

Nevada Drinking Water Workshops

July–December 2022



NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**

Presented by:
Rural Community Assistance Corporation
Funded by:
Nevada Division of Environmental Protection

Nevada Drinking Water Workshops

July–December 2022

The goal of these workshops is to provide information to help small, rural water systems deliver safe, reliable drinking water to their customers and to demonstrate how to properly manage a water system for long-term viability.

Long-term viability includes additional capacity development in the following areas:

Technical:

- Regulatory Compliance
- Operator training and testing
- Operations and maintenance
- Sampling, water quality testing, and troubleshooting
- System mapping

Managerial:

- Management/board training
- Human resource management
- Consolidation/collaboration/water rights management
- Security and vulnerability response

Financial:

- Budgeting and rate setting
- Asset management
- Capital project planning
- Financial management



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Registration

For the fastest registration and most current information, please visit:

www.events.rcac.org/rcac/Calendar.asp

Then choose "Nevada" from the state drop down and click "Filter".

Registration help: <http://www.rcac.org/trainings/registration-help/>

Training department phone: (916) 447-9832 ext. 1429 • **Fax:** (916) 372-5636 • **Mail:** RCAC • 3120 Freeboard Drive, Suite 201 • West Sacramento, CA 95691

Training Information

Contact Hours & Certificates:

Each classroom workshop qualifies for six (6) drinking water contact hours. Each online workshop qualifies for two (2) drinking water contact hours. Certificates will be provided at the conclusion of each on-site training to those pre-registered at least two weeks in advance.

Certificates for all online sessions will be available for self-printing within 48 hours through your RCAC website registration/profile account. Self-printing classroom certificates are also available for most workshops, but may take longer to access through your online account. RCAC and the Bureau of Safe Drinking Water require signatures for in-person trainings and we must wait to receive the original classroom sign-in sheets to be sent from the RCAC trainers in order to verify attendance.

Cost:

There is no fee to attend these workshops. Priority is given to smaller water systems. For classroom trainings, handouts will be available for those who register at least three weeks before the class date.

Online Workshops

Online workshops will be hosted on the GoToTraining platform. The recommended web browsers are Edge and Chrome. Use of other browsers may lead to functionality issues. If using an IOS device, the GTT application should be downloaded and used.

All online workshop registrations require a valid e-mail address. See page 2 for more detailed information.

In order to receive contact hours for online workshops, each person must be registered and complete an online survey at the end of the training.

Are you attending as a group, but not watching from your own computer?

Attendees do not need to participate from their own computer/device for the online trainings, but will need to complete an evaluation to receive credit. Your group leader will need to inform RCAC (registration@rcac.org) of attendees who will be viewing sessions as a group prior to session start. Sign-in sheets are NO LONGER accepted to validate attendance for contact hours for online workshops.

Please notify RCAC as soon as possible if you cannot attend a session that you have registered for, as we have an attendee limit for online workshops. Cancellations can be made by email at registration@rcac.org or by phone at (916) 447-9832 x 1429. Please do not cancel through GoToTraining.

IMPORTANT: Failure to attend three workshops for which you reserved a seat (and did not cancel) in any six-month period will disqualify you from attending workshops in the following six-month period. Please cancel a minimum of 48 hours in advance to allow others to attend the training.

How do I find my certificates online?

You can now access your contact hour certificates online. (Not all trainings may be available). From the "View My Profile" page, click at the prompt for your certificates and history. That will take you to "My Registration Portal" page.

You can then print your certificates directly from your browser.

If you are unable to access your records through your account for any reason, please phone our staff at (916) 447-9832 ext. 1429 or email registration@rcac.org.

Certificates for all trainings may NOT be available. Contact registration@rcac.org if you cannot locate your training certificate online.

COVID-19 Response

We are monitoring the situation and will adhere to state and county COVID-19 guidelines/restrictions. All classroom workshops are subject to change in an effort to ensure public and trainer safety, and to comply with state and county guidelines/restrictions.



