



North Carolina Waterworks
Operators Association

GO WITH THE FLOW

Training Tomorrow's Water Professionals Today

October 2017
Volume 20, Number 4

Operator's Spotlight

*A Conversation with
Neil Reece*

Neil Reece works for Utilities Inc. and is the Water, Wastewater Operator II for Sugar Mountain. He has been in the water industry a little over 13 years, starting out with the Town of Seven Devils. Reece says he needed more job security than what building houses could offer, so he jumped when the utilities job opened with Seven Devils.

"I am a third generation carpenter," he says. "I left a job in law enforcement to build houses. I applied for the maintenance job and was hired as a maintenance repair crew member fixing water leaks."

Reece left Seven Devils to take a job with Utilities Inc. and has steadily worked his way up the ladder. He says he does pretty much everything, working on the water side and now the wastewater side for Sugar Mountain. There are 1,458 connections on Sugar Mountain and in the summer there is anywhere from 1,500 to 3,000 people on the mountain. In the winter, that number explodes to 30,000 a day because of Sugar Mountain Ski Resort.

"I still help out with distribution on Sugar Mountain even though I have just recently switched to ORC of wastewater now," he says. "I changed roles in August, but I am still the ORC of distribution for Elk River, Hound Ears, and Linville Ridge."



Reece has three children: one in college, one going into middle school, and a three-year-old. He says he will work for the next 20 years in the water industry until he gets his youngest through college. In his spare time he is a volunteer fireman and youth director at his church. He loves to travel within the United States, stating there is plenty to see right here in America. He loves to hunt and fish and does so in his spare time, as well as, his wife's "Honey-Do-List." He says that keeps him well immersed in the field of carpentry.

He has been a member of the North Carolina Waterworks Operators Association (NCWOA) for the last several years and he really likes what the association offers water operators.

"I became a member when I started my career and I thought I had paid my membership, but I hadn't," he laughs. "It kinda fell through the cracks. I dropped the ball on that one, but I picked it back up."

Reece loves the networking opportunities and the schools that NCWOA

provides. He says you get to meet people in the industry and instructors that you probably never would if not for the opportunities it provides.

The purpose of GO WITH THE FLOW is to keep you, the operator, informed of some of the training opportunities that are available for your certification needs (new and renewal). The Training/Meetings calendar will be updated quarterly as information about new training opportunities becomes available. Events may be scheduled by: NCWOA, Public Water Supply Section, State Laboratory of Public Health, and other sources. This newsletter may also contain information on new regulations, news from the Certification Board, and important need-to-know resource contacts.

Check out
our website!
www.ncwoa.com

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SMART METERS - WHAT ARE THEY?

By Mike Houston, Jones County

A brief history:

(AMR) Automatic Meter Reading & (AMI) Advanced Metering Infrastructure

The smart water metering market emerged in the 2000s as water utilities responded to global trends of using detailed and near real time data and analytics to deliver more predictive and proactive services. The backbone of this effort is advanced metering infrastructure (AMI) technology. AMI can provide a remote and constant two-way data link between utilities, meters, and consumers. Communications are delivered through various technologies including power line communications (PLC), telephony, broadband, fiber optic cable, wireless radio frequency, and cellular transmissions.

Hydraulic modeling and network monitoring can be used by utilities to make evidence-based network investments and upgrades. Utilities can also send information back to the meter to perform remote upgrades and fixes, reset alert parameters, shut off water supply during change of tenancy or reduce water flow for unpaid accounts.

Customer reaction:

Public perception of "smart meters" is mixed... There have been many stories that smart meters have been used to "spy" on customers and their daily habits. These myths are simply untrue, as smart meters have been used as a proactive approach to recapture lost water revenue, detect leaks, and data-log history of total water use. In the end it appears that smart technologies have benefited both the utility and the customer.

AMR or AMI:

Smart water metering however, does not come without a set of questions, uncertainties, or debates. Four of the largest industry

debates center on technology, operations, communications, and the marketplace.

Water utilities often debate whether to fully convert to AMI or run an AMR (automatic meter reading) water grid instead. The truest of smart water grid definitions requires AMI technology and its enabling two-way communications. Many water utilities however, do not see a clear advantage to AMI and feel the smart aspects of communications from meter to utility offered by AMR is fit for purpose. The final decision to implement either AMR or AMI technology really comes down to the specific need for the utility.

