

August 2021 Volume 24, Number 2

The North Carolina **Area Wide Optimization Program**

By Kimberly Barnett, P.E. Asheville Regional Office -Regional Engineer

The Area Wide Optimization Program (AWOP) is a national voluntary program for both public water systems and states agencies. The NC Department of Environmental Quality, Division of Water Resources, Public Water Supply Section (PWS Section) has participated in the EPA Region 4 AWOP since 2002. The program's goal is to provide North Carolina's water utilities with training and tools that can assist in optimizing water system operations to surpass regulatory requirements. NC AWOP monitoring requirements and goals are shown in Table 1.

Microbial pathogens including protozoan parasites, bacteria, and viruses are physically removed as particles in the flocculation, sedimentation, and filtration treatment processes and inactivated in disinfection processes. The goals of AWOP are to eliminate or reduce fluctuations in water quality and treatment facility performance. These performance goals are focused on turbidity removal, largely based on the correlation that reducing finished water turbidity from 0.3 to 0.1 NTU is the equivalent of an additional log removal of giardia and cryptosporidium (USEPA Dugan 2001). Water treatment facilities that meet these performance goals provide higher quality drinking water to their customers that improves public health protection by further reducing the risk of microbial contamination.

Since AWOP's inception in 2002, North Carolina has seen a tenfold increase in population served by optimized water from approximately 250,000 people in 2002 to over 2,500,000 people in 2020. The surface water treatment plants that met the NC AWOP turbidity optimization goals in 2020 are shown in Table

These water systems will receive a printed and framed AWOP award, which signifies to management and the public the ex-

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). 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

If you would like to nominate an operator for a spotlight article please contact Heather Cagle at heather@ncwoa.com.

Inside This Issue	
The NC Area Wide Optimization Program	1-3
River Otter Mural wins National Championship	4-5
NCWOA Workshops & Training Events	6-7
NCWOA Sectional Training	8
Sponsors	9
Membership Application	10
Board & Committee Members	11
Important Phone Numbers	12

tra work water system personnel have done to achieve improved public health protection. Meeting the optimized microbial goals is very challenging and requires consistent dedication by management and staff.

In addition to the turbidity related goals, NC AWOP has also adopted Disinfection Byproduct (DBP) goals (see Table 1). The NC AWOP program targets technical assistance for systems where the Maximum Contaminant Level for Total Trihalomethanes (TTHMs) and 5 Halo Acetic Acids (HAA5) are being exceeded. Maintaining compliance with the Stage

2 DBP Rule presents a challenge for water systems in North Carolina. While the number of systems exceeding the DBP goals has decreased by 75 percent since 2006, there is still room for improvement.

In summary, the NC AWOP program has taken great strides in improving drinking water in North Carolina through working with water systems to achieve the turbidity and DBP goals. Technical assistance from the NC AWOP team and consistent effort by water system staff are key components of the successful AWOP program in North Carolina. For

more information about how your water system can become optimized, visit the NC AWOP website at https://deq.nc.gov/about/divisions/water-resources/drinking-water/area-wide-optimization-program.



City of Morganton with members of the NC AWOP Team in 2019

TABLE 1 NORTH CAROLINA AWOP MONITORING REQUIREMENTS AND GOALS

Category	Goal	Description
Microbial	Minimum Data Monitoring Requirement	 Daily raw water turbidity. Settled water turbidity from sedimentation basins at four-hour increments. On-line, continuous turbidity from each filter.
Microbial	Individual Sedimentation Basin Performance Goals	 Settled water turbidity < 2 NTU in 95% of readings when the annual average raw turbidity is > 10 NTU. Settled water turbidity < 1 NTU in 95% of readings when the annual average raw turbidity is ≤ 10 NTU.
Microbial	Individual and Combined Filter Performance Goals	 Filter water turbidity of less than 0.10 NTU in 95 percent of the maximum turbidity samples recorded each day (excluding 15-minute period following filter backwash. Maximum individual filtered water turbidity of 0.3 NTU. Filter backwash initiated before effluent turbidity exceeds 0.1 NTU. Filter to waste until turbidity is less than 0.1 NTU. Maximum filtered water measurement of less than 10 particles (in the > 2 micron range) per milliliter (if particle counters are available).
Distribution System	Disinfection Byproducts Performance Goals	 Individual Site Goal: Quarterly Maximum Locational Running Annual Average TTHM/HAA5 values not to exceed 70/50 ppb. Long-Term System Goal: Average of Maximum Locational Running Annual Average TTHM/HAA5 values not to exceed 60/40 ppb (the average of the last 8 quarters cannot exceed 60/40 ppb).