Online Workshops

RCAC's online trainings are instructor-led, interactive, internet-based workshops designed to provide quality training without the participant having to travel. Each session is two hours and qualifies for two contact hours.

Registration

In order to receive contact hours for online workshops, each person must be registered with their own email address and complete an online survey at the end of the training.

Are you attending as a group, but not watching from your own computer?

Attendees do not need to participate from their own computer/device for the online trainings, but will need to complete an evaluation to receive credit. Your group leader will need to inform RCAC (registration@rcac.org) of attendees who will be viewing sessions as a group prior to session start.

Online certificates

Certificates are available for self-printing within 48 hours through your RCAC website registration/profile account. This allows RCAC time to confirm your participation in the online training.

RCAC uses the GoToTraining™ online platform. We recommend that you sign-in to the session 15 to 30 minutes early to download the GoToTraining desktop app (if needed). All online workshop registrations require a valid email address. This is how the links (invitations) to the training are sent to registered participants.

Technical recommendations

Online workshops will be hosted on the GoToTraining platform. The recommended web browsers are Edge and Chrome. Use of other browsers may lead to functionality issues. If using an IOS device, the GTT application should be downloaded and used.

We recommend using a headset or speakers with your computer. You do not need a microphone for this class. You can use the chat box to type your questions and comments to the instructors and others in the training if you choose. GoToTraining has links available for you to test your connection and/or audio to provide assistance if you are having problems connecting to a session. If you continue to have problems connecting, contact GoToTraining Tech Support, toll free, at (855) 352-9002, and choose option 1.

Cancellation

Please notify RCAC as soon as possible if you cannot attend a session that you have registered for, as we have an attendee limit for online workshops. Please cancel a minimum of 48 hours in advance to allow others to attend the training.

Cancellation can be made by email at registration@rcac.org or by phone at (916) 447-9832 x 1429. Please do not cancel through GoToTraining.

IMPORTANT: Failure to attend three workshops for which you reserved a seat (and did not cancel) in any six-month period will disqualify you from attending workshops in the following six-month period.



Developing the Operator Workforce

August 11, 2022 • 10:00 AM–12:00 PM (PST)

Both water and wastewater treatment systems employ operators who are required to have state-regulated training and certification. Hiring the right person the first time is much easier than having to fire an employee who did not meet expectations and then having to refill the position.

Participants will learn how to:

- Identify the needs of the system
- Assign responsibility and essential functions
- Determine how better to structure the work of your employees
- Provide operators with the tools, equipment, and training to perform their jobs efficiently

Target audience: appointed, elected, or volunteer to be a board member.

Cyber Security 101: Safety and Security

August 30, 2022 • 10:00AM–12:00 PM (PST)

Cyber Security is an increasing concern for all of us. Taking simple steps in our system can prevent costly and dangerous outcomes. In two hours, we will share common strategies used to reduce the risk to your water system and your community.

Participants will learn:

- How to assess the risk and resilience of the water system to a cyber threat
- Common attack methods hackers use to target water systems
- What security measures can be taken to protect the water system

Target Audience: operators, managers, utility staff

Distribution Operator Prep (3 Part Series)

Part 1 • August 24, 2022 • 10:00 AM–12:00 PM (PST)

Part 2 • August 31, 2022 • 10:00 AM–12:00 PM (PST)

Part 3 • September 7, 2022 • 10:00 AM–12:00 PM (PST)

The operator exam is coming, and you want to increase your chances of passing. This three-part series spans three weeks and is designed to present knowledge and help you identify areas where you may need additional study or help. Each week we will focus on different aspects of the Distribution Grades 1 and 2 exams. You will identify areas for further study and build on them in subsequent weeks. Participation in all three sessions is highly encouraged.

