

83rd Annual North Carolina Waterworks Operators School

September 26 - 30, 2022



Including Advanced Day

Wednesday, September 28, 2022

NCSU McKimmon Center - Raleigh, NC

This school serves as a **REVIEW** of topics covered in the study manuals (see page 3) from which all exam questions are derived.

ATTENTION OPERATORS - Need help with math?

Special Class - *Basic Math for Operators*

(This class is designed for reviewing basic math skills for new operators in preparation to better understand the C-Surface & C-Well math classes.)

This class will be held from 9:00am - 10:00am on Monday prior to Fall School registration. This class is open to all operators free of charge who are registered for Fall School in either C-Surface or C-Well. This class is NOT REQUIRED as part of the certification school but is limited to 45 participants.

Class Schedule for A, B & C Well and A, B & C Surface

Monday, September 26

9:00am – 10:00am **Basic Math for Operators (C-level students only)**
10:00am – 10:45am Registration - McKimmon Center
10:45am – 5:30pm Report to your assigned classroom

Tuesday, September 27

8:00am – 5:00pm Classes – Report to your assigned room – Lunch Provided
7:00pm – 9:00pm Review – Holiday Inn Express & Suites
(3741 Thistledown Dr. off of Gorman St.)

Wednesday, September 28

7:45am - 8:30am **Breakfast in Exhibit Hall (NEW!)**
7:45am - 4:00pm Exhibit Hall Open during Breakfast, Lunch & Breaks
8:30am – 5:30pm Classes – Report to your assigned room – Lunch Provided
12:30pm – 1:30pm **AWARDS BANQUET LUNCHEON - McKimmon Center**

Thursday, September 29

8:00am – 5:00pm Classes – Report to your assigned room – Lunch Provided

Friday, September 30

8:00am – 11:00am Classes – Report to your assigned room
11:00am Certificates of Attendance Awarded

See page 4 for specific topics being **REVIEWED** in your class. Exact class agenda will be handed out at registration on Monday, Sept. 26, 2022 for A, B & C Well and A, B & C Surface.

School **REGISTRATION FORM** must be received on or before **September 16, 2022**. Applications accepted on a first-come, first-served basis. Class sizes are limited.

Host hotel will be the Holiday Inn Express & Suites

(3741 Thistledown Drive - 2.2 miles from McKimmon Center)

CHECKLIST



The following checklist is provided for your use to insure that you have taken the necessary actions to attend the School and be qualified to take the Exam.

- Send Class Registration Form (see page 6) and payment for the SCHOOL to:

Heather Cagle
NCWOA
PO Box 5466, High Point, NC 27262
Phone: 252-764-2094 ext 1
Fax: 252-764-2095
Email: heather@ncwoa.com

**Make check payable to: "NCWOA"
or "North Carolina Waterworks
Operators Association.**

**Registration must be received by
September 16, 2022.**

- Send EXAM APPLICATION and check for \$50.00 to the NCWTFO Certification Board:**
Visit the NCWTFO website for the electronic, apprentice or regular exam applications:
<http://deq.nc.gov/about/divisions/water-resources/operator-certification/drinking-water-operator-certification/dw-operator-certification-exams>. Phone: 919-707-9040

If you wish to take the exam on October 27, 2022, your exam application must be postmarked no later than September 27, 2022. On application put "To Attend" dates of 9/26-9/30/2022.

- Make hotel reservations – **HOST HOTEL IS THE HOLIDAY INN EXPRESS & SUITES**
To make reservations, call 919-854-0001 or 1-800-HOLIDAY. Guest should request group code NWA or group title NC Waterworks Operators Association.
Deadline for special group rate is September 5, 2022. (See page 4).
Special Note: A hotel authorization form must be completed, and returned to the Holiday Inn Express for guests that will not be physically traveling with their company/organization credit card.
- Information on books is listed on the next page. All exam questions are taken from the books listed on the next page.
- Read and study recommended materials. **Be sure to bring a calculator to ALL classes.**

REGISTRATION INSTRUCTIONS AND REQUIREMENTS

SCHOOL REGISTRATION FORM

To be completed by ALL students. Please complete one form per person. Please print or type. This form must be accompanied by a payment for the correct registration fee. Please make checks or money orders payable to **NCWOA or North Carolina Waterworks Operators Association**. We do not accept Purchase Orders. Please be sure to enter all information requested on the form. Incomplete forms will delay your registration or may be returned. All attendees must be pre-registered and paid in advance.