TABLE 2 NC SURFACE WATER TREATMENT PLANTS THAT MET MICROBIAL AWOP GOALS IN 2020

Appalachian State University Water Treatment Plant	Town of Southern Pines Water Treatment Plant	City of Cherryville Water Treatment Plant
Town of Wilkesboro Water Filtration Plant	Town of Carthage Water Treatment Plant	Town of Robbinsville - Rock Creek Water Treatment Plant
City of Burlington - Ed Thomas Water Treatment Plant	Orange Water & Sewer Authority	Fontana Dam Water Treatment Plant
City of Thomasville Water Treatment Plant	City of Rockingham Water Treatment Plant	City of Waynesville-Allens Creek Water Treatment Plant
Town of Mocksville - Hugh A. Lagle Water Treatment Plant	City of Raleigh - E.M. Johnson Water Treatment Plant	Maggie Valley Sanitary District Water Treatment Plant
Davie County Water System - Sparks Road Water Treatment Plant	City of Raleigh - D.E. Benton Water Treatment Plant	City of Hendersonville Water Treatment Plant
City of High Point – Frank L. Ward Water Treatment Plant	Cary/Apex Water Treatment Facility	City of Statesville Water Treatment Plant
City of Eden - Robert A. Harris Water Treatment Plant	Harris Nuclear Plant Water System	Town of Mooresville Water Treatment Plant 2
Town of Mayodan Water Treatment Plant	Cape Fear Public Utility Authority - Wilmington - Sweeney Water Treatment Plant	Western Carolina University Water Treatment Plant
Town of Madison Water Treatment Plant	Greenville Utilities Commission - Charles Horne Water Treatment Plant	City of Lincolnton Water Treatment Plant
City of King Water Treatment Plant	Piedmont Triad Regional Water Authority - John F. Kime Water Treatment Plant	Lincoln County Water Treatment Plant
City of Mount Airy - F.G. Doggett Plant	Johnston County Water Treatment Plant (East)	City of Marion Water Treatment Plant
City of Mount Airy - S.L. Spencer Plant	Martin County Regional Water and Sewer Authority Water Treatment Plant	Franklin Water Plant
Town of Elkin Water Treatment Plant	Town of Burnsville Water Treatment Plant	Salisbury-Rowan Water Treatment Plant
Town of Dobson Water Treatment Plant	City of Asheville - North Fork Water Treatment Plant	City of Kannapolis Water Treatment Plant
Kerr Lake Regional Water System	City of Asheville - William DeBruhl Water Treatment Plant	Broad River Water Authority Water Treatment Plant
Town of Pittsboro Water Treatment Plant	City of Asheville - Mills River Water Treatment Plant	Town of Norwood Water Treatment Plant
Hoffer Water Treatment Plant	Town of Weaverville-Ivy River Water Treatment Plant	City of Brevard Water Treatment Plant
Harnett County Water Treatment Plant	City of Morganton-Catawba River Water Treatment Plant	Town of Boone Water Treatment Plant
Town of Smithfield Water Treatment Plant	City of Concord - Coddle Creek Water Treatment Plant	Town of Blowing Rock - Thomas G. McRary Water Plant
Johnston County Water Treatment Plant (West)	City of Lenoir Water Treatment Plant	
City of Sanford Water Filtration Facility	City of Newton Water Treatment Plant	



A river otter mural on a water tank in Winston-Salem has won the 2021 Knope National Championship, a March Madness-style competition hosted online by Engaging Local Government Leaders. Named after Leslie Knope, the fictional "Parks and Recreation" character, this year's challenge was focused on municipal water-related services.

