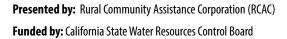


Registration open | Links available inside







#### **About the Workshops:**

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.

Financial stability is the key to success for most water systems.

The California State Water Resources Control Board has identified 13 Technical, Managerial and Financial (TMF) elements necessary for public water systems.

The 13 elements are:

#### **Technical:**

- Consolidation Feasibility
- · System Description
- · Certified Operators
- · Operations Plans
- Source Capacity
- Training

## **Managerial:**

- · Ownership
- · Water Rights
- Organization
- Emergency Response Plan
- Policies

#### **Financial:**

- Budget Projection / Capital Improvement Plans
- · Budget Control



© 2023. Funding for this project has been provided in full or in part under the Safe and Affordable Funding for Equity and Resiliency (SAFER) Drinking Water Program through an agreement with the State Water Resources Control Board. The contents of this document do not necessarily reflect the views and policies of the foregoing, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

#### **Contact Hours & Certificates:**

Each classroom workshop qualifies for six (6) drinking water contact hours. Exceptions include the AB54 & 240 class, which qualifies for two (2) drinking water contact hours.

Each online, one-part workshop qualifies for two (2) drinking water contact hours. Each online, Deep Dive workshop qualifies for four (4) drinking water contact hours. Each online series, qualifies for two (2) drinking water contact hours per session.

Certificates for all online sessions are available for self-printing within 48 hours through your RCAC website registration/profile account. Certificates for all classroom sessions are available for self-printing within 10 business days through your RCAC website registration/profile account. RCAC and the Water Board require signatures to verify attendance for in-person trainings and we must wait to receive the original classroom sign-in sheets from the RCAC trainer in order to verify attendance.

**Certificates will no longer be provided at the conclusion of each classroom training.** If you would like to request a physical copy of a certificate, you may request this at the time of signing in to the event and a copy will be mailed to you within 20 business days.

#### 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.

## **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.

# January-June 2023 On-Site Workshop Topics and Locations



# **CalTAP Fair**



# **CalTAP Fair**

# March 16, 2023 • Valencia, CA

Embassy Suites Valencia / 28508 Westinghouse Place / Valencia CA, 91355

Join us and learn about the California Technical Assistance Providers (CalTAP) programs, funded by the California State Water Resources Control Board. These programs provide onsite technical assistance and free workshops, as well as many other resources, for water professionals throughout California.

This CalTAP Fair for Water Systems qualifies for six (6) contact hours.

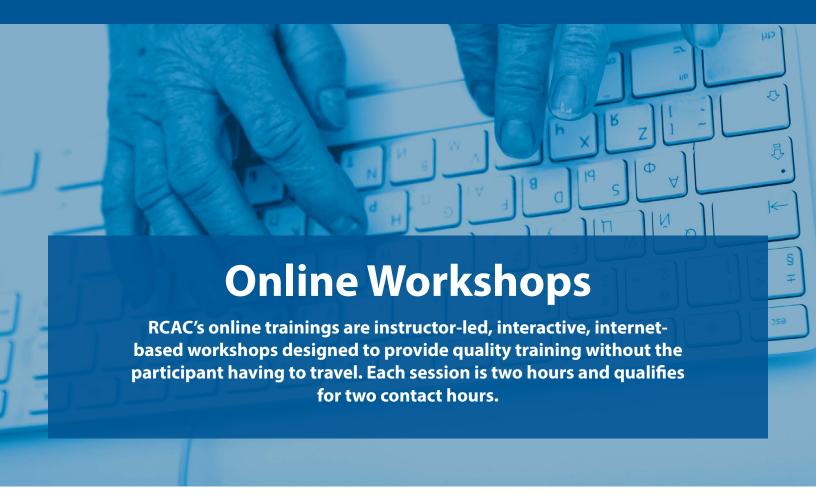
See page 20 for more information. (Lunch is one hour and on your own.)

# CalTAP Fair • March 16, 2023 PROGRAM AT A GLANCE

8:00 AM	Registration Opens			
8:30 AM	Welcome & CalTAP Fair Presentations			
10:30 AM	Regulations Update			
	Technical Track	Managerial Track	Combined Track	
1:00 PM	PFAS in Drinking Water	SB552: Drought Response	Getting Hands on with the Sustainable Groundwater Management Act	
2:40 PM	Small System Drinking Water Treatment	At Risk Financial Reporting	California TMF Review	
4:00 PM	Adjourn			

# The CalTAP providers are:

- California State Water Resources Control Board
- California Rural Water Association
- Office of Water Programs, California State University Sacramento
- Rural Community Assistance Corporation (RCAC)
- Self-Help Enterprises
- U.S. Environmental Protection Agency



#### 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. Sign-in sheets are NO LONGER accepted to validate attendance for contact hours for online workshops.

## **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.

# **Training platform**

RCAC uses the GoToTraining<sup>™</sup> 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 and 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.

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 sixmonth period.

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.

# **Public Notification: Your Customers Have the Right to Know**

# January 4, 2023 @ 10 a.m. & 2 p.m.

Despite the efforts of water suppliers, water quality can sometimes change, and problems with drinking water can and do occur. When problems arise, consumers have a right to know what happened and what they need to do to protect themselves. The public notice requirement of the Safe Drinking Water Act requires water suppliers to provide this notice, and sets strict requirements on the form, manner, content and frequency of public notices. EPA specifies three categories, or tiers, of public notification. The delivery timeframe depends on what tier a violation or situation falls into. Each tier has different required methods for delivery.

#### Participants will learn:

- The 10 required elements of a public notice
- · How to determine which tier your situation falls under
- Federal and state requirements pertaining to public communication and notification
- Consumer Confidence Report basics

Regulation Basics Series: The recommended audience includes water system operators and managers.

# **Groundwater Treatment Techniques**

# January 5, 2023 @ 10 a.m. & 2 p.m.

85% of California's public water systems use only groundwater as their primary source of water. A significant number of California communities rely on contaminated groundwater sources for their public drinking water supply, requiring the source to undergo a comprehensive treatment effort. Groundwater treatment is a complex topic. The range of contaminants of concern to safe drinking water is broad, covering essentially the entire chemical spectrum. Occurrence of groundwater contamination is similarly diverse encompassing both naturally occurring and man-made contaminants. Operators of groundwater systems therefore need a comprehensive reconnaissance-level knowledge of groundwater treatment technologies and how these technologies are applied to removal / control of specific groundwater contaminants.

This learning event will provide California water system operators with a reconnaissance-level knowledge of the technologies employed to treat drinking water from groundwater supplies.

Participants will learn about treatment for the seven most common groundwater contaminants:

- · Microbial contaminants (bacteria and virus)
- · Iron and manganese
- Arsenic
- Nitrate
- Uranium
- Organics
  - VOCs
  - SOCs
- Hydrogen sulfide

Operator Basics Series: The recommended audience includes operators, managers and board members.

# Register now.

Click on the title or time of any training to access the registration page.

# **Surface Water Treatment Rule**

#### January 10, 2023 @ 10 a.m. & 2 p.m.

It's been raining for three straight days and your effluent turbidity has just spiked at your water treatment plant. What monitoring and reporting procedures do you follow? What do these new regulations say? Is your treatment method still acceptable? What do you need to report and when? This workshop is designed to help you understand surface water treatment and monitoring regulations by reviewing the basis for current and future regulations.

#### Participants will learn:

- The Surface Water Treatment Rule
- Long-Term 1 and Long-Term 2 Enhanced Surface Water Treatment Rules
- · Existing and future water quality monitoring requirements
- Basic treatment methods and technologies
- Regulatory reporting requirements

Regulations Basics Series: The recommended audience includes operators and managers of surface water treatment facilities.

# **Operations Plans**

# January 18, 2023 @ 10 a.m. & 2 p.m.

Your only licensed operator has just left town due to a family emergency and handed you the phone number of a certified operator in the next town. Will the substitute operator know how your system works and what needs to be done daily to keep the water safe and in compliance? A properly prepared Operations and Maintenance (0&M) Plan is one of a water purveyor's most important documents. The 0&M Plan is a "living" document that explains how a public water system is to be operated and maintained on a day-to-day basis to ensure public health, safety and compliance with applicable regulations. In addition to being an important training tool for new staff, the 0&M manual serves as a practical handbook by which a qualified substitute operator or a new operator can operate and maintain the system in a safe and reliable manner in absence of the system's primary operator.

# Participants will learn:

- The vital elements that comprise an 0&M Plan
- The most important tools needed for developing an O&M Plan
- · Policies and procedures for keeping your O&M Plan updated
- Free resources and templates for developing O&M Plans

Operator Basics Series: The recommended audience includes water system operators, managers and maintenance staff

# **Bacteriological Quality**

# January 19, 2023 @ 10 a.m. & 2 p.m.

Providing safe and affordable drinking water to customers is the primary objective of any drinking water system. Routine monitoring for bacterial contamination is one of the most effective indicators of a potentially hazardous condition in your system. Although waterborne disease outbreaks are relatively uncommon in the United States, the threat can be deadly. Missed routine and repeat samples are costly in many ways including time, lab fees, penalties and consumer confidence, not to mention the health risk to the public.