Participants will learn:

- Distribution system overview
- Distribution equipment
- Minimal basic math
- Testing tips and tricks
- Cross connection control basics
- Repairing components
- Chemicals
- Lab samples
- Safety

Target audience: This class is geared towards individuals preparing to take the Distribution Operator Level 1 or 2 exam

Treatment Operator Prep (3-Part Series)

Part 1 • August 24, 2022 • 2:00 PM–4:00 PM (PST)

Part 2 • August 31, 2022 • 2:00 PM–4:00 PM (PST)

Part 3 • September 7, 2022 • 2:00 PM–4:00 PM (PST)

The operator exam is coming, and you want to increase your chances of passing. This three-part series spans three weeks and is designed to present knowledge and help you identify areas where you may need additional study or help. Each week we will focus on different aspects of the Treatment Grades 1 & 2 exams. You will identify areas for further study and build on them in subsequent weeks. Participation in all three sessions is highly encouraged.

Participants will learn:

- Treatment system overview
- Treatment equipment
- Minimal basic math
- Testing tips and tricks
- Filtration
- Repairing components
- Chemicals
- Lab samples
- Safety

Target audience: This class is geared towards individuals preparing to take the Treatment Operator Level 1 or 2 exam

Build America, Buy America

September 13, 2022 • 10:00 AM–12:00 PM (PST)

In 2021 the Infrastructure Investment and Jobs Act was signed into law. This act incorporates the Buy America preference for all infrastructure projects in the US. This online training event will delve into what that means for water systems receiving funding from federal and state agencies.

Participants will learn:

- What the Buy American provisions mean for their water system
- How to incorporate these provisions into new and existing projects

Target audience: managers, board members and operators

Regulations Update

September 28, 2022 • 10:00 AM–12:00 PM (PST)

With the wrap up of the Congressional and legislative sessions, operators will need to know key changes in rules and regulations. This session will provide a recap of key regulations and rule changes affecting Nevada operators, such as the new updates to the Lead and Copper Rule. NDEP staff will be present to offer insight and guidance for operators.

Participants will:

- Learn what changes have recently taken place in water quality regulations
- Have an opportunity to ask questions of NDEP staff and TA providers

Target audience: managers and operators

Funding Options in Nevada

October 19, 2022 • 8:00 AM–12:00 PM (PST)

Nevada has many opportunities for infrastructure funding. Do you know what your options are? In this online venue major funding providers will show what they currently offer, how to access their funds and sample projects.

The last portion will include meetings with potential funders to share about your projects.

Participants will learn:

- What funding is available in Nevada
- How to access those funds

Target audience: managers, board members, system staff

Contract Operator: Understanding the Duties of a Water System Operator

November 10, 2022 • 6:00 PM–8:00 PM (PST)

Understanding the roles and responsibilities in delivering safe drinking water to your system's customers is crucial in every public water system. The responsibilities can vary depending on the size of the system, characteristics (e.g., complexity of the system), managerial structure, and regulatory requirements. As a decision maker, hiring a certified operator will not eliminate a system's legal responsibility, but it can help with making decisions that meet state regulation requirements.

Participants will learn:

- To find the right operator for your system.
- To communicate the water system responsibilities documenting expectations for operating the water system.
- The importance of holding and attending regular safety meetings to ensure that all staff are properly certified for the system's safety procedures (e.g., CPR, confined space entry, lock-out/tag-out, etc.) and any other necessary training/education (e.g., equipment upgrades, changes in treatment processes, new regulations, etc.).

Target audience: appointed, elected, or volunteer board members.

All Things Lead and Copper

November 16, 2022 • 10:00 AM–12:00 PM (PST)

After 30 years the EPA has released the new Lead and Copper Rule Revisions (LCRR). This will require the water systems and water system operator to address lead and copper in their systems in a new way.

This online training will guide drinking water operators through the new Lead and Copper site selection process, criteria, and sampling plans so that water supplies maintain compliance for lead and copper under the Safe Drinking Water Act.

Participants will learn:

- The requirements of the new lead service line inventory
- Monitoring childcare and school facilities
- New monitoring requirements
- Expanded communications programs
- More stringent response to elevated lead levels

Target audience: operators, managers, and board members.