The Winston-Salem/Forsyth County Utilities Sides Road Water Tank was one of 85 nominees. Buoyed by the Arts Council of Winston-Salem & Forsyth County, global otter protection groups and local media encouraging the public to vote, the tank won every weekly bracket. In the final round, the colorful critter beat a wastewater reclamation facility in Athens, Georgia with 3,036 votes to 2,615.

Local ELGL members entered "Daybreak Along the River" featuring an indigenous American River Otter that was designed and painted by the artist Daas in 2018. They describe it as "absolutely adorable – not a fact, but a very, very strong opinion."

"The large participation in voting from the community really shows how much public art can make a positive, meaningful impact and serve as an ex-

ample to
encourage creative
use for these types of municipal
water facilities around the country," Daas said.

The mural is visible to thousands of southbound drivers every day on Peters Creek Parkway just south of Clemmonsville Road. It brings attention to water resources, native flora and fauna, and their importance to the community. Otters are native to the Yadkin River which serves as the main source of water for the region. The mural was created through a public/private partnership with the Lidl grocery chain, Winston-Salem/Forsyth County Utilities and the Winston-Salem Public Art Commission.

See an interview with Daas at youtube/2gmPQvZDtNk, a time-lapse video of the otter mural painting process at youtu.be/P8yN-R4gogGE and more of the artist's work at artist-daas.com.

Kirsten Wyatt, the executive director of ELGL, said the organization hosts the annual Knope Award to shine a light on essential local government services. "This year, by focusing on water, wastewater, and stormwater facilities, we wanted to showcase how critical these services are to thriving and livable communities," Wyatt said. "It's an added bonus that this year's National Champion is also simply aderable and reminds local government of the powerful connection between public services and public art."



Visit cityofws.org/1287/Water-Treatment for information on the WSFC Utilities Water Treatment Division. To learn more about this annual competition, visit elgl.org/2021-elglknope/.

Interested in Specialized Training?

NCWOA will bring the training to you!

Training specifically designed on subjects you request
6.0 hours of continuing education
Dual credit if requested

Great economical way to provide your operators with knowledge and expertise!



If interested please contact Mike Richardson or Don Price at (252) 764-2094 or mike@ncwoa.com or don@ncwoa.com.

NCWOA Upcoming Workshops & Training Events

(tentative schedule as NCWOA monitors COVID situation)

All NCWOA seminars listed on pages 6 are for 6.0 contact hours and are pre-approved by the NCWTFOCB 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. Seminar agendas and locations are tentative and may be subject to change.

Fall Certification School

September 20-24, 2021 McKimmon Center Raleigh, NC

Advanced Day & Exhibits - September 22

for more information and registration please visit www.ncwoa.com

Water & WW Operations - Distribution & Collections

October 20, 2021 in Dunn - 8am - 4pm December 8, 2021 in Asheville - 8am-4pm

Topics will include:

Regulations & Permitting for Distribution and Collection

Optimization of Operations & Maintenance for Distribution/Collection Systems

System Cleaning - Flushing, Vacuum Cleaning & Other Maintenance

Managing the Assets for the Future

Certificates for 6 Contact hours for all DRINKING WATER and WASTEWATER certifications

Water Operations - Virtual

Session 1 - November 3, 2021 from 9am-12noon Session 2 - November 4, 2021 from 9am-12noon

Session 1 topics will include: Session 2 topics will include:

Water System Management Plans NC AWOP

Groundwater Protection Turbidity Optimization

Source Water Protection Total System Optimization

Certificates for <u>3</u> Contact hours for all DRINKING WATER certifications (<u>each session</u>)

Virtual C-Level Certification School

January 2022 (Multiple 3-hour sessions) More information coming in November

Virtual Training Requirements

Participants must have broadband internet access, computer audio with microphone (or the ability to dial in by phone) and a web camera. We must be able to see the participant at all times during the sessions.