RECEIPT/CONFIRMATION OF REGISTRATION

All participants who pre-register will receive a receipt/confirmation in the mail. This acknowledgement will include specific information on the site.

CERTIFICATES OF ATTENDANCE OR COMPLETION

At the conclusion of the event all participants, who have attended at least 80% of their classes, will receive a Certificate of Attendance. These certificates will document attendance for professional growth contact hour requirements and/or successful class completion (31 drinking water hours/6 wastewater hours). Participants must pick up their own certificate at the conclusion of the event. No certificates will be given out early, to another individual.

REFUNDS

Refunds will be issued (minus a \$25 administrative fee), if the refund is requested, in writing, by September 16, 2022. Substitutions may be made. Please inform us as soon as possible of substitutions so appropriate certificates of attendance may be generated.

MEMBER/NON-MEMBER STATUS

Only individuals who are current members of NCWOA are eligible for the member rate. Please refer to your membership card for your member #. We will verify registrations for eligibility and will return those who pay the incorrect amount. If you would like to become a member, please complete the membership application in this brochure and return with payment.

How to get books for school

Surface Water Treatment - Study Materials

Sacramento Manuals:

Website: <http://www.owp.csus.edu/> or
call: (916) 278-6142

Water Treatment Plant Operator Vol. 1 – 7th Edition

Water Treatment Plant Operator Vol. 2 – 7th Edition

Small Water System Operation & Maintenance –
6th Edition

Rules Governing Public Water Systems (Green Book) (02/22)

Call 919-707-9100 or available for download from
NCWOA website

Surface Water “Needs To Know” – A Certification Study Guide for Surface Water Systems (2021)

available for download from NCWOA website

Rules Governing Water Treatment Facility Operators (Blue Book) (12/12)

available for download from NCWOA website

***All books available for download
from NCWOA website are listed
under Training - Books
www.ncwoa.com***

Well Water Treatment - Study Materials

Sacramento Manuals:

Website: <http://www.owp.csus.edu/> or
call: (916) 278-6142

Small Water System Operation & Maintenance –
6th Edition

Water Treatment Plant Operator Vol. 1 – 7th Edition

Water Treatment Plant Operator Vol. 2 – 7th Edition

Rules Governing Public Water Systems (Green Book) (02/22)

Call 919-707-9100 or available for download from
NCWOA website

Ground Water “Needs To Know” – A Certification Study Guide for Groundwater Systems (2021)

available for download from NCWOA website

Rules Governing Water Treatment Facility Operators (Blue Book) (12/12)

available for download from NCWOA website

Well Construction Standards (Red Book) (10/2009)
available for download from NCWOA website

Online Supplement for Certification Exam Review

All attendees of NCWOA Certification Schools will be eligible to enroll in an online course that will supplement and enhance the materials presented in the week-long class. The online supplement is an optional, web-based Moodle class that includes multiple practice tests, videos of worked math problems, copies of presentation materials for many of the topics presented in the week-long school, and additional materials that will help you prepare for the certification exam. The online supplement will be available by the first day of the week-long school and will be accessible until the day of the first traditional certification exam after the school.

If you wish to participate in this program, please be sure that YOUR email address is included on your registration form. Please note the online supplement is optional.

Individuals who register for the week-long school will receive an email with directions on how to log in and access the class.

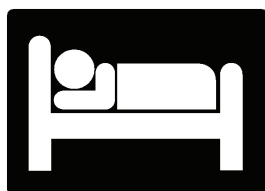
Surface & Well Review Topics

WELL REVIEW CLASSES

A	B	C	Class Title
X	X	X	Administration
X	X	X	Bacteriology
X	X	X	Corrosion Control
X	X	X	Disinfection & Disinfection By-Products
X	X	X	Distribution Systems & Cross Connection
X	X	X	Drinking Water Regulations & Records
X	X		Fluoridation
X	X	X	Ground Water Hydrology
		X	Groundwater Treatment Processes
X	X		Handling & Disposal of Process Wastes
X	X		Instrumentation
X	X		Iron & Manganese Removal
X	X	X	Lab Procedures & Sample Collection
X	X	X	Maintenance
X	X	X	Math
X	X		Membrane Processes
		X	Operation of Small Water Systems
X	X	X	Pumps
X	X	X	Safety
X	X	X	Softening
X	X	X	Well Construction
	X	X	Well-Water Chemistry