Join us to learn or review the bacteriological standards required by both California State Revised Total Coliform Rule and Federal Revised Total Coliform Rule (RTCRs). This workshop will address public water system standards for ensuring bacteriological quality through monitoring and reporting.

# Participants will learn:

- The importance of total coliform as an indicator of water quality
- Compliance with California state and federal bacteriological quality monitoring and reporting regulations
- · Public notification requirements
- · Triggers and follow-up for Level 1 and Level 2 assessments

Regulations Basics Series: The recommended audience includes new operators and managers as well as anyone interested in understanding bacteriological standards for public water systems.

# **Capital Improvement Planning**

# January 31, 2023 @ 10 a.m. & 2 p.m.

For any water utility, even a very small water system, operators have a very important role in asset management (e.g., water tanks, pumps, computers, buildings, etc.) which is key in the overall financial performance and the sustainability of water systems. When boards, managers and operators work together, with proper planning, emergencies can be avoided and overall costs will be reduced. A Capital Improvement Plan (CIP) prioritizes the replacement or installation of infrastructure assets. It includes the forecasting and budgeting of capital outlay and is an integral part of the budgeting, rate-setting, and project funding.

# Participants will learn:

- · What a CIP is and why a water system needs one
- · Strategic planning to prioritize projects
- How to implement a CIP and access funding resources

Board Basics Series: The recommended audience includes board members, managers, operators and financial managers.

# **Compliance Monitoring & Reporting**

# February 14, 2023 @ 10 a.m. & 2 p.m.

Public water systems are required to test for a multitude of constituents, both in their water sources and in the distribution system. Come find out how to develop your monitoring schedule by learning how to navigate California regulations and the Public Drinking Water Watch (PDWW). PDWW is an online tool managed by the SWRCB that allows the public to see water quality information for each public water

system in the State. It is important to make sure your customers are getting accurate water quality information by knowing how to ensure PDWW information is accurate along with how to follow mandatory public notification regulations.

#### Participants will learn:

- How to navigate the many resources to determine your monitoring requirements
- · An overview of required water quality samples
- How to fill out a chain-of-custody form to ensure lab results make it into PDWW
- Reporting and public notification requirements based off your lab results

Regulations Basic Series: The recommended audience includes operators, managers, and board members.

# Capital Reserve Planning for Mutual Water Companies: The True Cost of Water

# February 22, 2023 @ 10 a.m. & 2 p.m.

It is becoming all too common for water systems to experience system failures resulting in outages or non-compliance issues caused by the underfunding of reserves. One method to avoid these issues is the plan for the future and to fund reserves. This workshop will educate mutual water company directors, board members, managers and operators about the reserves required by AB54. Attendees will learn how to plan for the true cost of water by understanding how to develop a capital improvement plan (CIP) to replace water system components prior to failure.

#### Participants will learn:

- · AB54 requirements for financial reserve funds
- · What a CIP is
- Resources for planning and developing a CIP
- How to prioritize projects
- What is needed to update a CIP
- · How a CIP ties into other important documents, policies and budgets

Board Basics Series: The recommended audience includes mutual water company directors, board members, managers, financial managers and operators.

# California's New Cross-Connection Control Handbook: An Overview

# February 23, 2023 @ 10 a.m. & 2 p.m.

The Water Board is in the final stages of the development and implementation of a Cross-Connection Control Policy Handbook (CCCPH). The primary objective of the CCCPH is the protection of public health through the establishment of standards intended to ensure a public water system's (PWS) drinking water distribution system will not be subject to the backflow of liquids, gases, or other substances into the distribution system. In addition, by providing basic educational information on backflow prevention, the State Water Resources Control Board (State Water Board) intends to build a foundation of awareness within the regulated community regarding the importance of backflow protection and cross-connection control, leading to the implementation of a robust cross-connection control program by PWS.

This online learning event will provide an overview of the proposed requirements of the CCCPH and the effect that it may have on a water system's backflow control program.

#### Participants will learn:

- · The background of backflow protection and cross-connection control
- The standards for backflow protection and cross-connection control
- Hazard assessment and required protection
- Requirements for testers and CCC specialists
- How to develop a successful program

Operator Basic Series: The recommended audience includes operators, managers and board members.

# AB54 & AB240: Ethics for Mutual Water Company Board Members

March 8, 2023 @ <u>6 p.m.</u> June 8, 2023 @ <u>6 p.m.</u>

By law, all mutual water board members are required to have two hours of ethics training within six months of taking office and every six years following. This training is designed to provide system longevity and help ensure that board members meet their legal responsibilities. Required training topics include conflicts of interest, fiduciary responsibilities, Safe Drinking Water Act compliance, long-term financial management and capital improvement planning. We will also cover the AB240 Open Meeting Act requirements, which affect mutual water systems as of Jan. 1, 2014. This workshop allows mutual water systems to comply with this regulation and helps prepare them to better govern their mutual water company. This workshop meets the legal requirement for board members ethics training under AB54.

#### Participants will learn:

- Requirements of AB54 and AB240
- · Financial conflicts of interest to avoid
- · Strategic planning
- · Fiduciary responsibilities
- · Capital improvement planning
- How to comply with the Safe Drinking Water Act

Board Basics Series: The recommended audience includes directors, board members and managers of mutual water companies.

# **Recruitment & Retention**

# March 23, 2023 @ 10 a.m. & 2 p.m.

Your water operator, office staff or manager has just given their notice and they are moving on to another job. They have been there for years and know the system history, where all the (hidden) valves/meters are and developed relationships with all entities required to manage or operate a public water system. The powers that be (local government and/or management) may be wondering, "What could we have done to prevent this employee from seeking other employment?" and "How do we go about hiring someone to replace this valuable resource?" This workshop will utilize the trainer's and participant's experiences to explore these conundrums.

# Participants will learn:

- About advertising, interviewing, and hiring of water system managers, office staff and operators
- The resources available to assist with hiring good people
- · Steps to budget to acquire and retain competent staff
- How to use staff evaluations to help with retention longevity
- How to retain excellent staff (hint, it's not always about the money!)

Board Basics Series: The recommended audience includes management & local government board of directors

# **Seasonal Start-up Operations**

# April 4, 2023 @ 10 a.m. & 2 p.m.

Seasonal system startups and shutdowns require having approved procedures, thanks to the Revised Total Coliform Rule. But wait, you're not done yet! Like your Consumer Confidence Report, you are also required to certify your actions have been successfully completed. Learn about some of the available tools to help you stay in compliance with these recent changes in state regulations.

#### Participants will learn:

- · How to complete an inspection of water system components
- Disinfection and flushing
- · Best practices on coliform and chlorine residual monitoring
- About the importance of using certified distribution operators
- Rules on notifying your local regulating agency DDW District Office or County Environmental Health Office
- Instructions on seasonal water system start-up procedure and certification

Operator Basics Series: The recommended audience includes operators, managers and board members.

# **Completing the Electronic Annual Report**

# April 5, 2023 @ 10 a.m. & 2 p.m.

The California Health and Safety Code specifies that a public water system shall submit a technical report to Division of Drinking Water (DDW) annually. Based on this requirement, DDW provides an updated survey each year through their dedicated online portal for every regulated public water system to report current contact information and operational details for the prior year. This workshop will guide you through the process of registering for your account and completing the online survey for your water system. Together we will navigate through the eAR portal and assist you in entering your system's specific information for the 2022 report.

#### Participants will learn:

- · How to access your eAR account and survey
- · What resources are available including DDW eAR guidance
- · The correct format for information entry
- · Important dates/deadlines

Regulations Basics Series: The recommended audience includes anyone who has responsibility for reporting technical water system information annually via the eAR nortal

Bring your laptop and your system records for 2022.

# Financial Management for Small Water Systems

# April 11, 2023 @ 10 a.m.

Do you want to improve your water system's financial health? As a member of the governing body, management or staff of a small water system, you have very important financial responsibilities including establishing the policy framework governing your utility's finances, planning for the system's financial future, preparation and adoption of budgets, monitoring and oversight of financial performance and ensuring accountability and integrity of the financial system. The goal of good financial management is to ensure that your utility is operated as a financially sustainable enterprise while providing safe and reliable water, both in the short- and long-term, to your utility's customers.

Participants will learn how to:

- Recognize various financial statements and understand how to use them to make informed decisions
- · Understand the elements of internal controls
- Develop a meaningful budget
- · Identify methods to balance the budget

Board Basics Series: The recommended audience includes local government (board of directors), managers and operators.