NCWOA Upcoming Workshops & Training Events

For more information and online registration, please visit our website at www.ncwoa.com

NAME (First, MI, Last):	Nickname (For T	ag)
SOCIAL SECURITY # (last 4 digits): XXX-XX	EMPLOYER:	
MAILING ADDRESS		
CITY:	COUNTY: STATE	:: ZIP:
NORK PHONE:	Ext: FAX:	
EMAIL ADDRESS:		
NC WATER TREATMENT CERTIFICATE # (OPERATOR	R ID #): NCWOA MEMBER # : _	
NC WATER TREATMENT CERTIFICATE TYPE:ASBS	CSAWBWCWDWADBD _	CD DD CC/BFNone
NC WASTEWATER CERTIFICATION # (OPERATOR ID #): NCWOA MEMBER PRICE IS \$65.00 (Must put your	r INDIVIDUAL NCWOA membership number on the line	above to qualify)
NON-MEMBER PRICE IS \$125.00 (2022 NCWOA n	nembership included in this price.)	
Water & WW Operations Distribution & Coll	lactions Octobor 20 in Dunn 9 4pm	Cost \$
Water & WW Operations Distribution & Coll Water & WW Operations Distribution & Coll	· · · · · · · · · · · · · · · · · · ·	Cost \$
VIRTUAL Water Operations - Session 1 - Nov	•	Cost \$
VIRTUAL Water Operations - Session 2 - Nov		Cost \$
•	, s.n. s. , , s.n. , <u>2.1.55.1.</u>	COST #
Please make checks payable to "NCWOA" or "N Card payments may be mailed, faxed, or scanne once full payment is received. REFUNDS: We will issue a refund (minus a \$25 ac Refunds will be made in the same manner as pay the appropriate certificates of attendance may l	Jorth Carolina Waterworks Operators Association." We dead but NOT called in. A confirmation letter/receipt and dministrative fee), if the refund is requested, in writing, a syment. Substitutions may be made. Please inform us, a be generated. PLEASE SEND APPLICATION Heather Cagle, NCWO PO Box 5466 High Point, NC 27262	do NOT accept Purchase Orders. Credit If map will be mailed to each attendee at least 7 business days prior to the even as soon as possible, of substitutions so that ION AND PAYMENT TO:
Please make checks payable to "NCWOA" or "N Card payments may be mailed, faxed, or scanned conce full payment is received. REFUNDS: We will issue a refund (minus a \$25 ac Refunds will be made in the same manner as pay the appropriate certificates of attendance may be	Jorth Carolina Waterworks Operators Association." We ded but NOT called in. A confirmation letter/receipt and dministrative fee), if the refund is requested, in writing, a syment. Substitutions may be made. Please inform us, a be generated. PLEASE SEND APPLICATION Heather Cagle, NCWO PO Box 5466 High Point, NC 27262 Phone: 252-764-2094 et ac. Discover	do NOT accept Purchase Orders. Credit If map will be mailed to each attendee at least 7 business days prior to the even as soon as possible, of substitutions so that ION AND PAYMENT TO: IA
Please make checks payable to "NCWOA" or "NCard payments may be mailed, faxed, or scanned proce full payment is received. REFUNDS: We will issue a refund (minus a \$25 acts and september of the same manner as payorhe appropriate certificates of attendance may be compared to the compared to the same manner as payorhe appropriate certificates of attendance may be compared to the co	lorth Carolina Waterworks Operators Association." We ded but NOT called in. A confirmation letter/receipt and dministrative fee), if the refund is requested, in writing, a syment. Substitutions may be made. Please inform us, a be generated. PLEASE SEND APPLICATION Heather Cagle, NCWO PO Box 5466 High Point, NC 27262 Phone: 252-764-2094 et a Discover Discover Possociation." We described and several processes are processed and several processes and several processes and several processes are processes and several processes and several processes are processes and several processes and several processes are processes and several processes and several processes and several processes and several processes are processes are proce	do NOT accept Purchase Orders. Credit map will be mailed to each attendee at least 7 business days prior to the events soon as possible, of substitutions so that ION AND PAYMENT TO: 1A