Planning for Water Utility Workforce Succession

December 8, 2022 • 10:00 AM–12:00 PM (PST)

Recruiting a strong and resilient workforce and retaining these employees continues to remain a challenge for utilities. Leaders need to have the right training, career development opportunities, and other incentives to help employees succeed and advance in their careers. Utilities that are embracing programs that expose their workforce to a real career, not just a job, are finding that it can lead to improving employee morale and cost savings benefits for the system.

Participants will learn:

- Important levels of succession planning: management, ownership, relationship, cultural, and leadership succession.
- To apply the training and career development opportunities to retain employees.
- Forward-thinking strategies to attract employees.

Target audience: appointed, elected, or volunteer board members.



Do The Math: Exam Prep

At a minimum, every public water system regardless of size and complexity requires a certified water distribution operator. The most significant hurdle for many grade 1 and grade 2 operators in passing the operator certification exam, however, is the math portion of the test. Typically, the math section of the certification exam constitutes about 35% of the total exam score so proficiency in math is necessary to pass the test.

The “Do the Math” learning event will be subdivided into four (4) two-hour online sessions. The four sessions are listed below with content section details for each session. The math included in each session is based on the expected-range-of-knowledge for the ABC distribution D1/D2 exams. The sessions are numbered 101, 102, 201, and 301 after a traditional academic curriculum and to indicate a sequential progression of the content of each session.

Target audience: Those looking to take a treatment or distribution operator exam

Operator Math 101

August 18, 2022 • 10:00 AM–12:00 PM (PST)

Participants will learn to:

- Convert water units (ft³ to gallons, gallons to weight)
- Convert distance (in. to ft, ft to meters, ft to mile)
- Convert areas (acres to ft², in² to ft², yd² to ft²)
- Convert volumes (ft³ to gal, gal to liters, liters to mL)

Operator Math 102

August 25, 2022 • 10:00 AM–12:00 PM (PST)

Participants will learn to:

- Calculate area of a circle
- Calculate area of a rectangle
- Calculate volume of a cylinder
- Calculate volume of a rectangular tank

Operator Math 201

September 1, 2022 • 10:00 AM–12:00 PM (PST)

Participants will learn:

- Pressure and head problems
- Dosage problems (simple no conversions)
- Well calculations (drawdown and specific capacity)
- Flow calculations (gal/min, ft³/sec, velocity problems)

Operator Math 301

September 8, 2022 • 10:00 AM–12:00 PM (PST)

Participants will learn:

- Pressure and head problems (multi conversion problems)
- Chemical dosage problems (HTH and hypochlorite)
- Pumping problems (horsepower)
- Odds and Ends (supply, solution, SCADA, specific gravity)

Classroom Workshops

RCAC's classroom trainings are instructor-led, interactive workshops designed to provide quality, in-person training and networking opportunities. Each session qualifies for six contact hours.

Unless otherwise noted, all classroom workshops will be on the following schedule: Registration/Check-in: 8 a.m. Workshop: 8:00 a.m.–3:00 p.m. Lunch is one hour (on your own). All classroom workshops are subject to change due to COVID-19 in an effort to ensure public and trainer safety, and comply with guidelines/restrictions. All workshops will be limited in size based on federal, state and local public health guidelines in place at the time of the workshop. If guidelines allow larger gatherings, all workshops will be limited to 40 attendees.

Beyond Chlorine: Disinfection for Water Systems

July 13, 2022 • Pahrump Area • 8:30am-3:30pm

Many modern water systems require some form of disinfection to maintain compliance with state and federal regulations. How is this accomplished? What equipment is needed? How do I ensure my disinfection is working? What are the pitfalls of disinfection and long-term storage of water? Those questions and many more will be answered here. The class will walk through the history of disinfection, the equipment required, adjustment and maintenance of the equipment, safety, disinfection byproducts and how we overcome them, and alternative disinfection methods.