# What You Need to Know About the Sustainable Groundwater Management Act

# April 19, 2023 @ 10 a.m. & 2 p.m.

The Sustainable Groundwater Management Act of 2014 (SGMA) has been called "the most important legislation in California in 100 years." SGMA mandates the sustainable use of California groundwater. Given the fact that many groundwater basins are in overdraft, implementation of sustainable practices will likely have a significant impact on small water systems that use groundwater from these basins.

SGMA applies to the 127 high and medium priority groundwater basins, which account for approximately 96 percent of groundwater use in California. It is therefore very likely that a significant number of California small water systems will be impacted by the implementation of sustainable practices mandated by this law.

Given that both Water Rights and Adequacy of Supply are Division of Drinking Water (DDW) Technical, Managerial and Financial (TMF) elements and that SGMA is very likely to have a significant impact on both these elements for a large number of California small water systems, it is very important that these systems have adequate training into SGMA's process and requirements.

# Participants will learn:

- The basics of groundwater hydrology, including: The Water Cycle and types of aguifers
- The provisions of SGMA, including: The goal of sustainable water extractions from a basin
- What the groundwater sustainability plans are and how they might affect our operations
- · Strategies that may be used to achieve sustainability

Regulations Basics Series: The recommended audience includes water system managers, operators, administrative staff and board members.

# **Metering Replacement Plans**

# April 20, 2023 @ 10 a.m. & 2 p.m.

The water meter is the cash register for public water systems! Water systems need an accurate measurement of the water being used by their residential, commercial, and industrial customers or they could potentially be losing money. This accuracy is vital for planning all aspects of water system operations. From budgeting and reporting to primacy agency compliance and planning for the future. It is crucial that the meters be replaced prior to a predetermined date, no more than 15 years, to ensure that the meters are still reading accurately. When replacing meters, the public water system may want to consider replacing manual read water meters with radio read, cellular read or other technology. Which brings us to funding. Will we be funding this from our existing budget, or will we be seeking grant/loan money for a meter replacement project?

#### Participants will learn:

- Different types, brands and styles of water meters and choosing the one best for your system
- Proper application of water meters (type and size)
- How to install a water meter
- Budgeting for water meter replacement vs. loans/grants for water meter replacement
- Manual read water meters vs. smart meters

Board Basics Series: The recommended audience includes board members, management and operators.

# Dealing with "Forever Chemicals": PFAS in Drinking Water

# April 25, 2023 @ 10 a.m. & 2 p.m.

The issue of PFAS contamination is being highlighted throughout the country with many experiencing anxieties over possible water contamination. PFAS are a group of man-made chemicals which include Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS). Known as "forever chemicals," PFAS compounds have been found widely in the environment, including thousands of groundwater sources throughout US.

PFAS compounds are currently the #1 emerging threat to water systems. Continuing studies are identifying potential health risks associated with these chemicals. This session examines the origin, the concerns and provides information for small systems about protecting public health.

#### Participants will learn:

- Why these "forever" chemicals are not going away
- · Where PFAS come from
- · What the health effects of PFAS are
- PFAS regulations in drinking water
- · PFAS treatment technologies for drinking water systems

Operator Basics Series: The recommended audience includes board members, managers and operators.

# **Coliform Sampling Procedures**

# May 3, 2023 @ 10 a.m. & 2 p.m.

Sampling for total coliforms and E. coli in the water system is one of the most important things an operator can do. The new Revised Total Coliform Rule (RTCR), effective April 2016, affects every public water system. These revisions to the Total Coliform Rule will affect how operators and managers respond to total coliform positives (TC+) and require steps to analyze the integrity of the system as a result of positive samples. Investigation and corrective actions are at the forefront of the RTCR and knowing how to complete a level 1 assessment can be the difference between compliance and violation. This workshop will focus on reviewing triggers for level 1 and level 2 assessments, who is expected to perform them, and how to conduct an assessment with examples and small group exercises.

#### Participants will learn:

- Repeat sampling requirements
- New procedures for the month following a TC+
- · What to do if you have a positive E. coli result
- When an assessment of a system is needed
- How to complete a level 1 assessment of your system
- Tips on system inspection/investigation

Operator Basics Series: The recommended audience includes operators, managers and board members.

# **Consumer Confidence Reports**

# May 9, 2023 @ 10 a.m. & 2 p.m.

Informing your customers annually about the sources and quality of your water became a state and federal mandate with the 1996 SDWA amendments. California regulations were updated in 2012 to allow for electronic delivery of Consumer Confidence Reports (CCRs). The exact format and language required for a CCR can be confusing to those creating the report, and to customers trying to understand it. This workshop will guide you through the process of producing a proper CCR for your water system for calendar year 2022. You will learn how to access the resources available on the Division of Drinking Water website, the information that must be included, and the various delivery options.

# Participants will learn:

- · Where to find and download California specific CCR template and guides
- · The required language
- · Important dates/deadlines
- The methods of distribution
- · Public relations information

Regulations Basics Series: The recommended audience includes anyone who has responsibility for producing and distributing CCRs, or for gathering the data necessary for its completion.

# **Cyber Security for Drinking Water Systems**

# May 16, 2023 @ 10 a.m. & 2 p.m.

Recent cyber-attacks on water and wastewater systems have manipulated treatment processes, disabled process control and business enterprise systems and stolen proprietary data. Cybersecurity best practices and incident response planning can prevent or mitigate many of these attacks and are essential to the sound operation and management of water and wastewater systems.

Participants will learn how to recognize cybersecurity threats, how to complete the self-assessment questionnaire and utilize the water industry cybersecurity controls for small systems. Based on the cybersecurity self-assessment and cybersecurity controls for small utilities, participants learn how to identify at-risk areas and take actions to protect their systems.

## Participants will learn:

- Why cybersecurity is important
- How to conduct a self-assessment of your system to identify vulnerabilities
- · Cybersecurity controls for small water systems

Operator Basics Series: The recommended audience includes board members, managers and operators.

# **Process Control Troubleshooting**

# May 17, 2023 @ 10 a.m. & 2 p.m.

How well do you understand your process control systems? This course is a "need to know" guide to begin evaluating and troubleshooting automated processes. Attendees will learn basic techniques to document and troubleshoot process control system performance. We will also discuss how SCADA systems present data to operators.

#### Participants will learn:

- · Analog versus digital signals
- Common signal issues and how they present
- · Electromechanical versus logic-based controls
- · Basic instrumentation troubleshooting techniques
- How to quickly spot stale data in SCADA systems

Operator Basics Series: The recommended audience includes system operators, technicians, and managers.

# **Rate Setting**

# May 31, 2023 @ 10 a.m. & 2 p.m.

Often, many small water systems recover their operating costs but are not able to fund reserves and other balance sheet obligations through their customer rates. Water rates should recover the "true costs" of providing the service. Many systems' governing bodies and management lack basic understanding of how much money needs to be collected from customer rates to recover operating costs and fully fund debt service and reserve account funding. This training will be presented to provide attendees with working knowledge and emphasize tools/resources available to understand how to develop an adequate rate structure to provide the ability to meet short-term and long-term financial obligations. Finally, the workshop will cover the latest interpretations of Prop. 218 procedures and limitations in setting customer rates in California.

#### Participants will learn:

- · How to determine if a rate adjustment is necessary
- The four basic types of rate structures
- How to calculate base and flow rates
- To calculate base rates according to meter size
- How to set rates that are compliant with Proposition 218

Board Basics Series: The recommended audience includes board members, general managers, financial managers and operators.

# **Preparing for a Sanitary Survey**

# June 13, 2023 @ <u>10 a.m.</u> & <u>2 p.m.</u>

It is the ultimate responsibility of every operator, manager and board member to provide safe drinking water to their customers. The prevention and removal of water contaminants is an essential job function. Sanitary Surveys are an important tool in helping water systems provide safe drinking water. The Groundwater Rule puts increased regulatory emphasis on conducting Sanitary Surveys and correcting deficiencies before they lead to water contamination events. This course will give participants an overview of how to prepare for a Sanitary Survey.

# Participants will learn:

- What a Sanitary Survey entails
- The benefits of conducting your own Sanitary Survey to provide safe drinking water to your customers
- The Sanitary Survey requirements in the Groundwater Rule
- How to access resources to help you prepare

Operator Basics Series: The recommended audience includes board members, general managers, financial managers and operators.

# **Customer Communications & Transparency**

# June 14, 2023 @ 10 a.m. & 2 p.m.

Outside of operations, communication and transparency are arguably the two most important issues when running a water system. If the customers are not happy, you will not be happy! Without these collaborating factors, consumer confidence can lessen or be lost. Lack of customer support of a public water system will damage moral and could result in potential problems in a system. This workshop will strengthen your relationship with your customers by learning how other water systems communicate and remain transparent with their customers through newsletters, websites, public meetings, and outreach.