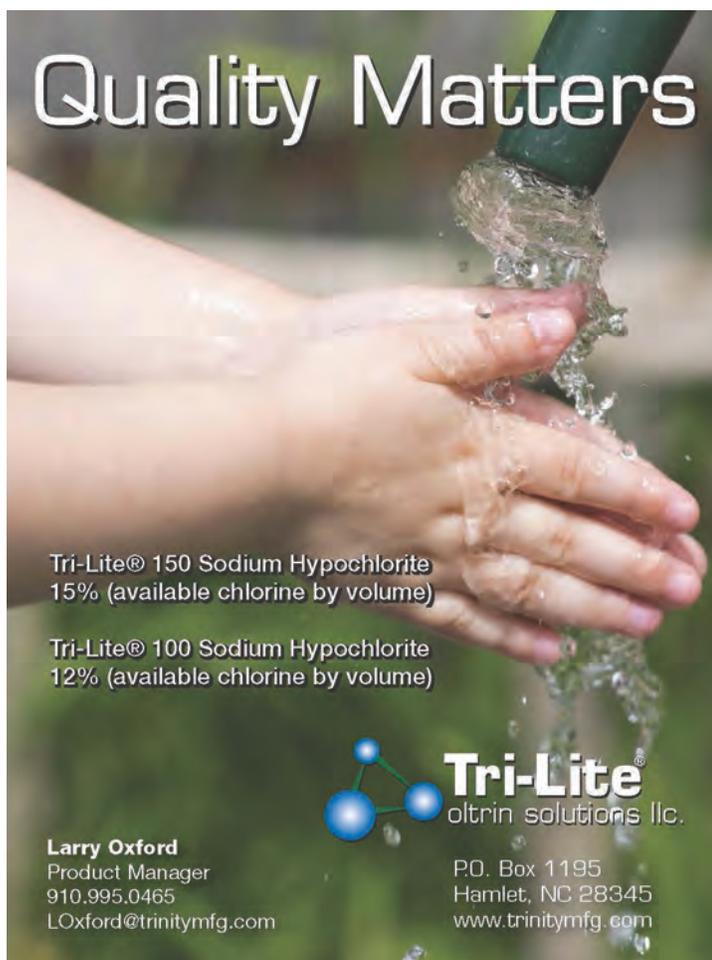
Cost:

When considering overall cost, keep in mind that AMR will be less than AMI due to the difference in complexities of each system.

System implementation cost is the overwhelming parameter for most utilities when deciding to utilize which type of smart meter technology to be used in their respective systems. The more "bells and whistles" you need will dictate the total investment.

Final Thoughts:

Today's smart meter technology is moving quicker than many of us can keep up with. With that being said, anyone looking to utilize this technology is highly urged to do their due diligence, due to the market overload of smart technology. Contacting your surrounding utilities is a great start, since many of them may have experienced the pros and cons of such a project. Putting in this early footwork will help insure that you are implementing the system that works best for you and your customers for years to come.



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What's happening at your plant?

Are you going through an upgrade, adding some new features, starting a new process? Want to share your experience with other operators?

NCWOA would love to include your article in Go With The Flow. Anyone interested please contact Heather Cagle at heather@ncwoa.com

Craft Beer is the New Textile Industry in North Carolina

By: Tanya Rose



Water quality and quantity have played a crucial role in the success of the textile industry. Almost all dyes, specialty chemicals, and finishing chemicals are applied to textiles in water baths. Each step in the fabric preparation uses water, and fabrics are rinsed with water between steps. North Carolina has traditionally led the country in textile production. For the last century, the wealth of raw materials, abundance of accessible water, and available labor made North Carolina an ideal environment for a booming textile industry. Now however, most textile jobs have moved overseas and a new industry is thriving in the state. The craft beer industry is filling the economic gap, replacing textiles as a major employer and provider of revenue.

Many would agree that the craft beer industry is an improvement over the textile industry for environmental reasons, as well as health issues and working conditions. Historically, textile factories were known to produce polluted wastewater and air. For example, coastal areas have been especially vulnerable to lint and suspended solids in wastewater. In comparison, craft breweries tend to be more involved in the overall health of the community and environmental stewardship. Breweries have frequently donated money to local

non-profit organizations that specialize in greenways projects and disaster relief. Labor unions fought against the textile industry's low wages and poor working conditions, whereas craft breweries often guarantee a living wage to their workers.

