Topics discussed included new infrastructure, the addition of new wells, local



development activity, water quality, and communications. Aqua is working with the HOA on communicating new projects and a future “lunch and learn” with the Agricultural Extension office concerning turf management. The HOA was advised by their consultant to consider communication to its residents regarding irrigation demand. Additional meetings will be scheduled in the future as needed or requested.

5. *Linda Joyce – 327 Motts Forest Rd; Village of Mott’s Landing Subdivision (water customer of Aqua), Tr. Vol.2, pp. 23-32.*

Ms. Joyce’s testimony involved multiple topics that included water quality, water pressure, rates, toxic chemicals, the recording of customer service complaints, irrigation, capital improvements, independent water testing, the cost associated with backflow prevention testing and timing, and the possibility of connecting to Cape Fear Public Utilities Association (“CFPUA”).

**Aqua’s Response:** Ms. Joyce has been a water customer in the Village of Motts Landing for eight years. To specifically address Ms. Joyce’s concerns raised in her testimony, the Company provides the following information.

**Rates & Capital Improvements** – From April 2020 through September 2022, Aqua has invested over \$2.4 million in Fairways’ water systems. Significant upgrades on the water system primarily include investments to improve water quality. Projects include the Rivers and Sanders iron and manganese treatment system – a nearly \$750,000 dollar investment, and work on additional water supply sources within the Village of Mott’s Landing, along with the development of a Master Water Supply Plan for The Cape Master System. The Master Water Supply



Plan includes future capital expenditures that increase capacity, ensure water quality, and identify additional water supply sources. It also includes additional elevated water storage.

Water Quality – Upon review of Aqua’s Banner records, Aqua notes Ms. Joyce has not contacted Aqua regarding discolored water issues.

As noted in the subdivision history, there are four wells that primarily serve the Village at Motts Landing. One well – Rivers and Sanders – was offline until 2021 when the iron and manganese filtration system was activated. The other three other wells that primarily serve this area, have not demonstrated water quality results that exceed USEPA sMCLs in at least the last fifteen years; see Attachment 7 for the latest sample results. Ms. Joyce’s testimony included a statement that USEPA and NCDEQ should develop enforceable standards for iron and manganese. The Company notes that 15A NCAC 18C. 1511 and 15A NCAC 18C .1512 are enforceable treatment standards for iron and manganese concentrations above USEPA sMCLs. Aqua utilizes a privately contracted lab in Wilmington to perform all public water system analysis, except for unregulated contaminants.

Water Pressure – Ms. Joyce commented in her testimony that she received an email from NCUC stating her low pressure was caused by an irrigation schedule issued by a landscaping company, which was false as she has low pressure during winter months. A review of Aqua’s Banner notes since Ms. Joyce activated her Aqua account in 2014 indicate that she contacted Aqua twice in August 2021 regarding low water pressure and once in August 2022. Field results completed by



the operator upon response to the August 2021 calls showed system pressures were 60 psi and 70 psi. Ms. Joyce declined any field assistance from the customer service representative in relation to the August 2022 call and stated she just wanted to call on a recorded line and hung up. Aqua's Environmental Compliance Director did send an email to the HOA in June, discussing analysis regarding the community's irrigation demand in general, which also included a brief reference to a contracted landscaper – Aqua is unsure if this is the information used in the letter to which Ms. Joyce is referring. A copy of this email communication is included as Attachment 5.

The subdivision notes included in the community detail provide a history and analysis of the ongoing water pressure issues in Motts. Aqua has extensively reviewed the hydraulics of the system internally and with external partners, including professional engineers, a professional hydrogeologist, and financial and environmental regulators. The system was designed to sufficiently meet residential demand and supply based on NCDEQ – PWS plan requirements.

To assist in addressing peak demand issue on the water system, Aqua is in the process of installing two new wells that are scheduled to be activated in 2023 within the Motts subdivision. Ms. Joyce noted in her testimony that one has failed, and one was good but needed power. To clarify, Aqua drilled test wells on two different sites within the community. Once the depth was confirmed, Aqua submitted plans to NCDEQ to construct the permanent wells. Construction has begun at one well, and the other is awaiting Duke Energy to install 3-phase power to the site to meet pump demand as it is a high-yield well. A community wide



update regarding these projects was mailed on October 21, 2022. The Mott's HOA has also communicated separately with the residents regarding the meeting held between the Company and HOA on October 11, 2022.