# Participants will learn:

- · How to build a functional communication structure
- How to maintain financial and operational transparency
- Community involvement best practices
- How to maintain good customer correspondence
- · Guidance to maintain customer confidence in your water system

Board Basics Series: The recommended audience includes anyone that sets or manages policies, operates a water system, or interacts with the public or customers regarding a water system.

# Beat the Cyanobacterial Blues: What You Need to Know About Cyanotoxins

# June 15, 2023 @ <u>10 a.m.</u>

Cyanobacteria, formerly referred to as blue-green algae, are found naturally in lakes, rivers, ponds and other surface waters. When certain conditions exist, such as in warm water containing an abundance of nutrients, they can rapidly form harmful algal blooms (HABs). Some HABs are capable of producing toxins, called cyanotoxins, which can pose health risks to humans and animals through drinking water and recreational water exposure. Additionally, HABs can create taste and odor problems in drinking water, which do not have adverse human health impacts but can create an earthy and musty taste and smell.

The purpose of this learning event is to provide operators of small water systems with a basic knowledge of the causes, health effects and treatment of cyanobacteria and their associated endotoxins in drinking water. Contaminants related to algal blooms are a relatively new area of concern for water systems using surface supplies.

#### Participants will learn:

- Basic information about cyanobacteria and the toxins associated with these organisms
- Information about Harmful Algal Blooms (HABs) providing an understanding of the characteristics and conditions of that result in HABs; including California's HAB Incident Reporting Map
- An overview of the treatment technologies for the removal of cyanotoxins in the drinking water treatment plant; including a framework for the management of cyanotoxins in a drinking water supply

Regulations Basics Series: The recommended audience includes operators, managers and board members of water systems that use surface water supplies.

# **Get the Lead Out: Lead & Copper Rule Revisions**

# June 15, 2023 @ 2 p.m.

After 30 years, the EPA has officially passed new regulations for the Lead and Copper Rule. These revisions are a major step toward keeping communities safe from lead. The new Lead and Copper Rule Revisions (LCRR) will require water systems and water system operators to rethink how they address lead and copper in their systems. These new requirements will require a thorough understanding of the LCRR's requirements so you can effectively engage in short- and long-term actions that will ensure compliance and safe water for all your customers.

This webinar 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
- Lead service line replacement requirements
- · Monitoring childcare and school facilities
- New monitoring requirements
- Expanded communications programs
- · More stringent response to elevated lead levels

Regulations Basics Series: The recommended audience includes operators, managers and board members.

# **SB552: Drought Response**

# June 21, 2023 @ 10 a.m. & 2 p.m.

In September 2021, California Senate Bill 552 was signed by Governor Newsom and enacted into law. SB 552 includes new responsibilities and requirements to help small water suppliers and rural communities reduce their risk of inadequate water supply during a water shortage event. In this workshop we will share the emerging awareness and understanding of the potential water shortage risks for small water suppliers and rural communities, and we will identify some of the roles and recommendations to improve drought resilience planning.

#### Participants will learn:

- New requirements in Drought Resilience and Water Shortage Response
- Improved communication and coordination recommendations between water users and government
- How to recognize emerging challenges related to increased frequency and severity of drought conditions
- New resources to assess current climate information and water shortage vulnerability
- Planning strategies for disaster preparedness

Operator Basics Series: The recommended audience includes operators, managers and elected officials.

# Permanent Water Conservation Measures for Water Systems

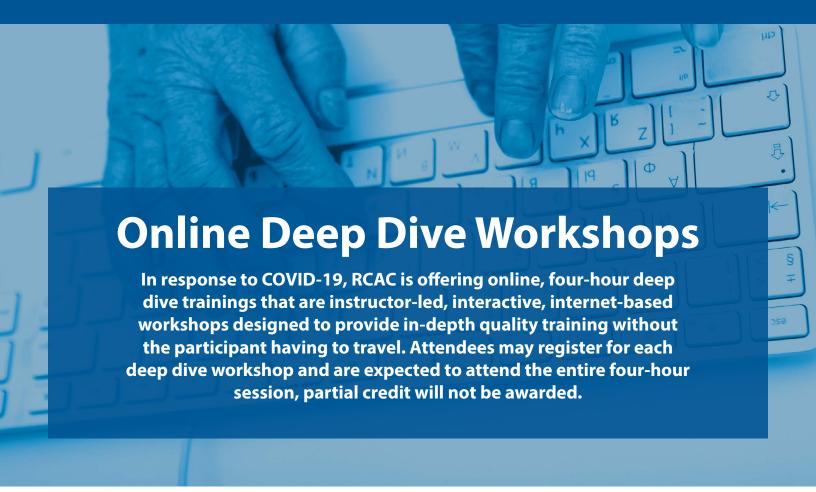
# June 22, 2023 @ 10 a.m. & 2 p.m.

Water conservation is a California way of life. Current prohibitions against wasteful water use practices and requirements for monthly water use reporting remain in place. Planning for drought conditions is essential to ensure water supply for public health and safety and to minimize impacts on economics, environment, and lifestyle. This workshop will cover how to implement policies and programs to reduce the vulnerability of the water system by implementing ways to conserve water. Knowing how much water you have and use, plays a huge role in drought preparedness and water conservation. This workshop will also highlight the challenges of small systems, and how to keep up with current and new drought/conservation regulations.

# Participants will learn:

- How a water audit can help you reduce how much un-accounted water you lose and ways to stop it
- How to look for alternate or new water sources
- How to use water meter systems to help you keep track of water use and enforce conservation
- Best practices to reduce water use, making water conservation a way of life in your community

Operator Basics Series: The recommended audience includes operators, managers and elected officials.



# **Capacity Building Through Partnerships**

January 26, 2023 @ 8:30 a.m.

This workshop will discuss the spectrum of opportunities for partnering with others. From casual information sharing or operational support, to formal consolidation or joint powers agreements, we will review the challenges and benefits of partnering up. By creating partnerships and opportunities for working together we can solve some of our small system challenges.

#### Participants will learn:

- How to evaluate their system's potential for partnership
- Options for working with other systems
- The next steps to start or continue the conversation

Board Basics Series: The recommended audience includes anyone involved with a small water system.

# **Pumps & Motors Troubleshooting**

February 1, 2023 @ 8:30 a.m.

How many times has this happened to you? You discover that one of your pumps is not performing like you think it should, or it will not run at all. What are your next steps? When should you call in an expert? These questions and more will be answered in the Pumps and Motor Troubleshooting session. This will be an extensive course in the most common pumping and electrical system issues that could leave you out of water.

# Participants will learn:

- Electric motor troubleshooting and common issues
- Basic types of centrifugal pumps and their characteristics
- How to calculate TDH in a fluid pumping system
- How to calculate friction loss
- How to read pump curves
- Centrifugal pump performance testing and troubleshooting techniques

Operator Basics Series: The recommended audience includes system operators, technicians, and managers.

# **Intro to Quickbooks**

# March 9, 2023 @ 8:30 a.m.

Accurate, meaningful and comprehensible financial information is critical to the decision making and continuity of every utility. Many small utilities use QuickBooks to track and report their financial activity. In this class you will learn how to maximize the use of this software, from setting up your chart of accounts to entering your budget and transactions to producing your financial statements.

Participants will learn how to:

- Set up your chart of accounts
- Set up your customers and vendors
- Enter customer billing data and produce bills
- **Record transactions**
- Build your audit trail
- Produce your financial statements

Board Basics Series: The recommended audience includes bookkeepers/accountants, governing bodies, managers, operators and anyone recording and/or interpreting transactions.



# **Regulation Essentials: The California Safe Drinking Water Act**

# March 22, 2023 @ 8:30 a.m. through 12:30

The primary mission of every public water system is to provide water that is safe to drink. There are upwards of 100 chemicals and microbials regulated under the California and federal versions of the Safe Drinking Water Act. In addition, the regulations mandate operational activities and infrastructure standards that help ensure the delivery of safe drinking water. These regulations have changed and evolved over the last 45 years.

The California drinking water regulations define "safe drinking water" and mandate operations that maintain water quality. Every operator, manager and board member are required to have a reconnaissance-level knowledge of California's drinking water regulations and an understanding of how these regulations apply to the day-to-day operation of a public water system.

#### Participants will learn:

- Overview / history / purpose / structure of the Safe Drinking Water Act
- California Drinking Water Regulations Need-to-know / Nice-to-know / Whereto-go modules
  - Cross-connection control
  - **Operator Certification**
  - System Classification
  - POU-POE Treatment
  - **Bacteriological Quality**
  - **Groundwater Rule**
  - **Primary Standards** 
    - Inorganics
    - · Organics
    - Fluoridation
    - Radioactivity
  - · Secondary Standards
  - **Public Notification** 
    - · Consumer Confidence Reporting
  - Reporting and Recordkeeping
  - Disinfection By-products
  - Waterworks Standards
  - Surface Water Treatment Rule
  - · Lead and Copper Rule

Regulations Basics Series: The recommended audience includes all water system operators and managers.