At the end of this session the learner will have a stronger understanding of the modern disinfection systems that will be used for many years to come.

Participants will learn:

- Disinfection requirements
- Disinfection equipment
- System adjustment and maintenance
- Disinfection byproducts
- Safety
- Alternative methods of disinfection

Target audience: operators, supervisors, managers, and board members

Contaminants of Concern

October 4, 2022 • Reno Area • 8:30am-3:30pm

What's being found in water? Learn about current and emerging contaminants, other areas of concern and some "hot topics".

Participants will learn about:

- Emerging contaminants, including PFAS
- Natural disasters
- Water rights
- Supply chain issues

Target audience: operators, managers

Contaminants of Concern

October 6, 2022 • Elko Area • 8:30am-3:30pm

What's being found in water? Learn about current and emerging contaminants, other areas of concern and some "hot topics".

Participants will learn about:

- Emerging contaminants, including PFAS
- Natural disasters
- Water rights
- Supply chain issues

Target audience: operators, managers



- Required by
- Review annually or as needed
- Approved by your primacy agency
- Should be representative of system
- Should be easily understood
- Could be used to perform your same the current plan

Small System Operations

November 9, 2022 • Tonopah Area • 8:30am-3:30pm

Not all systems are created equal. There are many classes that cover the operations of medium and large-scale water systems that have their own operational issues, but small systems have unique issues often never discussed in these classes. This class is here for the small to very small system.

In this class we will cover what it takes to create, maintain and operate small water systems. We will discuss operating systems on a budget and setting small water systems up for long term success. There are resources available for small systems that often go unused, and this class will help these systems tap into those resources.

Participants will learn:

- Components of a small system
- System maintenance
- Dealing with contract operators
- Regulations
- The importance of asset management
- System mapping

Target audience: small system owners, operators, managers, board members

Filtration and Instrumentation

December 7, 2022 • Sparks Area • 8:30am-3:30pm

Surface water requires filtration but how do you get the best bang for the buck out of your filtration system? First you need to know what filtration technologies are available. Once you know what technologies there you must determine what is the best fit for your system.

In this training you will learn about treatment technologies and how they work. You will then learn how to maintain the systems and how you get the most effective efficient treatment possible out of these systems. We will discuss traditional filtration and newer technologies.

In addition, instrumentation plays a big role in getting the most out of your system. To get the most out of your instrumentation you need to know how, when and where to use it. You will also need to know how to ensure the information is accurate. This class will cover this subject and help bolster your operations toolbox.

Participants will learn:

- The components of filtration
- Filtration system design basics
- System maintenance
- Alternative filtration methods
- Introduction to instrumentation
- Instrumentation maintenance

Target audience: operators, supervisors, managers

Workshops At-a-Glance

Online Workshops

Developing the Operator Workforce	08/11/22
Operator Math 101	08/18/22
Operator Math 102	08/25/22
Cyber Security 101: Safety and Security	08/30/22
Distribution Operator Prep (Part 1)	08/24/22
Treatment Operator Prep (Part 1)	08/24/22
Distribution Operator Prep (Part 2)	08/31/22
Treatment Operator Prep (Part 2)	08/31/22
Operator Math 201	09/01/22
Distribution Operator Prep (Part 3)	09/07/22
Treatment Operator Prep (Part 3)	09/07/22
Operator Math 301	09/08/22
Build America, Buy America	09/13/22
Regulations Update	09/28/22
Funding Options in Nevada	10/19/22
Contract Operator: Understanding the Duties of a Water System Operator	11/10/22
All Things Lead and Copper	11/16/22
Planning for Water Utility Workforce Succession	12/08/22

Classroom Workshops

Beyond Chlorine: Disinfection for Water Systems	07/13/22
Contaminants of Concern	10/04/22
Contaminants of Concern	10/06/22
Small System Operations	11/09/22
Filtration and Instrumentation	12/07/22

Registration

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