Toxic Chemicals – Ms. Joyce's testimony included statements regarding Perfluoroalkyl and Polyfluoroalkyl Substances ("PFAS"). A review of Banner notes, indicates Ms. Joyce has not contacted Aqua to discuss any concerns regarding PFAS in The Cape Master System.

Since Aqua began monitoring The Cape Master System for PFAS, only one customer in Motts Village has requested data or called to discuss concerns. Aqua's NCWaterQuality.com website was updated October 4, 2022, to include PFAS results for its Coastal system wells. This update was shared with the HOA Board, regulators, and activist groups that have contacted Aqua regarding PFAS results. The Company is currently in litigation with the manufacturers of PFAS on behalf of its customers, to mitigate financial harm that may result from future treatment requirements necessary to address these contaminants.

The Cape Master System has had low level detections of PFAS contaminants that were marginally above the Minimum Reporting Level (MRL) – the ability of analytical device to quantify a contaminant – in five wells serving The Cape Master System, including two wells near the Village at Motts Landing. The Rivers and Sanders well detected 2.7 ng/L PFOS in 2019 and has not had a detection in follow-up samples since that date. The Sanders Road well detected PFOA at 2.0 ng/L in 2019 and has not detected PFOA since. The Sanders Road well detected 2.2 ng/L of PFOS in June 2022 and was not detected in the latest



sample collected October 18, 2022. These contaminants are present throughout the environment, to include the air, fuel, pens, makeup, hair products, pipe sealant, and many other sources. Sample results can easily be influenced by environmental factors due to the very low-level quantification in the method. To date, Aqua has not had consistent detections of PFOS, PFOA, or GENX in The Cape Master System wells. Aqua utilizes two contracted laboratories to analyze for PFAS compounds.

Ms. Joyce in her testimony stated that no one is enforcing USEPA regulations and asked why. PFAS is currently considered an unregulated contaminant and is not regulated by USEPA or NCDEQ. Ms. Joyce also stated that the Company should be performing quarterly monitoring and updating NCDEQ data with our results. Until USEPA promulgates a standard, PFAS monitoring is not required in North Carolina unless the system has been identified to participate in the Unregulated Contaminant Monitoring Rule ("UCMR") scheduled for 2023 – 2025 or previously participated in UCMR 3 in 2013-2015. Aqua is voluntarily monitoring its systems based on occurrence and environmental factors. The Cape Master System's data is available on Aqua's previously referenced website.

The standard Ms. Joyce referenced in her testimony is thought to be the USEPA PFOS and PFOA Health Advisory Limits ("HALs") issued in June 2022. The prior HALs for PFOS and PFOA were 70 parts per trillion (ppt) and have since been lowered to 2 parts per quadrillion (ppq) (.002ppt) for PFOS and 4 ppq (.004ppt) for PFOA. To give a perspective on ppq, a part per quadrillion is the equivalent of one second in 31.7 million years, and currently there are no analytical



devices that can measure to ppq. HALs are guidance documents prepared by USEPA to inform customers on risk and risk advertence. It is not a regulated standard and public water systems are not required to comply with the HAL. The USEPA is anticipated to release a draft Maximum Contaminant Level (MCL) in December 2022 for certain PFAS compounds. Attempting to filter a non-regulated contaminant to a specific level in advance of the establishment of an MCL for that contaminant may result in imprudent spending on unnecessary heightened filtration or filtration that does not meet the final standards to which utilities will be required to eventually adhere. Aqua will comply and provide treatment for any well that exceeds an established regulatory standard. In 2020, Aqua established an internal goal for PFOS, PFOA, and pFNA of 13 parts per trillion (ppt) based on what was one of the lowest state standards adopted at that time. Aqua has capital investments planned to address the systems identified through our water quality monitoring program that exceeded this internal limit. No wells in The Cape Master System exceeded Aqua's internal standard; therefore, related capital projects are not planned at this time.