# Online Series Workshops In response to COVID-19, RCAC is offering online, series trainings that are instructor-led, interactive, internet-based workshops designed to provide buildable in-depth quality training without participants having to travel. Each session of the series qualifies for two hours for a total of four hours if taken together. Attendees may register and participate in one session for two hours or up to two sessions for four hours. Registration must be made for each session.

#### **DO THE MATH 2-PART SERIES**

At a minimum, every public water system, regardless of size and complexity, requires a certified water distribution operator. In addition, those systems using treatment also must have an operator that holds a water treatment operator certification. 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 percent of the total exam score, so proficiency in math is necessary to pass the test.

The math included is based on the expected-range-of-knowledge for the California distribution D1/D2 exams.

The target learner for this training wants (and needs) one specific thing: the ability to accurately calculate operator certification exam math questions. Accordingly, the learning event design focuses solely on this need. This training is not designed for "contact hours" or participant "entertainment." This is a hands-on training with an expectation of continuous participation -- working and answering math problems — throughout the entire session.

Operator Basics Series: The recommended audience includes operators and managers

# **Operator Math 101: The Basics**

May 4, 2023 @ 10 a.m.

Participants will learn how to convert:

- Water units (ft3 to gal, gal to wt)
- Distance (in to ft, ft to m, ft to mi)
- Areas (ac to ft2, in2 to ft2, yd2 to ft2)
- Volumes (ft3 to gal, gal to L, L to mL)

# **Operator Math 102: The Basics Continued**

June 1, 2023 @ 10 a.m.

Participants will learn how to calculate:

- Area of a circle
- Area of a rectangle
- · Volume of a cylinder
- · Volume of a rectangular tank





# **Cross-Connection Controls**

January 11, 2023 • West Sacramento, CA

RCAC / 3120 Freeboard Avenue, Suite 201 / West Sacramento, CA 95691

Do you have an active cross connection control program? Now is time to get in the game- not only are you required to have an approved program, but cross connection controls provide yet another barrier against water contamination. This workshop will hand you the information and resources on how to develop policies and a successful program for your small water system.

## Participants will learn:

- How to identify potential and actual cross connections
- · Different backflow prevention devices and how to properly use them
- New State requirements regarding cross connection control
- · Basics on training and licensing for surveys and testing
- How to develop and implement a successful program

The recommended audience includes operators, managers, and board members.

# **Pumps & Motors Troubleshooting**

January 12, 2023 • West Sacramento, CA

RCAC / 3120 Freeboard Avenue, Suite 201 / West Sacramento, CA 95691

How many times has this happened to you? You discover that one of your pumps is not performing like you think it should, or it will not run at all. What are your next steps? When should you call in an expert? These questions and more will be answered in the Pumps and Motor Troubleshooting session. This will be an extensive course in the most common pumping and electrical system issues that could leave you out of water.

#### Participants will learn:

- · Electric motor troubleshooting and common issues
- Basic types of centrifugal pumps and their characteristics
- How to calculate TDH in a fluid pumping system
- How to calculate friction loss
- How to read pump curves
- Centrifugal pump performance testing and troubleshooting techniques

The recommended audience includes system operators, technicians, and managers.

# **Asset Management for Operators**

# February 8, 2023 • Visalia, CA

Wyndham Visalia / 9000 W Airport Drive / Visalia, CA 93277

A public water systems "assets" are the critical components that allow operators to provide safe drinking water to the public. This includes the water source, filtration plants, chemical feed, pipes, and all appurtenances connected to the pipes. This also includes vehicles, equipment, and tools. The operator has his/her finger on the pulse of these items and knows when they will need to be replaced. However, many operators are not familiar with the method for replacing these items prior to failure. Enter the Capital Improvement Plan (CIP). This workshop will provide the basics of a CIP which will allow the operators to better discuss his/her needs with management.

#### Participants will learn:

- CIP basics
- Why a public water system needs a CIP
- The operator's responsibility in developing a budget and CIP
- Tools to assist the operator

The recommended audience includes board members, general managers, financial managers and operators.

# **Financial Fundamentals**

# February 9, 2023 • Visalia, CA

Wyndham Visalia / 9000 W Airport Drive / Visalia, CA 93277

Would you like to have a better understanding of how to sustain your system's financial position? Here's your chance. We would like to invite you to join us for a fundamentals of financial management workshop showcasing the understanding of foundational financial skills that will pave your way to a better economic health.

The goal of proper financial management is to ensure that your utility is operated as a financially sustainable enterprise ensuring that you can provide safe and reliable water, both in the short-and long-term, for your customers.

#### Participants will learn how to:

- Set up a solid chart of accounts for recording day-to day financial transactions
- Recognize various financial statements and understand how to use them to make informed decisions
- Develop a strong budget
- Apply internal controls into the system's financial management

The recommended audience includes all board and/or council members, accountants, bookkeepers, and managers of small water systems.

# **Permanent Measures to Deal with Impact**ed Water Sources & Water Conservation

#### February 15, 2023 • Turlock, CA

Hampton Inn Turlock / 1821 Lander Avenue / Turlock, CA 95380

Water conservation is a California way of life. Current prohibitions against wasteful water use practices and requirements for monthly water use reporting remain in place. Planning for drought conditions is essential to ensure water supply for public health and safety and to minimize impacts on economics, environment, and lifestyle. This workshop will cover how to implement policies and programs to reduce the vulnerability of the water system by implementing ways to conserve water. Knowing how much water you have and use, plays a huge role in drought preparedness and water conservation.

# Participants will learn:

- How to use a water audit to find and identify water loss
- Ways to use alternate water sources and find new water sources
- Best practices to reduce water use, making water conservation a way of life in your community
- How to use water meter systems to help you keep track of water use and enforce conservation
- How to Implement a water loss program
- What technologies are available to identify water loss

The recommended audience includes operators, managers and elected officials.

# **Water Operator Certification Prep**

# February 16, 2023 • Turlock, CA

Hampton Inn Turlock / 1821 Lander Avenue / Turlock, CA 95380

The new California Operator Certification program allows operators to take their state exams within weeks of applying. This includes the tests for both distribution and treatment. In this workshop you will learn preparation methods for passing the state exams. Included are multiple resources, study materials, necessary guidance, and a basic lesson utilizing the state math conversion sheet.

#### Participants will learn:

- Where to secure study materials
- Studying and preparation basics
- Introduction to practices and procedures of water distribution and water treatment
- Water math skills

The recommended audience includes drinking water operators, laborers and management.

# **Maintaining Water Quality**

#### March 1, 2023 • Redding, CA

Red Lion Hotel Redding / 1830 Hilltop Drive / Redding, CA 96002

Public water systems are required to provide safe drinking water. Methods for providing safe drinking water vary from system to system, but there are a handful of methods that apply to all systems. This workshop designed for operators and managers will cover the methods used by most water systems to ensure acceptable water quality. This includes water sampling and basic water distribution system. maintenance and protection techniques.

# Participants will learn:

- The technique and importance of coliform sampling
- The importance and methods for unidirectional flushing
- Disinfection basics
- Water storage tank cleaning and maintenance
- Cross connection prevention

The recommended audience includes water system operators and managers. Board members, council members and water consumers are welcome to attend as a diverse group of participants should generate good feedback and networking regarding the demands of operating and maintaining a public water system.

# **Asset Management & Capital Improvement Planning**

# March 2, 2023 • Redding, CA

Red Lion Hotel Redding / 1830 Hilltop Drive / Redding, CA 96002

Small water systems are often limiting their capital planning to replacement or upgrade. Many systems have limited financial capacity or lack the planning to save for major system upgrades. With asset management planning the standards for capital planning integrate levels of service, more long term maintenance, and life extending activities. Systems with an asset management plan can strategize for funding availability, as well as maintaining desired level of service standards.

#### Participants will learn to:

- Build their asset management team and plan
- Develop Levels of Service Standard to their system
- Identify their system components and apply criticality ratings
- Calculate life cycle costs of their assets
- Develop a financial strategy for their asset management plan
- Create, update, and maintain their asset management plan

The recommended audience includes board members, general managers, financial managers and operators.

# **CalTAP Fair**

# March 16, 2023 • Valencia, CA

Embassy Suites Valencia / 28508 Westinghouse Place / Valencia CA, 91355

See page 20 for more information

# **Compliance Monitoring & Sampling**

# March 29, 2023 · Cathedral City, CA

DoubleTree by Hilton Hotel Golf Resort Palm Springs 67967 Vista Chino / Cathedral City, CA 92234

Public water systems are required to test for a multitude of constituents, both in their water sources and in the distribution system. Come find out how to develop your monitoring schedule, sample for each contaminant type, and manage your lab results. This training will help you to comply with the requirements of the Domestic Water Quality and Monitoring Regulations (California Code of Regulations Title 22, Division 4, Chapter 15).