Please make checks payable to "NCWOA" or "NCG payments may be mailed, faxed, or scanned procedull payment is received. REFUNDS: We will issue a refund (minus a \$25 acts and section of the same manner as pay the appropriate certificates of attendance may be compared to the compared to	dorth Carolina Waterworks Operators Association." We ded but NOT called in. A confirmation letter/receipt and dministrative fee), if the refund is requested, in writing, a syment. Substitutions may be made. Please inform us, a be generated. PLEASE SEND APPLICATI Heather Cagle, NCWO PO Box 5466 High Point, NC 27262 Phone: 252-764-2094 e Fax: 252-764-2095 Email: heather@ncword.	do NOT accept Purchase Orders. Credid map will be mailed to each attendee at least 7 business days prior to the events soon as possible, of substitutions so the ION AND PAYMENT TO: A ext. 1 A.com Credit Card Payment:
Please make checks payable to "NCWOA" or "NCard payments may be mailed, faxed, or scanned procedul payment is received. REFUNDS: We will issue a refund (minus a \$25 acts and section and section and section are made in the same manner as pay the appropriate certificates of attendance may be compared to the compared are considered. CREDIT CARD PAYMENT Credit Card Type: Visa MC Amex ame on Credit Card: MC Amex Credit Card Number: Visa MC Visa MC Amex Credit Card Number: Visa MC Visa	lorth Carolina Waterworks Operators Association." We ded but NOT called in. A confirmation letter/receipt and dministrative fee), if the refund is requested, in writing, a syment. Substitutions may be made. Please inform us, a be generated. PLEASE SEND APPLICATION Heather Cagle, NCWO PO Box 5466 High Point, NC 27262 Phone: 252-764-2094 e Fax: 252-764-2095 Email: heather@ncword.	do NOT accept Purchase Orders. Credit map will be mailed to each attendee at least 7 business days prior to the even as soon as possible, of substitutions so that ION AND PAYMENT TO: A Axt. 1 A.com Credit Card Payment Cannot be Processed Over the Phone
Please make checks payable to "NCWOA" or "NCGO payments may be mailed, faxed, or scanned procedull payment is received. REFUNDS: We will issue a refund (minus a \$25 and sefunds will be made in the same manner as pay the appropriate certificates of attendance may be compared to the com	dorth Carolina Waterworks Operators Association." We ded but NOT called in. A confirmation letter/receipt and dministrative fee), if the refund is requested, in writing, a syment. Substitutions may be made. Please inform us, a be generated. PLEASE SEND APPLICATI Heather Cagle, NCWC PO Box 5466 High Point, NC 27262 Phone: 252-764-2094 e Fax: 252-764-2095 Email: heather@ncword.	do NOT accept Purchase Orders. Credit map will be mailed to each attendee at least 7 business days prior to the events soon as possible, of substitutions so that ION AND PAYMENT TO: A xt. 1 a.com Credit Card Payment Cannot be Processed
Please make checks payable to "NCWOA" or "NCard payments may be mailed, faxed, or scanned procedul payment is received. REFUNDS: We will issue a refund (minus a \$25 acts and seasons will be made in the same manner as pay the appropriate certificates of attendance may be appropriate certificates of attendance may be compared to the	dorth Carolina Waterworks Operators Association." We ded but NOT called in. A confirmation letter/receipt and dministrative fee), if the refund is requested, in writing, a syment. Substitutions may be made. Please inform us, a be generated. PLEASE SEND APPLICATI Heather Cagle, NCWC PO Box 5466 High Point, NC 27262 Phone: 252-764-2094 e Fax: 252-764-2095 Email: heather@ncword.	do NOT accept Purchase Orders. Credit map will be mailed to each attendee at least 7 business days prior to the events soon as possible, of substitutions so the RON AND PAYMENT TO: Auxt. 1 A.com Credit Card Payment Cannot be Processed Over the Phone
Please make checks payable to "NCWOA" or "NCGOAT payments may be mailed, faxed, or scanned procedull payment is received. REFUNDS: We will issue a refund (minus a \$25 and sefunds will be made in the same manner as pay the appropriate certificates of attendance may be compared to the c	dorth Carolina Waterworks Operators Association." We ded but NOT called in. A confirmation letter/receipt and dministrative fee), if the refund is requested, in writing, a syment. Substitutions may be made. Please inform us, a be generated. PLEASE SEND APPLICATION Heather Cagle, NCWO PO Box 5466 High Point, NC 27262 Phone: 252-764-2094 etem in the properties of the pro	do NOT accept Purchase Orders. Credit map will be mailed to each attendee at least 7 business days prior to the even as soon as possible, of substitutions so that ION AND PAYMENT TO: A Axt. 1 A.com Credit Card Payment Cannot be Processed Over the Phone