Cross Connection – Ms. Joyce stated in her testimony that an engineer inspected her backflow device and that “it is impossible for the backflow to cause an issue” and asked why the testing can’t be once every five years.

Backflow Prevention Devices (BFPs) are required by regulation to be installed on all residential irrigation systems connected to a public water supply to prevent back-siphonage and contamination of the water supply. BFP prevention devices in North Carolina are above ground and subject to freeze. This is



especially concerning in Coastal communities as many irrigation systems are not well winterized. BFP failure is common, and the American Water Works Association (“AWWA”) recommends all BFP devices be tested at a minimum annually. To protect the consuming public, Aqua adheres to NCDEQ regulation found in 15A NCAC 18C .0406 and AWWA Manual 15. For comparison, other water purveyors in that region also require a similar annual inspection of BFP devices.

Cape Fear Public Utilities Association (CFPUA) – Ms. Joyce in her testimony requested that she be provided information regarding how the community can petition for water service from CFPUA.

Aqua owns and operates The Cape Water system in accordance with all financial and environmental regulations. We intend to continue to provide safe and reliable service to all of our customers and do not have any intention to sell these system assets.

### **Cottonfield Village**

6. *Debra Cook – 3634 E. Cotton Gin Drive, Clayton, NC, Cottonfield Village Subdivision (water and wastewater customer of Aqua), Tr. Vol. 2, pp. 32-36.*

Ms. Cook, a water and wastewater customer of Aqua, states she is a retired schoolteacher and is opposed to the rate increase. In particular, she is concerned about the base facility charge which is not based on her usage. She states that her water usage is less than the average customer and that the current rate structure does not support conservation due to the amount of the base facility



charge. Ms. Cook also states that she has not noticed any improvements in water quality since the 2018 discussions on the local news channel.

**Aqua's Response:** As part of a follow-up conversation with Ms. Cook after her statement, she indicated understanding that she receives water from Aqua that is purchased from Johnston County. Johnston County's water source is primarily the Neuse River. Aqua management is not aware of persistent secondary water quality issues related to the water Aqua purchases from Johnston County and delivers to Aqua customers in this area. As such, her statement regarding water quality is not addressed in this report.

The Company is presenting the need for the rate increase in its Application and Testimony, which is predominately driven by infrastructure improvements, replacements, and increasing operations and maintenance costs.

It must be noted that the Johnston County purchased water usage rate that Aqua passes-through to its customers in this area is \$3.21 per thousand gallons. In comparison, a typical Aqua customer has a current water consumption rate of \$6.28 per thousand gallons, and the purchased Town of Pittsboro water consumption rate is \$23.72 per thousand gallons.

With respect to conservation rates, Aqua has initiated a conservation pilot that is currently in progress in four water systems in North Carolina. The pilot utilizes tiered rates, which are intended to promote conservation. None of the systems in the conservation pilot, however, were purchased water systems, and that option was not contemplated during the conservation pilot program development.



**Chapel Ridge**

7. *Rose Rowan – 636 Chapel Ridge Drive, Pittsboro, NC, Chapel Ridge*

*Subdivision (water and wastewater customer of Aqua), Tr. Vol. 2, pp. 40-45.*

Ms. Rowan, an Aqua water and wastewater customer for four years, expressed concerns regarding the cost of water service. She states that the annual charges for her water-conserving residence are in excess of \$4,000.

**Aqua's Response:** The first issue is consumption. Review of Aqua records indicates that this residence used 306,000 gallons of water between October 2021 and September 2022. This is an average usage of greater than 25,000 gallons per month, which included a peak usage in excess of 53,000 gallons per month. By comparison, the average usage for a home served by Aqua is 4,790 gallons per month.

The second issue is price for the commodity. Aqua purchases water from the Town of Pittsboro to serve the Chapel Ridge subdivision. Aqua does not treat this purchased water, but it does own and operate booster pumps, a 500,000 gallon water tower, and the water distribution system in the community. Aqua assumed the Water Service Agreement established between the Town of Pittsboro and Chatham Partners dated October 14, 2002, which dictates the pricing terms of water purchased from the Town, which is necessary to provide service to Aqua's Chapel Ridge customers.