# Participants will learn:

- How to navigate the many resources to determine your monitoring require-
- Sampling requirements for the different contaminant types
- Recordkeeping and reporting requirements of water quality analyses

The recommended audience includes operators, managers, and board members.

# **Financial Analysis: Using Financial State**ments for Informed Decision Making

# March 30, 2023 • Cathedral City, CA

DoubleTree by Hilton Hotel Golf Resort Palm Springs 67967 Vista Chino / Cathedral City, CA 92234

The purpose of this training is to provide small water systems in California with tools necessary to plan for financial stability-specifically reading financial statements and interpreting that information. Many systems lack basic understanding of using financial statements to make the informed financial decisions necessary to provide for sustainability of the water system. This training will be presented to provide decision makers with working knowledge and emphasize tools/resources available to understand information contained in financial statements about their utility's revenue, expenses, profitability, debt load, and the ability to meet its short-term and long-term financial obligations.

#### Participants will learn how to:

- Identify on which financial statements to find specific financial information
- Understand what each financial statement reveals about the financial health of the system
- Calculate financial indicators, including liquidity ratios, efficiency ratios and solvency ratios

The recommended audience includes governing bodies, managers, accountants and operators

# **Sanitary Surveys**

# April 12, 2023 • San Luis Obispo, CA

San Luis Business Park / 4251 S. Higuera Street, Suite 800, Room 501 San Luis Obispo, CA 93401

It is the ultimate responsibility of every operator, manager and board member to provide safe drinking water to their customers. The prevention and removal of contaminants from the water is an essential job function. Sanitary surveys are a very important tool in helping water systems provide safe drinking water. The Ground Water Rule puts increased regulatory emphasis on conducting sanitary surveys and correcting deficiencies before they lead to water contamination events.

This workshop will give the participants an overview of sanitary surveys. Guides and templates will be provided so that individuals can conduct sanitary surveys of their own water systems.

#### Participants will learn:

- What a sanitary survey is
- The benefits of conducting your own sanitary survey to provide safe drinking water to your customers
- The sanitary survey requirements in the Groundwater Rule
- How to use the EPA sanitary survey guidebooks and templates

The recommended audience includes system operators and managers.

# **Operator Guide to Drought Resiliency**

# April 13, 2023 • San Luis Obispo, CA

San Luis Business Park / 4251 S. Higuera Street, Suite 800, Room 501 San Luis Obispo, CA 93401

Ongoing drought conditions spell hard times for those affected. Whether your source water is from a river, reservoir, or a well, communities are increasingly at risk. Conservation is now the norm in California due to the drought severity of recent times. Legislative efforts of state, cities and counties have increased, and these practices are here to stay, in preparation for more dry years to come. This presentation will identify drought-related vulnerabilities in your systems and communities, and share knowledge on drought monitoring, preparedness, and emerging regulations.

Participants will learn how to:

- Locate resources to assess current climate information
- Determine the triggers for different drought stage activities
- Develop best practices to reduce water use and promote water conservation
- Create a drought and emergency response plan using required core elements
- Identify tools and resources to keep up with current and emerging regulations

The recommended audience includes operators, managers, and elected officials.

# **Navigating State Funding**

## April 26, 2023 • Oxnard, CA

Courtyard by Marriott / 600 East Esplanade Drive / Oxnard, CA 93036

Does your system have a capital improvement project and you are you trying to figure out where to start in the state funding process? In this class you will learn about the resources available to identify funding opportunities, the requirements of a state funding application and how to request assistance so your system is prepared to execute a funding agreement.

Participants will learn:

- How to request technical assistance and the types of assistance available
- Resources for identifying state funding opportunities
- What to expect when completing a funding application

The recommended audience includes managers, board members and operators.

# **Capacity Building Through Partnerships**

#### April 27, 2023 • Oxnard, CA

Courtyard by Marriott / 600 East Esplanade Drive / Oxnard, CA 93036

This workshop will discuss the spectrum of opportunities for partnering with others. From casual information sharing or operational support, to formal consolidation or joint powers agreements, we will review the challenges and benefits of partnering up. By creating partnerships and opportunities for working together we can solve some of our small system challenges.

#### Participants will learn:

- How to evaluate their system's potential for partnership
- Options for working with other systems
- The next steps to start or continue the conversation

The recommended audience includes anyone involved with a small water system.

# **Introduction to Surface Water Treatment Processes**

# May 10, 2023 • National City, CA

Holiday Inn Express San Diego South / 1645 East Plaza Boulevard National City, CA 91950

Many small water system operators require a treatment operator certification to run their groundwater treatment operations. The water treatment certification exams, however, include many elements of surface water treatment that are completely foreign to the groundwater treatment plant operator. This often can be a significant impediment to them successfully passing the treatment exam. This training is intended to provide an operator preparing to take the treatment certification with a basic knowledge of surface water treatment processes that will help them pass the treatment exam.

This training includes on-site experience in a conventional surface water treatment plant. Because of security requirements, no walk-on registration will be allowed. This class is limited to 25 participants.

# Participants will learn:

- Basic knowledge of surface water treatment processes
- Surface water treatment process control techniques
- Filter backwash processes
- Basic SCADA system control of a surface water treatment plant

The recommended audience includes groundwater treatment operators preparing for the treatment certification exam.

# **Treatment & Distribution Math**

#### May 11, 2023 • El Centro, CA

Imperial County Administrative Center / 940 Main Street / El Centro, CA 92243

One of many skills needed by water treatment operators is the ability to solve water math problems. Dosing a tank, calculating flow, flushing hydrants, and converting static pressures are all part of a system's operational needs. This workshop will cover conversion numbers, pressure, tank and pipe volumes, detention times, and continue into pipe velocity, chemical dosages, chemical blending, and filtration rates. We will utilize the state math conversion sheet and cover the requirements for Grade 1 and 2 certifications.

Participants will learn how to calculate:

- Volume in cubic feet and gallons
- Pressure conversion to elevation
- Chemical dosage
- **Detention time**
- Sedimentation and filtration
- Pumping rates and flow velocity

The recommended audience includes operators, managers and board members.

Please bring a pen or pencil and your favorite calculator.

# **Auditing & Leak Detection**

#### May 23, 2023 • Fortuna, CA

River Lodge Conference Center / 1800 Riverwalk Drive / Fortuna, CA 95540

We live in California and water is a pricey and limited resource that we need to use wisely to supply it to our customers and we must charge a fair and equitable rate to all our customers equally. California's Human Right to Water law declares that "every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." For all drinking water systems one of the keyways to ensure your water system is sustainable into the future is to charge what it costs to run it optimally and show that you can account for all the water you produce and charge your customers for their share they use equally. So how do you know your water system is accounting and charging for all the water you produce, you do a water system audit, and identify how much of your water is accounted for revenue water and how much is unaccounted/un-revenue water. Once you know how much un-revenue water you have, you can proceed with measures to move the un-revenue to revenue water. A key benefit of a water audit is its ability to give you a good idea of how much water you are losing through your water system leakage so you can begin to take measures fix it. This class will walk you through conducting and validating a water audit and how to start a water loss program.

# Participants will learn:

- How and why a water audit can help all water systems
- Who must do a mandatory water audit in California and validate it
- How to do a water audit and validate it
- What free resources are available for water audit software
- What technologies are available for conducting leak detection programs
- How to set up a leak detection/water loss program

The recommended audience includes operators, managers, utility staff, utility billing staff.

# **Financial Capacity Symposium**

May 24, 2023 • Fortuna, CA

River Lodge Conference Center / 1800 Riverwalk Drive / Fortuna, CA 95540

See page 21 for more information

# **Cross-Connection Controls**

May 25, 2023 • Fortuna, CA

River Lodge Conference Center / 1800 Riverwalk Drive / Fortuna, CA 95540

Do you have an active cross connection control program? If not, it is time to get in the game. Not only are you required to have an approved program, but cross connection controls provide yet another barrier against water contamination. This workshop will give you the information and resources on how to develop a program that fits your small water system.

#### Participants will learn:

- How to identify potential cross connections
- What backflow prevention devices to use
- State requirements regarding cross connection control
- How to develop a successful program

The recommended audience includes operators, managers and board members.

# **Water Treatment Techniques**

June 7, 2023 • Ukiah, CA

Ukiah Valley Convention Center / 200 South School Street / Ukiah, CA 95482

There are multiple techniques used by public water systems to provide safe, aesthetically pleasing water to their customers. These techniques have been established by state law, federal law and the industry. This workshop will cover most of these techniques as well as provide resources for the water treatment operator.

#### Participants will learn:

- Water sources and the need for treatment
- Water quality parameters
- Water treatment regulations
- Water treatment techniques

The recommended audience includes operators, managers and board members.

# **Financial Capacity Reporting**

June 8, 2023 • Ukiah, CA

Ukiah Valley Convention Center / 200 South School Street / Ukiah, CA 95482

The purpose of this training is to provide small water systems in California with tools necessary to accurately complete state required financial reports. The training will consist of reviewing financial statements, specifically the Statement of Financial Position and the Statement of Activities to determine where to find the information to enter into the reporting database. The state financial reporting database will be accessed in class. Using sample financial statements, attendees will receive hands-on training in completing the reports.