SURFACE REVIEW CLASSES

A	B	C	Class Title
X	X	X	Administration
X	X	X	Bacteriology
X	X	X	Coagulation & Flocculation
X	X	X	Corrosion Control
X	X	X	Disinfection & Disinfection By-Products
X	X	X	Distribution Systems & Cross Connection
X	X	X	Drinking Water Regulations & Records
X	X	X	Fluoridation
X	X	X	Handling & Disposal of Process Wastes
X	X		Instrumentation
X	X	X	Iron & Manganese Removal
		X	Jar Test
X	X	X	Lab Procedures & Sample Collection
X	X	X	Maintenance
X	X	X	Math
X	X	X	Plant Operations
X	X	X	Pumps
X	X	X	Safety
X	X	X	Sedimentation & Filtration
X	X	X	Taste & Odor
X	X	X	WTP Operator & Reservoir Management



HOTEL ACCOMMODATIONS

SPECIAL NOTE: The host hotel will now be the Holiday Inn Express & Suites. A block of rooms has been reserved in the name

of the NC Waterworks Operators Association until **September 5, 2022**. When you make your reservations be sure to request group code NCWOA or group title NC Waterworks Operators Association.

Holiday Inn Express & Suites
3741 Thistledown Drive
Raleigh, NC 27606
Phone: 919-854-0001

Limited Number of Rooms Blocked – Special Group Rates
 \$ 115.00 King or Double Rate (Breakfast is included)

Special Notes:

A hotel authorization form must be completed, and returned to the Holiday Inn Express and TownePlace Suites for guests that will not be physically traveling with their company/organization credit card.

There will be a \$20.00 hold per night up to \$140.00 max for incidentals (if company/organization does not cover, individuals will have to provide their own credit card.) Authorization will have to include incidentals, otherwise individuals will be required to provide a credit card at check-in or they will not be able to check-in. The hold will be effective at check-in and will be released back to their account when they check out if there are no incidental charges (which could take 3-10 days.)

MEETING SITES

Advanced Day, Well & Surface classes and their lunches will be held at the McKimmon Center, which is located near the main NCSU campus at the corner of Western Boulevard and Gorman Street in Raleigh (919-515-2277).

OVERFLOW HOTEL

Towneplace Suites
 3771 Thistledown Drive
 Raleigh, NC 27606
 Phone: 984-300-1410 (*mention NCWOA Group*)
Deadline: September 5, 2022

Limited Number of Rooms Blocked – Special Group Rates
 \$ 135.00 Studio King Suite
 \$ 145.00 Studio Double Queen Suite



NORTH CAROLINA WATERWORKS OPERATORS ASSOCIATION

Advanced Day Agenda

Wednesday, September 28, 2022 in Raleigh, NC

Emerging Issues for the Water Industry

EXHIBIT HALL OPEN FROM 7:45AM - 4:00PM
BREAKFAST 7:45AM-8:30AM

Session 1

9:00am – 9:30am Certification Board Update
9:30am – 10:30am Financial Considerations/Funding
Exhibit Hall Break/Networking: 10:30 - 11:00

Session 2

11:00am – 12:30pm Lead & Copper Update
Awards Banquet Luncheon – Provided on Site 12:30 – 1:30

Session 3

1:30pm – 2:30pm UCMR 5 Overview
2:30pm – 3:00pm PFOS/PFAS - Emerging Contaminants & Techniques
Exhibit Hall Break/Networking: 3:00 – 3:30

Session 4

3:30pm – 4:00pm PFOS/PFAS - Emerging Contaminants & Techniques (continued)
4:00pm – 5:00pm Gen X - What is CFPWA doing for the Future?

This class has been pre-approved for 6 contact hours for drinking water and wastewater certification.
Agenda is tentative and could be subject to change.

AWARDS BANQUET LUNCHEON

The Awards Banquet Luncheon and Business Meeting will be held on Wednesday, September 28, 2022. The festivities will begin at 12:30pm at the McKimmon Center. There will be door prizes given away. Please make plans to attend and congratulate your fellow operators for a job well done!