NCWOA Sectional Training

(tentative schedule and could be subject to change)

All sectional training is open to anyone regardless of your particular section. Training agendas and dates are tentative and may be subject to change.

Western Sectional Training

August 17 - 10am-12noon

Mills River WTP - Topics: SCADA - Jon Forrest, Fortech /Tanks & Coatings - Austin Windham, Tnemic

October 19

Questions/RSVP to Brendan Kelley at (828) 232-4574 or BKelley@ashevillenc.gov

North Piedmont Sectional Training

August 5 - 10am-12noon

Eden City Hall - Topics: Legionella Testing & Technology/Different Technologies - Isaac Ketteman, USA Bluebook

October 7

Questions/RSVP to Melanie Clark at (336) 627-1009 ext 101 or mclark@edennc.us

South Piedmont Sectional Training

August 26 - 10am-12noon

Salisbury-Rowan Utilities - Topics: Asset Inventory Systems - Doug Chapman, McGill Associates/Plant Upgrades & Plant Tour - Jeff Parker, City of Salisbury (SPACE IS LIMITED TO 25 ATTENDEES)

October 21

Questions/RSVP to Tena Mullis at (704) 920-5163 or mullistm@concordnc.gov

Northeast Sectional Training

August 10 - 10am-12noon VIRTUAL

Topics: Data Management - Pam Moss, HACH/Chemical Safety - WaterGuard

October 12

Questions/RSVP to Dail Booth at (252) 551-1559 or boothrd@guc.com

Southeast Sectional Training

October 14

Questions/RSVP to Robin Miller at robin.miller@faypwc.com

<u>Virtual Training Requirements</u>

Participants must have broadband internet access, computer audio with microphone (or the ability to dial in by phone) and a web camera. We must be able to see the participant at all times during the sessions.

Must be an active member to receive credit hours.

We Appreciate Our Corporate Sponsors!























Interested in sponsorship? Multiple Opportunities Available

Please contact:

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

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 an article in the Go With The Flow or if you are intersted in hosting a sectional training meeting please contact Heather Cagle at 252.764.2094 ext. 1 or heather@ncwoa.com.

North Carolina Waterworks Operators Association 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 \$50.00 FOR 2021

	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-Conn	ection
Was	tewater #'s
None Yet You are not an Operator & do not plan to be	come Certified.
PLEASE SELECT YOUR PREFERRED ADDRESS (This is where confirm	ations & membership info will be sent.)
Home Address:	
City: State	Zip County:
Employer Name:	
MAILING Address:	
City: State	Zip County:
Work Phone :	
Home Phone: Cell Phone:	
Email Address:	
How would you like to receive your issues of Go With The Flow? Post	al Delivery <u>OR</u> Email
How would you like to receive your Section Meeting notices? Postal	Delivery <u>OR</u> Email
NOTE: Memberships are based upon a calendar year. Membership membership number, and membership expiration date.	cards will be mailed with receipt. These cards will contain your name,
NOTE: Please make checks payable to "NCWOA" or "North Carolina Orders. Credit Card payments may be mailed, faxed, or scanned but	
CREDIT CARD PAYMENT	PLEASE SEND APPLICATION AND PAYMENT TO: Heather Cagle, NCWOA Administrator
Credit Card Type: Visa MC AmEx Discover	PO Box 5466 High Point, NC 27262
Name on Credit Card:	Phone: 252-764-2094 ext. 1 Fax: 252-764-2095
Credit Card Number:	Email: heather@ncwoa.com
Exp Date: Month Year Security Code from back of Card	
Cardholder's Signature:	Over the Phone
If cardholder is other than attended what email address should the C	CC receipt be sent to?