The Town of Pittsboro operates a surface water treatment plant with an intake on the Haw River. The Haw River, at the intake point, is downstream of



the discharge from several large municipal wastewater treatment plants, including the City of Greensboro. At this intake point, elevated levels of PFAS compounds, 1,4-dioxane, and bromide have occurred. To address the elevated levels of PFAS, the Town of Pittsboro recently completed the installation of a one million gallon per day granular activated carbon system. Initial reports are that the system is meeting its greater than 90% PFAS removal design. It is also expected that disinfection byproducts will be lowered due to improved total organic carbon removal, using the granular activated carbon system which should result in fewer issues with disinfection byproducts. The capital and operational costs for this level of treatment are significant, and rates were raised by the Town of Pittsboro for both “Inside City Limits” and “Outside City Limits” customers to cover these costs.

Water and sewer rates for customers of the Town of Pittsboro are established by the elected Board of Commissioners. The Town of Pittsboro maintains separate rates for customers “Inside” and “Outside” their town limits. The “Outside” rates have been set at two times (2x) the “Inside” town rates. To Aqua’s knowledge, there is no study supporting this rate structure; however, this doubling of “inside” town or city rate inflator appears to be widely used by many municipalities in North Carolina.

“...(L)ocal governing boards have a lot of leeway in setting schedules of rates. A unit may vary its rates according to different “classes of services,” and it may charge different rates for services provided outside its territorial jurisdiction.” (Coates Canons for Local Government Law –



“Transferring Money from an Enterprise Fund: Authority, Limitations, and Consequences”, Kara Milonzi, published June 5, 2015).

**Meadow Ridge**

8. *Hayden Moore – 5001 Fielding Drive, Raleigh, NC, Meadow Ridge Subdivision (water customer of Aqua), Tr. Vol. 2, pp. 46-53.*

Mr. Moore, an Aqua water customer, expressed concerns regarding, rates, conservation, irrigation in a neighboring subdivision ruining water quality, customer notice rate increase percentages being misleading, and “callous” customer service. He also stated water quality is improved, but periods of cloudy white water continue to occur. Upon cross, Mr. Moore indicated that Aqua provided a minimal credit for flushing, one time.

**Aqua’s Response:** Mr. Moore has been a water customer of Aqua, residing in the Meadow Ridge Subdivision (Meadow Ridge Master System), since June 1995. Mr. Moore last contacted Aqua about low pressure and air in the lines in 2018; his last contact to Aqua regarding discolored water and flushing credit requests was 2015. Per review of Aqua’s Banner service order records, Aqua appears to have issued flushing credits on three occasions between 2007 and 2014.

The Meadow Ridge Master community water system serves 179 customer connections and is comprised of seven NCDEQ approved wells: Swift Ridge Well #1 approved for 30 gpm; Meadow Ridge Well #1 approved for 34 gpm; Meadow Ridge Well #2 approved for 24 gpm; The Oaks @Meadowview Ridge Well #2 approved for 16 gpm; The Oaks @Meadowview Ridge Well #3 approved for 39



gpm; The Estates at Meadow Ridge Well #1 approved for 10 gpm; and The Estates of Meadow Well #2 approved for 14 gpm. This is a total capacity of 167 gpm to serve a water system with 179 connections, giving each customer .93 gallons per minute (“gpm”), which is higher than the state minimum of .55 gallons per minute per customer.

Certain wells in the Meadow Ridge system have historically had water quality challenges. Iron and manganese concentrations in The Estates of Meadow Ridge Well #2 have fluctuated with periodic episodes of high concentrations. As a result, Aqua took this well offline in June 2021. This reduced the gpm per customer to .85 gpm, which still exceeds the established state standards. The combined entry of the Meadow Ridge Well #1 (P01) and Meadow Ridge Well #2 (P02) have a manganese dioxide filter that was installed in 2015. The combined entry point for “The Oaks Well #2 and #3” have also had elevated manganese results, primarily from Well #3, which currently has dual cartridge filtration installed. Aqua has been collecting additional water quality data from the latest inorganic chemical (“IOC”) samples to determine if additional actions or upgraded filtration is necessary to be installed on this well. Sample results from the remaining wells in the system have demonstrated good water quality.