NORTH CAROLINA WATERWORKS OPERATORS ASSOCIATION

Annual Fall School Registration Form

Must be RECEIVED BY September 16, 2022

Please Print or Type

NAME (First, MI, Last): _____

NICK NAME for TAG: _____ SOCIAL SECURITY #: XXX-XX-_____

EMPLOYER / ORGANIZATION: _____

ADDRESS FOR CONFIRMATION & MAP: _____

CITY: _____ STATE _____ ZIP _____ COUNTY: _____

WORK PHONE: _____ EXT: _____ FAX: _____

ATTENDEE'S EMAIL ADDRESS: _____
(Be sure to include if you would like access to NCWOA Moodle On-line supplement. Moodle log in and instructions will be sent to this email address.)

By registering for this training event, you acknowledge that you have read and understand NCWOA's Code of Ethics statement which can be found at www.ncwoa.com

ATTENDEE'S INDIVIDUAL NCWOA MEMBER # (must be included to be eligible for member rate): _____

NC WATER TREATMENT CERTIFICATE TYPE PRESENTLY HELD:

- AS BS CS AW BW CW DW
- AD BD CD DD CC/BF NONE

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

NC WASTEWATER CERTIFICATE# _____

PLEASE **CHECK** WHICH CLASS YOU ARE REGISTERING FOR AND **CIRCLE** RATE:

<u>CLASS TITLE</u>	<u>NCWOA MEMBER RATE</u>	<u>NON-MEMBER RATE</u>
<input type="checkbox"/> A-Surface (M-F)	\$ 350.00	\$ 410.00
<input type="checkbox"/> B-Surface (M-F)	\$ 350.00	\$ 410.00
<input type="checkbox"/> C-Surface (M-F)	\$ 350.00	\$ 410.00
<input type="checkbox"/> A-Well (M-F)	\$ 350.00	\$ 410.00
<input type="checkbox"/> B-Well (M-F)	\$ 350.00	\$ 410.00
<input type="checkbox"/> C-Well (M-F)	\$ 350.00	\$ 410.00
<input type="checkbox"/> Advanced (Wednesday)	\$ 150.00	\$ 210.00
<input type="checkbox"/> Advanced VIRTUAL (Wednesday)	\$ 150.00	\$ 210.00

We will be offering 25 Advanced Day virtual seats. Virtual training requirements apply.

**MAX 25 virtual seats
MIN 5 virtual seats**

Will you be attending the Basic Math for Operators from 9am-10am on Monday, Sept 26th? _____ Yes _____ No
It is not required as part of the certification school. (**C-level students only - limited to first 45 participants**)

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 heather@ncwoa.com to your email address book.

PLEASE SEND APPLICATION AND PAYMENT TO:

Heather Cagle, NCWOA
PO Box 5466, High Point, NC 27262
Phone: 252-764-2094 ext 1
Fax: 252-764-2095
Email: heather@ncwoa.com

Credit Card Payments CANNOT be processed over the phone.

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



NORTH CAROLINA WATERWORKS OPERATORS ASSOCIATION

Membership Application

MEMBERSHIP APPLICATION – 2022 ANNUAL DUES ARE \$50.00

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

Nickname: _____ Social Security #: 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

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

____, _____ Wastewater #'s

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: **North Carolina Waterworks Operators Association** or **NCWOA**. We do NOT accept Purchase Orders.

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: _____

PLEASE SEND APPLICATION AND PAYMENT TO:

Heather Cagle, NCWOA
PO Box 5466, High Point, NC 27262
Phone: 252-764-2094 ext 1
Fax: 252-764-2095
Email: heather@ncwoa.com

⋮ Credit Card Payments CANNOT ⋮
⋮ be processed over the phone. ⋮

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

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

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

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

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NORTH CAROLINA WATERWORKS OPERATORS ASSOCIATION

83rd Annual North Carolina Waterworks Operators School

September 26-30, 2022

Advanced Day Wednesday, September 28, 2022

*AWARDS BANQUET LUNCHEON and ANNUAL BUSINESS MEETING
Wednesday, September 28, 2022 from 12:30pm - 1:30pm at the McKimmon Center*

We Appreciate Our Corporate Sponsors! Look to them first for all of your industry needs.