Both the textile industry and the craft beer industry have faced challenges with keeping jobs local. From the 1920s when nearly every local was employed making hosiery, to World War II era when NC provided more textile products to the military than any other state, the textile industry provided needed jobs and revenue and boosted the local economy. Then in 1992, NC textile and apparel production reached a peak, representing 16% and 4% of total manufacturing production respectively. From 1992 to 2012, there was a 69% decline in textile jobs and establishments because many jobs were moved overseas for cheaper labor and weaker environmental regulations. Around that same time, in the 1990s, an abundance of new craft breweries opened in NC. At that point, alcohol by volume (ABV) laws stated that no beer sold or brewed in NC could be above 6% ABV. By 2000, some of those breweries closed, and others felt limited by the ABV laws. Beer makers lobbied to "Pop the Cap" on the ABV limit, which would allow

them to keep up with competition out west. In 2005, the law changed to allow beer to be 15% ABV, which established NC as one of the most progressive states in the south when it came to beer legislation. NC is now home to over 130 breweries. In 2015, NC ranked 9th in the U.S. for number of craft breweries in the state. During 2014 in NC, there were 1,347 jobs in brewing, but that number jumps to 26,480 when wholesale and retail positions are added.

Beer is 95% water, so naturally beer makers must seek a clean and reliable water source. A stable, healthy watershed is essential to their product. On average, for each keg (15.5 gallons) of domestic beer produced, seven kegs (108.5 gallons)

Beer
is the third most
consumed drink
after water and tea.

A photograph of four mugs filled with different styles of beer: a dark stout, a golden beer, a dark beer, and a light beer. The mugs are arranged in a row on a wooden surface.

eDidYouKnow.com

of water are used, a 7:1 ratio. Not only does water go into the beer that is kegged or bottled, but breweries also use water for cleaning, production, packaging, and utilities. Aware of their environmental impact, many craft breweries are taking innovative steps to lower their water consumption. Some have their water use ratio down to 4:1.

Asheville, NC has more breweries per capita than any other city in the country. New Belgium Brewery (NBB), based in Ft. Collins, CO, expanded and recently chose Asheville as the home of a new brewery- in part due to the high quality and pristine water source. Stacia Janes, Sensory Technician at NBB, states that water is what separates or defines the "terroir" of beer. "Terroir" is a term she borrowed from the wine industry, which refers to the connection to the land or natural environment. Janes claims that, "the terroir of beer is more in the water than in the malt or hops, which most breweries source from the same regions." Water is vital to all aspects of life, especially for beer making. Breweries like NBB recognize the need to balance the demand with the importance of sustainability. In addition to being the primary ingredient of beer, water plays other important roles in a brewery. NBB uses water to "push" or carry beer through pipes, essentially transporting beer throughout the brewery. NBB has a goal to limit their water use ratio from 4:1 to 3.5:1 by the year 2020, which would be half the industry norm. Hoppy beers like IPAs, a larger brewery, and greater variety of styles all contribute to increased water use.

Currently using Asheville's city water, Highland Brewery has the capacity to brew over 50,000 barrels/year with room to grow. When asked about the ideal water quality parameters for making beer, the brewers at Highland had nearly the exact response as New Belgium. Water that is not too soft or too hard is ideal. Hardness of water generally refers to the amount of dissolved calcium or magnesium in the water, and is primarily a function of the geology of the surface water area. Most NC water is soft to slightly hard. Brewing salts can be added to softer water to increase the hardness if desired. However, it's costly and difficult to decrease hardness from water.

According to John Palmer's book "How to Brew", there are several ions in water that can affect beer. The most notable ones are calcium, magnesium, bicarbonate, and sulfate. Sodium and chloride can influence taste, but do not affect the mash pH or overall chemistry of the beer. Calcium and magnesium are both necessary in certain quantities for yeast reactions. Calcium promotes clarity, flavor, and stability in finished beer, while too much magnesium will give beer a sour or bitter taste. Bicarbonate is important in determining brewing water chemistry. Less bicarbonate is preferred for pale ales, mid-range is good for amber beer, and greater quantities are best for the darker beers. High levels of bicarbonate in pale-based beers cause high mash pH, decreased enzyme activity, and can increase tannin levels extracted from the grain husk, creating a tea-like harshness. Sulfate accentuates the perception of hop bitterness and makes the bitterness seem more crisp or dry. Too much sulfate can be astringent and can even cause sickness. Sodium rounds out beer flavors, accentuating the sweetness of malt, but too much can make beer taste salty. Chloride accentuates flavor and fullness, but too much can lead to chlorophenol compounds and medicine-tasting beer. Providing specific information regarding the characteristics of local water to the annual water quality report may be helpful to brewers.