Mr. Moore’s discolored water quality complaints and reports of brown/black water ceased after 2015, which is in line with the installation of the manganese dioxide filter installed in 2015. Aqua has continued to monitor and make further improvements to the water quality as demonstrated above.



Mr. Moore's comments about Aqua's customer service and flushing credits do not appear to be current based on the lack of recent contact with Aqua's Call Center and the fact that his latest request for a flushing credit was 2015. It should be noted that Mr. Moore did contact the Call Center on October 19, 2022, requesting a supervisor contact him regarding the current rate case and related rate increases before the upcoming hearing on October 20, 2022. A supervisor called him back and left a message - with a direct phone number for response - on October 20, 2022.

As described in the General Overview, section D, Aqua requested the continuation of the current pilot of tiered conservation rates for four systems. The Meadow Ridge subdivision, however, is not part of the pilot study. While Mr. Moore may not be aware of the on-going pilot and Aqua's efforts to identify a rate design structure that may eventually be applied to all Aqua water customers to promote conservation, Aqua is hopeful that a tiered rate structure will eventually be applied to all Aqua's consolidated water customers, including Meadow Ridge.

Mr. Moore additionally mentioned high irrigation use in the neighboring community causing water discoloration. Although high irrigation is noticeable and can contribute to discoloration events, Aqua has and continues to focus efforts on addressing source water issues as well as instituting conservation efforts to address periods of high demand/irrigation. Mr. Hayden expressed that Aqua "did do something and the water's not brown anymore". but it "is now cloudy-white", which is often indicative of air entering the water lines during periods of high demand and drought situations. Aqua did install a gpm (gallons per minute) control



program in 2021 on the Oaks of Meadow Ridge Well #3 to assist this well from “pumping out” during high consumption and drought conditions. This is to help eliminate the possibility of air intrusion into the distribution system, which allows the well capacity to properly recharge, as designed.

### **Hawthorne**

9. *Eric Galamb – 12208 Glenlivet Way, Raleigh, NC, Hawthorne Subdivision (water and wastewater customer of Aqua), Tr. Vol 2, pp. 19-22.*

Mr. Galamb, a water and wastewater customer of Aqua, expressed concerns about the frequency of rate cases without “significant improvements in the quality of service.” He specifically requests a full investigation of the Application by the Commission and a drop in the base rate to 20% or lower to encourage conservation. He also urges that all cleanups and spills should be the responsibility of the shareholders.

**Aqua’s Response:** Per review of Aqua’s customer files, Mr. Galamb has not contacted Aqua’s Customer Service since 2018, when his concerns were made and reviewed in the W-218, Sub 497, rate case. Mr. Galamb brings forward no new service quality complaints, but instead reiterates his concerns expressed in the last rate case in which he intervened (W-218, Sub 497). Aqua offers the following responses:

- a) Rate case review in this and all other cases is governed by the statutes and the Commission’s exercise of its oversight authority under Chapter 62. Aqua agrees that a full review of the Aqua rate case by the Commission is appropriate.



- b) Aqua respectfully disagrees with Mr. Galamb's view that there have not been significant improvements in service. The record of Aqua's accomplishments to improvement of water and service quality is replete with examples of effort, expenditures, and success. Aqua reports filed with the Commission track the extensive process made in the improvement of water quality, including improvements made in the Bayleaf Master System of which Mr. Galamb's community, Sussex Acres, is part.
- c) The science of rate design, whereby charges are manifested as either fixed or volumetric, is complicated but the bottom line purpose of it is to impose charges in such a way as to allow the utility a reasonable opportunity to recover the revenues that the Commission determines the Company should be allowed to recover. It should be noted that (i) Aqua has proposed a conservation pilot to assess the efficacy of using conservation rates to a greater degree, and (ii) there is a policy trade-off between conservation rates versus recovering more fixed costs from the base rate so that cost causation principles and ratepayer equity are better fulfilled. To Mr. Galamb's points, conservation can be encouraged by an increase in the volumetric component of the rate design; however, it should be noted that the ultimate revenues produced are to be aligned with the revenue requirement that the Commission approves. These points noted, Aqua would also respond to say that while it has proposed a rate design different from Mr. Galamb's recommendation, the Company is open to all



conversations about optimal designs, so long as the recovery of the revenue requirement is fulfilled.