## Participants will learn:

- Where to find the required information on financial statements
- How to access the reporting database
- How to accurately input financial information into the reports

The recommended audience includes board members, bookkeepers and decision makers.





# **CalTAP Fair**

March 16, 2023 • Valencia, CA

Embassy Suites Valencia / 28508 Westinghouse Place / Valencia CA, 91355

# **Technical Track**

#### **PFAS in Drinking Water**

The issue of PFAS contamination is being highlighted throughout the country with many experiencing anxieties over possible water contamination. PFAS are a group of man-made chemicals which include Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS). Known as "forever chemicals," PFAS compounds have been found widely in the environment, including thousands of groundwater sources throughout US.

PFAS compounds are currently the #1 emerging threat to water systems. Continuing studies are identifying potential health risks associated with these chemicals. This session examines the origin, the concerns and provides information for small systems about protecting public health.

# Participants will learn:

- · Why these "forever" chemicals are not going away
- · Where PFAS come from
- · What the health effects of PFAS are
- · PFAS regulations in drinking water
- PFAS treatment technologies for drinking water systems

The recommended audience includes board members, managers and operators.

# **Small System Drinking Water Treatment**

Many small public water systems in California require water treatment to turn the water into drinking water. The treatment technique used will be determined by the water source, what's in the source, drinking water regulations and your budget (how many customers you have). This could be no treatment at all, simple chlorination, filtration, greensand filtration, membrane filtration or other methods. This workshop will cover most of these topics.

#### Participants will learn:

- Surface water and groundwater quality basics
- The need for water treatment
- Water treatment techniques
- · Budgeting and planning for water treatment techniques

The recommended audience includes operators, managers and board members.

# **Managerial Track**

# SB552: Drought Response

SB 552 includes new responsibilities and requirements to help small water suppliers and rural communities reduce their risk of inadequate water supply during a water shortage event. In this workshop we will share the emerging awareness and understanding of potential water shortage risks for small water suppliers and rural communities, and we will identify some of the roles and recommendations to improve drought resilience planning.

Participants will learn:

- New requirements in Drought Resilience and Water Shortage Response
- Improved communication and coordination recommendations between water users and government
- · How to recognize emerging challenges to increased frequency and severity of drought conditions
- Planning strategies for water shortage vulnerability and disaster preparedness

The recommended audience includes operators, managers, and elected officials.

# **At Risk Financial Reporting**

The purpose of this training is to provide small water systems in California with tools necessary to accurately complete state required financial reports. The training will consist of reviewing financial statements, specifically the Statement of Financial Position and the Statement of Activities to determine where to find the information to enter into the reporting database.

Participants will learn how to:

- Identify where to find the required information on financial statements
- Understand how to accurately input financial information into the reports

The recommended audience includes board members, bookkeepers and decision makers.

# **Combined Track**

# **Getting Hands on with the Sustainable Groundwater Management Act**

The Sustainable Groundwater Management Act of 2014 (SGMA) has been called "the most important legislation in California in 100 years." SGMA mandates the sustainable use of California groundwater. Given the fact that many groundwater basins are in overdraft, implementation of sustainable practices will likely have a significant impact on small water systems that use groundwater from these basins.

In this session, attendees will have an interactive opportunity to experience the challenges of managing increasingly scarce groundwater amongst stakeholders with competing needs. Developed through a social science research partnership in response to SGMA, the Groundwater Game serves as a useful tool to gain insight into SGMA implementation and establishing a greater awareness of the varying interests and perspectives surrounding groundwater resources.

Participants will learn:

- Different management tools, including groundwater trading as local agencies develop their sustainability plans to balance the supply and demand of groundwater
- The importance of community engagement for SGMA implementation
- To experiment with different groundwater pumping and management strategies
- A greater awareness of groundwater resources and the multiple interests and perspectives from stakeholders

The recommended audience includes water system managers, operators, administrative staff and board members.

#### **California TMF Review**

Are you a considering applying for State Funding soon? There is a Technical, Managerial, and Financial Assessment (TMF Assessment) that must be completed prior to entering into a Financial Agreement with the State. This assessment looks at the technical, managerial, and financial plans and policies the water system has to ensure the water system can successfully provide safe and affordable drinking water to its customers into the foreseeable future. There are 13 core elements of the TMF assessment that the State will expect a public water system to have in place either before financing or within 6 months of project completion.

Participants will learn:

- Which TMF assessment is needed for their water system and where to find the forms and instructions
- What are the core 13 elements of a TMF assessment

The recommended audience includes board members, managers, and operators of public water systems.

# **Financial Capacity Symposium**

May 24, 2023 • Fortuna, CA

River Lodge Conference Center / 1800 Riverwalk Drive / Fortuna, CA 95540

The purpose of this training is to provide small water systems in California with tools necessary to accurately complete state required financial reports. The morning will focus on reviewing financial statements, specifically the Statement of Financial Position and the Statement of Activities to determine where to find the information to enter into the reporting database. The California State Water Resources Control Board, Department of Drinking Water and Division of Financial Assistance will discuss where to find the required financial forms, how to complete them and common errors to avoid in their completion.

Participants will learn how to:

- Identify where to find the required information on financial statements
- Know how to access the reporting database
- Understand how to accurately input financial information into the reports

The recommended audience includes board members, bookkeepers and decision makers.

# **Trainer Biographies**



**CYRIL BARMORE**, Rural Development Specialist – Environmental, delivers individual, classroom, and online instruction to promote water infrastructure resilience, sustainability, and quality in California's rural communities. Cyril provides both on-site and online assessment, quidance, and assistance to operators, managers, accounting personnel, and board members of small drinking water and wastewater systems. He holds the following California licenses: T3, D3, Wastewater 2, and AWWA Backflow Tester. Cyril dedicates technical strategies, management best practices, and financial resources to help solve problems and bring positive change to water and wastewater infrastructure in rural California.

KIM BENNETT, Rural Development Specialist II— Environmental, provides financial and managerial trainings and technical assistance to water and wastewater systems in rural communities in California. Kim conducts median household income (MHI) and low-to-moderate income surveys, and her responsibilities include planning and implementing income surveys under RCAC's federal and state contracts throughout RCAC's region. Kim also represents RCAC at conferences, CFCC and CalTAP Fairs and other outreach events. She is a member of the American Water Works Association (AWWA).

JASON CARMAN, Rural Development Specialist — Environmental, provides technical, managerial, and financial assistance and training for drinking water and wastewater systems. He assists them to achieve regulatory compliance and improve operations procedures. Jason has over 25 years of experience working in all types of water, wastewater, and industrial fluid handling systems in operations and management. He is a Grade 4 Water Distribution Operator, Grade 3 Water Treatment Operator, and a licensed maintenance electrician in Oregon. His electrical experience is industrial in nature, focusing on power systems and industrial automation/ SCADA. Jason has over 15 years of experience supervising distribution, treatment, and electrical operations for public water and electric utilities. He has also been responsible for capital improvement planning and execution. He served as the Oregon Health Authority's Direct Responsible Charge (DRC) for one of the largest public water utilities in Oregon for four years. He regularly conducts technical and managerial workshops throughout RCAC's service area.

MARY FLEMING, Rural Development Specialist – Environmental, provides financial management and QuickBooksTM technical assistance and training to small utilities and nonprofit housing organizations' staff, management, and board of directors. She has more than 30 years of experience in financial management. Mary develops financial management training curricula and teaches online and in classroom workshops for RCAC. She performs financial statements and rate analyses for utilities in California and works with other RCAC staff to provide the utilities with written recommendations for sustainability. Mary is a certified QuickBooksTM Pro Advisor and holds a bachelor's degree in accounting from California State University, Stanislaus.

JOHN HAMNER, Rural Development Specialist – Environmental, has more than 27 years of experience teaching classroom workshops, in person and online, on water and wastewater utility technical, managerial, and financial topics. John holds a T3 Water Treatment Operator Certification, a D3 Water Distribution Operator Certification, a Grade 3 Wastewater Certification and is a Water Conservation Practitioner I (CA/NV AWWA). He has managed and operated water and wastewater systems in Mendocino County and Lake County, California. He teaches water and wastewater classes for Woodland Community College at its Clearlake campus and is a full-time trainer for RCAC.

**BRIDGET HARRIS**, Rural Development Specialist III – Environmental, provides financial and managerial trainings to boards and councils throughout the rural west. She has nearly 20 years of experience leading management and financial aspects of nonprofit organizations. She develops and delivers curricula for in-person and online trainings, as well as system specific trainings for staff and boards. Bridget conducts financial analyses and rate studies throughout the west and assists utilities in asset management planning. She holds a bachelor's degree in accounting and an MBA in finance. Additionally, Bridget holds treatment and distribution Level 1 certifications in Nevada.