Presently, the craft beer industry in the Tar Heel State is thriving and it looks like that trend will continue. As long as water treatment plants continue to provide a reliable abundance of clean high quality water, craft brewers will happily continue to brew delicious North Carolina beer. However, the next time you see a person in a brewery with a shirt that says, "Save water, drink beer" feel free to correct them on water use ratios. On the other hand, you could just sit back, relax, and enjoy the product of the collaboration between water resources teams and craft brewers. Tell them to go ahead and have another- that's just job security. Cheers!

For a list of sources cited, please email trose@ashevilenc.gov.



////////////////////////////////// **NEW FOR 2018!** //////////////////////////////////

- NCWOA is proud to offer free water professional growth hours to all NCWOA members for 2018 at Sectional Training Meetings.
- NCWOA Sections will host three, 4-hour training day meetings broken into two, 2-hour segments with lunch included.
- **Section training will offer flexible training that will be more operation focused, flexible, and hands-on allowing plant and distribution operators to obtain 6 hours of water continuing education FREE as an active NCWOA member (membership fee will increase to \$40).**
- Each section will have a representative on the Training Committee which will assist with maintaining a local section knowledge and input as to the desired training needs for the section.
- NCWOA's new training approach is being designed to increase local participation and involvement of the operators in keeping training up-to-date, interesting, locally focused, and current to the needs of plant and distribution operation.
- In addition, to help you plan your training, we will be printing the year's section meetings schedule complete with agenda & locations, thus allowing the operator to plan their training schedule in advance.
- Not a member? Join for 2018 for \$40 & get your free drinking water/distribution training or discounts on any of our dual credit classes or schools.

**2018 Training Schedule will be included in
January Go With the Flow**

NCWOA Seminars with Proposed Agendas

All NCWOA seminars listed on pages 7 are for 6.0 contact hours and are pre-approved by the NCWFOCB for treatment and distribution operators. Some of the seminars will also qualify for 6.0 wastewater contact hours. Individuals that attend an entire seminar will receive a Certificate of Attendance for 6.0 contact hours. Please see each individual seminar agenda or description for details. Registration form is available on page 9. Seminar agendas and locations are tentative and may be subject to change.

Optimized Treatment: It Takes A Team

October 17, 2017 in Greensboro

8:00 – 8:30	Registration	12:00 – 1:00	Lunch Provided On-site
8:30 – 8:40	Welcome & Announcements	1:00 – 1:45	Customer Service
8:40 – 9:15	Building a Team for Treatment	1:45 – 2:30	Emerging Contaminants for Water & Wastewater
9:15 – 10:15	Operating Water & Wastewater Treatment Facilities	2:30 – 2:45	Break
10:15 – 10:30	Break	2:45 – 4:15	High Performance HMI Graphics
10:30 – 11:15	Trenching & Shoring	4:15	6 Contact hours for all DRINKING WATER and WASTEWATER certifications
11:15 – 12:00	Coriolis Flow Meters in Water Treatment		

Water & Wastewater - Keeping it in the Pipes

November 2, 2017 in Wilson

8:00 – 8:30	Registration & Welcome	12:45 – 1:45	Public Relations - Flushing, Fats, Oils, & Grease and other Customer Notifications
8:30 – 9:30	NC-811 Update & Law Changes	1:45 – 2:45	Valves Installation & Maintenance - Water Lines & Force Mains
9:30 – 10:30	Sewer Main & Water Main Repair	2:45 – 3:00	Break
10:30 – 10:45	Break	3:00 – 4:00	Safety in the Utility Field
10:45 – 11:45	Water & Wastewater Pump Maintenance & Repairs	4:00	6 Contact hours for all DRINKING WATER and WASTEWATER certifications
11:45 – 12:45	Lunch Provided On-site		