- d) As described in the General Overview section D, Aqua requested the continuation of the current pilot of tiered conservation rates for four systems, which includes Mr. Galamb's community of Sussex Acres. Mr. Galamb's billing history for the last 12 months shows his monthly consumption is typically below the 4,000 gallon limit established for the 1<sup>st</sup> tier pilot conservation rates approved in Aqua's last rate case of \$4.14 per 1,000 gallons. During this time period, Mr. Galamb exceeded the 4,000 gallon 1<sup>st</sup> tier on one occasion - July 2022 when he used 4,400 gallons of water and would have resulted in 400 gallons of water being charged at \$6.41 per 1,000 gallons. The usage tiers are established to promote conservation using inclining block rates, which are more impactful for high usage customers.
- e) Clean-ups of spills are an ordinary and necessary part of the Company's operation and are thus a regular and recoverable cost of service. The only exception would be that in the case of management imprudence, such as known ongoing major spill hazards that should have been addressed and were ignored. Aqua strives constantly for avoidance of all preventable spills, and does not believe its spills are the result of imprudence.
- f) Requests for general rate relief occur and are required during all cycles of the economy, and although regrettable, rate increases are important to maintaining reliable and adequate service for customers.



- g) Notice to customers was provided in accordance with the directions and the time-lines required by the Commission in this case. It appears that Mr. Galamb received the notice nearly a month prior to the virtual hearing.

### **CONCLUSION**

Aqua appreciates and takes seriously this opportunity to respond to the comments and concerns expressed by the Company's customers at the rate case public hearings. Customers may not see visible signs of all improvements or repairs being made to their specific water and wastewater systems; however, Aqua notes that investments made by the Company in its water and wastewater utility systems throughout the state of North Carolina are not always obvious, given the nature of some of the work. Additionally, should there be a need for major investment for upgrades or repairs—as there will inevitably be for every system—Aqua has an obligation arising from its status as a regulated public utility to make necessary capital investments to ensure that consumers receive reliable and adequate utility service. Aqua is proud of the fact that much work has been done to address water quality issues, and emphasizes that this work continues at an accelerated pace, driven and supported by Aqua's Water Quality Plan.

Respectfully submitted, this the 9<sup>th</sup> day of November 2022.

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](mailto:sanford@sanfordlawoffice.com)

**/s/David T. Drooz**

State Bar No. 10310

Fox Rothschild LLP

434 Fayetteville Street

Suite 2800

Raleigh, North Carolina 27601-2943

T: 919-755-8778

E-mail: [DDrooz@foxrothschild.com](mailto:DDrooz@foxrothschild.com)

ATTORNEYS FOR AQUA NORTH CAROLINA, INC.

OFFICIAL COPY

Nov 09 2022



**VERIFICATION**

**Shannon V. Becker**, being duly sworn, deposes and says:

That he is the President of Aqua North Carolina, Inc.; that he is familiar with the facts set out in this **REPORT ON CUSTOMER COMMENTS FROM VIRTUAL HEARING HELD OCTOBER 20, 2022**, filed in Docket No. W-218, Sub 573; that he has read the foregoing Report 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.

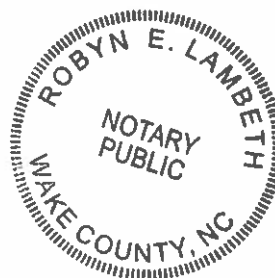
Shannon V. Becker  
Shannon V. Becker

Sworn to and subscribed before me this

the 9<sup>th</sup> day of November 2022.

Robyn E. Lambeth  
Robyn E. Lambeth  
Notary Public

My Commission Expires: May 13, 2026





**CERTIFICATE OF SERVICE**

I hereby certify that on this the 9<sup>th</sup> day of November 2022, a copy of the foregoing **REPORT ON CUSTOMER COMMENTS FROM VIRTUAL HEARING HELD ON OCTOBER 20, 2022**, filed in Docket No. W-218, Sub 573, has been duly served upon all parties of record by electronic service.

**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 AQUA NORTH CAROLINA, INC.**