KATRINA HIOTT, Regional Field Manager – Environmental, provides training and technical assistance to mutual water companies, nonprofits, and local and Tribal governments to improve or develop water and wastewater systems and programs for rural communities. Before joining RCAC, Katrina worked as an environmental health specialist in water protection programs in local government, where she assisted the public in complying with county well ordinances and state water codes. Her experience includes creating and conducting environmental education programs, assisting small public water systems with state and federal compliance, performing water system and private well evaluations, well construction, destruction and modification permitting, and inspection of new construction of onsite wastewater systems.

**DAVID HOSSLI**, Rural Development Specialist- Environmental, provides technical assistance and training to small water systems in California. David has 38 years of water system operation and management experience. Before coming to RCAC he served for 30 years in many roles from operator to management on a water system serving 100,000 residents. He was the Water System Supervisor and Chief Operator when he retired. He holds a D5 California Water Distribution Certification and T2 California Water Treatment Certification.

JIM MCVEIGH, Rural Development Specialist, has more than 45 years of experience in the operation and management of water utilities. Jim holds certifications as a Grade 5 California Water Treatment Operator, Grade 4 California Water Distribution Operator, Grade 4 Hawaii Water Treatment Operator, and Grade 4 Hawaii Water Distribution Operator and is a Certified Environmental Trainer. He retired as the senior water operations supervisor running the City of San Diego's Otay Water Treatment Plant. Jim holds a bachelor's degree in chemistry and biology, a master's degree in organizational management and has extensive training in drinking water quality issues.

SAMANTHA RYAN, Rural Development Specialist — Environmental, provides training and assistance to water and wastewater systems. Samantha holds Grade 3 Wastewater Treatment, Grade 2 Water Treatment, and Grade 2 Water Distribution operator certifications. During her five years as a water and wastewater operator, Samantha operated a pond and marsh wastewater system, a grade 3 water distribution system, and tested and repaired backflow prevention devices. She was a program and regulatory analyst for a water district for three years where she helped to ensure compliance with many federal and state regulations, including those established to satisfy the California Safe Drinking Water Act.

SAMANTHA VAN BREUKELEN, Rural Development Specialist Trainee — Environmental, conducts median household income (MHI) surveys according to California law and regulations. Samantha also performs financial rate and financial capacity analyses for water utilities in California. She holds a bachelor's degree in economics, specializing in quantitative analysis from California State University at Fullerton.

**DESSA WELLS**, Rural Development Specialist — Environmental, provides financial management and QuickBooks TM assistance to water and wastewater systems. Dessa is a QuickBooks certified Pro Advisor. She also assists systems with rate studies, funding applications, financial reporting for funding, water system management plans, and conducts median household surveys. She has developed and delivers curricula for in person and on-line trainings.

# **Training Information**

#### **Contact Hours & Certificates:**

Each classroom workshop qualifies for six (6) drinking water contact hours. Exceptions include the AB54 & 240 class, which qualifies for two (2) drinking water contact hours.

Each online, one-part workshop qualifies for two (2) drinking water contact hours. Each online, Deep Dive workshop qualifies for four (4) drinking water contact hours. Each online series, qualifies for two (2) drinking water contact hours per session.

Certificates for all online sessions are available for self-printing within 48 hours through your RCAC website registration/profile account. Certificates for all classroom sessions are available for self-printing within 10 business days through your RCAC website registration/profile account. RCAC and the Water Board require signatures to verify attendance for in-person trainings and we must wait to receive the original classroom sign-in sheets from the RCAC trainer in order to verify attendance.

**Certificates will no longer be provided at the conclusion of each classroom training.** If you would like to request a physical copy of a certificate, you may request this at the time of signing in to the event and a copy will be mailed to you within 20 business days.

# **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 guidelines/restrictions.

## **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.** 

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

https://stage.events.rcac.org/rcac/Free\_CA\_Drinking\_Water\_Workshops.asp

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

Training department phone: (916) 447-9832 ext. 1429 • Email: registration@rcac.org

# How do I find my certificates online?

You can now access your contact hour certificates online. 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.





# January–June 2023 Registration Form

**There is NO FEE to attend these workshops.** Please register in advance, as space may be limited. **Priority will be given to smaller water systems.** Please complete one form for each person who will attend. You can also register online at **https://stage.events.rcac.org/rcac/Free\_CA\_Drinking\_Water\_Workshops.asp**.

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Name:				(All notifications regarding work	shop changes are made via email)
					ishop changes are made via email)
Company or Water System:					
Preferred phone: ☐ Work ☐ Home or ☐ I					
Cell Phone (for text message notifications)					
Preferred mailing address: $\square$ Organization or $\square$ H					
City:	State:			Zip:	
Type of Water System: $\square$ Community $\square$ Nor	r-community 🔲 Non-community/Nor	n-transien	t	□ N/A	
Water System ID#:	Number of connections:		_	Serves less than 10,000 population:	□ Yes □ No
Operator Certification #(s):	Treatment			🗖 Wastewater	
SPECIAL NEEDS: If you have special needs addresse		ease notif	y RCA	C at (916) 447-9832 ext. 1003 or mayres	@rcac.org at least three weeks prior to
each workshop you are attending, so that we may Please register me for the following workshop.	•				
Online Workshops	(one-part)		0	nline Series Workshops: Opera	tor Math 2-Part Series
01/04	ion: Your Customers Have the Right to Know	05/04		10 a.m.	Operator Math 101: The Basics
01/05	Groundwater Treatment Techniques	06/01		10 a.m.	Operator Math 102: The Basics Continued
01/10	Surface Water Treatment Rule			Classica in Maril	ah ama
01/18	Operations Plans			Classroom Work	snops
01/19	Bacteriological Quality	01/11		Cross-Connection Controls	(West Sacramento)
01/31	Capital Improvement Planning	01/12		Pumps & Motors Troubleshooting	(West Sacramento)
02/14	Compliance Monitoring & Reporting	02/08		Asset Management for Operators	(Visalia)
02/22	serve Planning for Mutual Water Companies	02/09		Financial Fundamentals	(Visalia)
02/23	a's New Cross-Connection Control Handbook	02/15		Permanent Measures to Deal with Impacte	ed Water Sources(Turlock)
03/08	for Mutual Water Company Board Members	02/16		Water Operator Certification Prep	(Turlock)
03/23	Recruitment & Retention	03/01		Maintaining Water Quality	(Redding)
04/04	Seasonal Start-up Operations	03/02		Asset Management & Capital Improvemen	t Planning(Redding)
04/05	Completing the Electronic Annual Report	03/29		Compliance Monitoring & Sampling	(Cathedral City)
04/11	ıncial Management for Small Water Systems	03/30		Financial Analysis	(Cathedral City)
04/19	What You Need to Know About the SGMA	04/12		Sanitary Surveys	(San Luis Obispo)
04/20	Metering Replacement Plans	04/13		Operator Guide to Drought Resiliency	(San Luis Obispo)
04/25	"Forever Chemicals": PFAS in Drinking Water	04/26		Navigating State Funding	(0xnard)
05/03	Coliform Sampling Procedures	04/27		Capacity Building Through Partnerships	(0xnard)
05/09	Consumer Confidence Reports	05/10		Introduction to Surface Water Treatment P	rocesses(National City)
05/16	Cyber Security for Drinking Water Systems	05/11		Treatment & Distribution Math	(El Centro)
05/17	Process Control Troubleshooting	05/23		Auditing & Leak Detection	(Fortuna)
05/31	Rate Setting	05/25		Cross-Connection Controls	(Fortuna)
06/08	for Mutual Water Company Board Members	06/07		Water Treatment Techniques	(Ukiah)
06/13	Preparing for a Sanitary Survey	06/08		Financial Capacity Reporting	(Ukiah)
06/14	. Customer Communications & Transparency				
06/15	Beat the Cyanobacterial Blues			Special Ever	nts
06/15	the Lead Out: Lead & Copper Rule Revisions	03/16		CalTAP Fair	(Valoncia)
06/21		05/24		Financial Capacity Symposium	
06/22	er Conservation Measures for Water Systems	03/24		rillalicial capacity sylliposiulii	(FOI tulia)
Online Deep Dive \	Workshops	Day	nictur	tion questions or problems? Contact th	o Training Donartmont
01/26 🗆 8:30 a.m.	Capacity Building Through Partnerships			egistration@rcac.org • <b>Phone:</b> (916) 447-983	
02/01 🗖 8:30 a.m.	Pumps & Motors Troubleshooting	Lili	uii. It	.gistiation@icac.org • 1 11011€. (710) 447-303	/2 CAG 1727
03/09	Intro to Ouickbooks				

03/22 🗖 8:30 a.m. ...... Regulation Essentials: The California Safe Drinking Water Act





West Sacramento, CA 95691