Water Quality Monitoring & Data Analysis from Source to Tap

December 7, 2017 in Wilmington

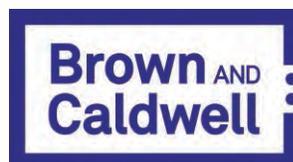
8:00 - 8:30	Registration & Welcome	11:45 – 12:45	Lunch (provided on-site)
8:30 - 9:15	Source Water Issues: Groundwater & Surface Water (Typical issues, Chloride & Bromide, Iron & Sulfur Bacteria, Taste & Odor, Brain-eating Amoeba)	12:45 – 1:30	Source Water Monitoring - What's In My Raw Water?
9:15 - 10:00	Groundwater Treatment (Typical issues, Chloride, Bromide, TOC)	1:30 – 2:15	Treatment Plant = Lab & Process Monitoring Tools
10:00 - 10:15	Break	2:15 – 2:30	Break
10:15 - 11:00	Surface Water Treatment (Typical issues, Bromide, TOC, Corrosion Control)	2:30 – 3:15	Distribution System = Water Quality Monitoring
11:00 – 11:45	Distribution (HPC's, Tank Mixing, Flushing, Lead & Copper)	3:15 – 4:00	Turning Data into Knowledge - Reports, Optimization, & Troubleshooting
		4:00	6 Contact hours for all DRINKING WATER certifications

For online seminar registration please check our website www.ncwoa.com

We Appreciate Our Corporate Sponsors!



Jack Moore & Associates, Inc.



Interested in sponsorship?

Please contact:

Mike Houston, Public Image Committee (252) 675-2380 Email: mhouston@jonescountync.gov

Allen Daniels, Public Image Committee (252) 230-8424 Email: allen@waterguardinc.com

Heather Cagle, NCWOA Administrator (252) 764-2094 ext. 1 Email: heather@ncwoa.com

or check our website at www.ncwoa.com

Additional NCWOA Sponsored Training

Bacteriological Methods Workshop
November 1-3, 2017
Contact Tiffany Kohl, (919) 807-8879

Math Review
Contact JD Monroe, (910) 947-5784

NCWOA Spring School
April 16-20, 2018 in Hickory
CHANGE IN LOCATION!!!
A, B, & C Surface
B & C Well
Advanced Day, April 18, 2018
Brochures coming in January

North Carolina Waterworks Operators Association

SEMINAR REGISTRATION FORM

Deadline for entry is receipt at least 4 business days before a seminar.

Space is limited - First Paid, First Accepted



Please Print or Type

NAME (First, MI, Last): _____ Nickname (For Tag) _____

SOCIAL SECURITY # (last 4 digits): XXX-XX-_____ EMPLOYER: _____

MAILING ADDRESS _____

CITY: _____ COUNTY: _____ STATE: _____ ZIP: _____

WORK PHONE: _____ Ext: _____ FAX: _____

EMAIL ADDRESS: _____

NC WATER TREATMENT CERTIFICATE # (OPERATOR ID #): _____ NCWOA MEMBER # : _____

NC WATER TREATMENT CERTIFICATE TYPE: AS BS CS AW BW CW DW AD BD CD DD CC/BF None

NC WASTEWATER CERTIFICATION # (OPERATOR ID #): _____, _____, _____ (Applies only to seminars indicated with a ^)

NCWOA MEMBER PRICE IS \$70.00 (Must put your INDIVIDUAL NCWOA membership number on the line above to qualify)

NON-MEMBER PRICE IS \$115.00 (Free 2018 NCWOA membership included in this price.)

^Optimized Treatment: It Takes A Team - October 17, 2017 in Greensboro	Cost \$ _____
^Water & Wastewater - Keeping it in the Pipes - November 2, 2017 in Wilson	Cost \$ _____
Water Quality Monitoring & Data Analysis from Source to Tap - December 7, 2017 in Wilmington	Cost \$ _____

Registration information for future seminars will be available in the January issue of Go With The Flow.

Please make checks payable to "NCWOA" or "North Carolina Waterworks Operators Association." We do NOT accept Purchase Orders. Credit Card payments may be mailed, faxed, or scanned but NOT called in. A confirmation letter/receipt and map will be mailed to each attendee once full payment is received.

REFUNDS: We will issue a refund (minus a \$20 administrative fee), if the refund is requested, in writing, at least 7 business days prior to the event. Refunds will be made in the same manner as payment. Substitutions may be made. Please inform us, as soon as possible, of substitutions so that the appropriate certificates of attendance may be generated.