Committee Members

2021 Executive Committee

President

Ken Loflin

Email: kloflin95@gmail.com

First Vice-President

Sam Molinas

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

Second-Vice President

Steve Pope

Piedmont Triad Regional Water Authority

Phone: (336) 382-2373 Email: spope@ptrwa.org

Secretary

Michelle Clements The East Group

Phone: (252) 758-3746 x 131

Email: michelle.clements@eastgroup.com

Treasurer

Leslie Carreiro

City of Asheville - North Fork WTP

Phone: (828) 271-6105

Email: Icarreiro@ashevillenc.gov

Past President

Jeff Isley

Email: Isley1062@aol.com

Chair - Board of Examiners

Pat Irwin Dare County

Phone: (252) 475-5603

Email: pat.irwin@darenc.com

Chair - Public Image

Allen Daniels Water Guard, Inc. Phone: (252) 230-8424

Email: allen@waterguardinc.com

Chair - Nomination Committee

Chris Smith

Fayetteville Public Works Phone: (910) 223-4708

Email: chris.smith@faypwc.com

Chair - Western Section

Brendan Kellev City of Asheville Phone: (828) 232-4574

Email: BKelley@ashevillenc.gov

Chair - North Piedmont Section

Melanie Clark City of Eden

Phone: (336) 627-1009 ext 101 Email: mclark@edennc.us

Chair - South Piedmont Section

Tena Mullis City of Concord Phone: (704) 920-5163

Email: mullistm@concordnc.gov

Chair - Southeast Section

Del Coffman

Fayetteville Public Works Phone: (910) 223-4706

Email: del.coffman@faypwc.com

Chair - Northeast Section

Dail Booth

Greenville Utilities Phone: (252) 551-1559 Email: boothrd@guc.com

Distribution Officer

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

2021 Committees

Finance Committee

Board Director: Julius Patrick

Chad Flannagan (Chair) Leslie Carreiro Julius Patrick Sam Molinas Ken Loflin Jeff Isley

Professional Development Committees

Board Director: Sam Molinas

Seminars

Steve Pope (Chair) Jeff Isley Leslie Carreiro Don Price Mike Richardson Melanie Clark Tena Mullis Dail Booth Brendan Kelley Del Coffman Julius Patrick Carl Scharfe Allen Daniels Rodney Horne

Annual Schools

Sandra Bradshaw (Chair) Del Coffman Garrett Gilbert Tiffanie Hawley

Lab Analyst

Chris Goforth (Co-Chair) Bernadine Wardlaw (Co-Chair) Chad Flannagan(Co-Chair) Jeff Isley **Amy Watters Dustin Guyer** Erik Ruff

Patricia Quinichett Elizabeth Meyer David Livingston

Board of Examiners

Pat Irwin (Chair) Ricky Langley Rani Holland Jeff Carlisle Julius Patrick Chris Smith Jay Van Hoose Dail Booth Yama Jones Patty Hall Mark Hahn Janet Mills

Public Image Committees

Board Director: Allen Daniels

Member Services

lan Stroud (Chair) Chad Flannagan Julius Patrick Tena Mullis Melanie Clark Del Coffman Dail Booth Brendan Kelley Gabe Sasser Dave Banick Sam Molinas Ken Loflin

Operator of the Year Award

Jeff Isley (Chair) PWS Representative - Joey White Charlie Colie

Leadership Committees

Board Director: Steve Pope

Nominating

Chris Smith (Chair) Tena Mullis Dail Booth Melanie Clark Brendan Kelley Del Coffman

Rules

Mack Edmisten (Chair) Chris Smith Jay Van Hoose

Heather Cagle, Administrator N.C. Waterworks Operators Association PO Box 5466 High Point, NC 27262 www.ncwoa.com

NON PROFIT ORG U.S. POSTAGE PAID

Important Phone Numbers & Websites

Main Phone # for Certification Board	919-707-9040	https://deq.nc.gov/about/ divisions/water-resources/ operator-certification/drinking- water-operator-certification/dv operator-certification-wtfocb
Bob Midgette, PWS Section Chief	919-707-9088	
Linda Raynor, Compliance Services Branch	919-707-9095	
Jay Frick, Operations Branch	919-707-9102	
Rebecca Sadosky – Protection & Enforcement Branch	919-707-9096	
Bethany Goodwin, PWS – Consumer Confidence Reports	919-707-9079	
Public Water Supply Offices:		www.deh.enr.state.nc.us/pws
Central Office	919-707-9100	
Asheville	828-296-4500	
Mooresville	704-663-1699	
Winston-Salem	336-776-9800	
Raleigh	919-791-4200	
Fayetteville	910-433-3300	
Washington	252-946-6481	
Wilmington	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