CONTACT HOUR INFORMATION: Each of the seminars are worth 6 contact hours and have been PRE-APPROVED by the NCWTFW Certification Board for Water Treatment Facility Operators continuing education hours. All seminars marked with a "^" have **ALSO** been pre-approved by the Wastewater Commission for 6 hours.

CREDIT CARD PAYMENT

Credit Card Type: Visa MC AmEx Discover

Name on Credit Card: _____

Credit Card Number: _____

Exp Date: Month _____ Year _____ Security Code from back of Card _____

Cardholder's Signature: _____

If cardholder is other than attendee, what email address should the CC receipt be sent to? _____

To ensure that you receive the emailed receipt, please add cindy@ncwoa.com to your email address book.

NCWOA USE: Amount: _____ CK# _____ E S Processed: _____

PLEASE SEND APPLICATION AND PAYMENT TO:

Cindy Gall, NCWOA Comptroller
PO Box 4519
Emerald Isle, NC 28594
Phone: 252-764-2094 ext. 2
Fax: 252-764-2095
Email: cindy@ncwoa.com

.....
: Credit Card Payment :
: Cannot be Processed :
: Over the Phone :
:.....

MEMBERSHIP APPLICATION

MISSION STATEMENT: To provide knowledge, skills & educational opportunities for drinking water professionals; develop working relationships with other water treatment organizations; project a positive image and communicate the importance of safe drinking water.



Membership Application

ANNUAL DUES ARE \$40.00 FOR 2018 (see page 6 for details)

First Name: _____ Middle Initial: _____ Last Name: _____

Nickname: _____ Social Security # (last 4 digits): xxx-xx-_____ If Renewal, what is your NCWOA Member #: _____

YOUR Individual Operator Certification #: (Issued by NCWTFOCB) _____

Certificate(s) Held:

___ A-Surface ___ B-Surface ___ C-Surface ___ A-Well ___ B-Well ___ C-Well ___ D-Well

___ A-Dist ___ B-Dist ___ C-Dist ___ D-Dist ___ Cross-Connection

_____ Wastewater #'s & certificate type

___ None Yet ___ You are not an Operator & do not plan to become Certified.

PLEASE SELECT YOUR PREFERRED ADDRESS (This is where confirmations & membership info will be sent.)

___ Home Address: _____

City: _____ State _____ Zip _____ County: _____

___ Employer Name: _____

MAILING Address: _____

City: _____ State _____ Zip _____ County: _____

Work Phone : _____ Ext: _____ Fax: _____

Home Phone: _____ Cell Phone: _____

Email Address: _____

How would you like to receive your issues of Go With The Flow? Postal Delivery _____ OR Email _____

How would you like to receive your Section Meeting notices? Postal Delivery _____ OR Email _____

NOTE: Memberships are based upon a calendar year. Membership cards will be mailed with receipt. These cards will contain your name, membership number, and membership expiration date.

NOTE: Please make checks payable to "NCWOA" or "North Carolina Waterworks Operators Association." We do NOT accept Purchase Orders. Credit Card payments may be mailed, faxed, or scanned but NOT called in

CREDIT CARD PAYMENT

Credit Card Type: ___ Visa ___ MC ___ AmEx ___ Discover

Name on Credit Card: _____

Credit Card Number: _____

Exp Date: Month _____ Year _____ Security Code from back of Card _____

Cardholder's Signature: _____

If cardholder is other than attendee, what email address should the CC receipt be sent to? _____

To ensure that you receive the emailed receipt, please add cindy@ncwoa.com to your email address book.

NCWOA USE: Amount: _____ CK# _____ E S Processed: _____

PLEASE SEND APPLICATION AND PAYMENT TO:

Cindy Gall, NCWOA Comptroller
PO Box 4519
Emerald Isle, NC 28594
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Fax: 252-764-2095
Email: cindy@ncwoa.com

.....
: Credit Card Payment :
: Cannot be Processed :
: Over the Phone :
:

Committee Members

2016-2017 Executive Committee

President

Julius Patrick
Greenville Utilities
Phone: (252) 551-1561
Email: patricje@guc.com

First Vice-President

Jeff Isley
City of Concord
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Email: isleyj@concordnc.gov

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Chair - Public Image

Leslie Carreiro
City of Asheville – North Fork WTP
Phone: (828) 271-6105
Email: lcarreiro@ashevillenc.gov

Chair – Nomination Committee

Sam Molinas
Broad River Water Authority
Phone: (828) 286-0731
Email: smolinas@ncbrwa.com

Chair – Western Section

Ray McCall
Phone: (828) 577-3156
Email: ray@ncwoa.com

Chair – North Piedmont Section

Steve Pope
Piedmont Triad Regional Water Authority
Phone: (336) 382-2373
Email: spope@ptrwa.org

Chair – South Piedmont Section

Tena Mullis
City of Concord
Phone: (704) 920-5163
Email: mullistm@concordnc.gov

Chair – Southeast Section

Frank Efrid
Smithfield Packing
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Email: frankefrid@hotmail.com or frank.efrid@sf-fl.com

Chair – Northeast Section

Mike Houston
Jones County
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Email: mhouston@jonescountync.gov

Distribution Officer

Jeremy Godfrey
City of Asheville
Phone: (828) 259-5991
Email: jgodfrey@ashevillenc.gov

2016-2017 Committees

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Board Director: Chris Smith

Ricky Langley (Chair)
Randy Hawkins
Chris Smith
Ken Loflin
Julius Patrick
Jeff Isley

Professional Development Committees

Board Director: Jeff Isley

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Brad Whitman (Co-Chair)
Jeremy Godfrey (Dist.)
Dana Hill
Seola Hill
Pam Moss
Tim Bishop
Vance Brooks
Tony Mencome
Allan O'Briant
Dail Booth

Lee Latham

Dyk Luben
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Rani Holland
Tommy Overby
Randy Hawkins
Jeff Carlisle
Ken Loflin
Dail Booth
Yama Jones
Patty Hall
Janet Mills

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Pam Gibbons
Bessy Farmber
Julius Patrick
Steve Pope
Tom Boyd
Sam Molinas
Tena Mullis
Frank Efrid
Mike Bell
Ray McCall
Ken Loflin
Jeremy Godfrey
Mike Houston
Chad Flanagan

Operator of the Year

Award
Chris Smith (Chair)
PWS Representative - Joey White
Randy Hawkins

Leadership Committees

Board Director: Ken Loflin

Nominating

Sam Molinas (Chair)
Mike Houston
Tena Mullis
Frank Efrid
Steve Pope
Ray McCall

Rules

Tommy Overby (Chair)
Mack Edmisten
James Fuller
Ricky Langley
Jay Van Hoose
Marty Wilson

Section Meetings

If your facility would be interested in hosting any of these meetings, please contact your section chair listed above. To see who you have been missing at the section meetings, check out the section meeting button on our website at www.ncwoa.com!

Northeast	Southeast	North Piedmont	South Piedmont	Western
10/12/17 - Eastern Pines	10/11/17	10/19/17	10/18/17 - Kannapolis	10/25/17 - Spruce Pine
12/14/17				

Heather Cagle, Administrator
N.C. Waterworks Operators Association
PO Box 4519
Emerald Isle, NC 28594
www.ncwoa.com

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Important Phone Numbers & Websites

Main Phone # for Certification Board	919-707-9040	www.ncwater.org/?page=61
Jessica Godreau, PWS Section Chief	919-707-9078	
Linda Raynor, Compliance Services Branch	919-707-9095	
Robert Midgette, Operation Branch	919-707-9088	
Jay Frick, PWS – Protection & Enforcement Branch	919-707-9102	
Bethany Goodwin, PWS – Consumer Confidence Reports	919-707-9079	
Public Water Supply Offices:		www.deh.enr.state.nc.us/pws
<i>Central Office</i>	919-707-9100	
<i>Asheville</i>	828-296-4500	
<i>Mooresville</i>	704-663-1699	
<i>Winston-Salem</i>	336-776-9800	
<i>Raleigh</i>	919-791-4200	
<i>Fayetteville</i>	910-433-3300	
<i>Washington</i>	252-946-6481	
<i>Wilmington</i>	910-796-7215	
NC State Laboratory of Public Health	919-733-7308	
SDWA Hotline	800-426-4791	
EPA SDWA Website		www.epa.gov/safewater
EPA Microbial & DBP Data from Drinking Water Systems Website		www.epa.gov/enviro/html/icr
NC Waterworks Operators Association (NCWOA)	252-764-2094	www.ncwoa.com email: heather@ncwoa.com
NC Rural Water Association	336-731-6963	www.ncrwa.com
NC AWWA-WEA	919-784-9030	www.ncsafewater.org

