

# North Lake Tahoe FREE Water & Wastewater Workshops

July 2009 through July 2010

Join us for one or all of the drinking water and wastewater workshops to be held in North Lake Tahoe in the coming months! All workshops qualify for contact hours. There is no cost to attend, however priority registration for the drinking water workshops will be given to OPERATORS from small water systems.

## Where:

All workshops will be held at:  
**North Tahoe Conference Center**  
8318 North Lake Blvd.  
Kings Beach, CA 96143

All workshops are 8 a.m. registration; Training: 8:30 a.m.-3:30 p.m.,  
Except for February 10, 2010: Training is 8:30 a.m.-4:30 p.m.  
Lunch is one hour and on your own.

## Workshop Schedule:

**July 31, 2009:**

### Arsenic Remediation

Learn about the history and health effects of arsenic, arsenic regulations, and how to come into compliance for arsenic in drinking water. Nontreatment options and treatment technologies will be discussed, and the EPA arsenic decision tree tool will be demonstrated. Bring your water systems water quality data, and find out what type treatment technology may be appropriate for your system. (6 contact hours)

**August 12, 2009:**

### Water Distribution Operator Test Prep, Grades I & II

Water operators who are interested in learning the basics of water distribution and water math, and others planning to take the California or Nevada Water Distribution Operator Certification test (Grades I and II) are invited to attend and participate in this workshop covering water distribution topics. Topics covered include: study and test tips, water quality, pipes, hydrants, valves, meters, water storage, disinfection, safety and water math. (6 contact hours)

**September 22, 2009:**

### Pathogens and Nuisance Organisms in Drinking Water

Find out about different nuisance and disease causing organisms that can inhabit water supplies and water distribution systems. Case studies of disease outbreaks, regulations regarding micro organisms in drinking water, and general rules for protecting your water system from contamination will be covered. (6 contact hours)

**October 9, 2009:**

### Water Conservation

As competition for existing water resources increases, utilities are focusing more and more on water conservation as a long term supply option. Learn about the benefits of water conservation, how water is being used, and how to develop a workable water conservation plan for your small water system. (6 contact hours)

**November 18, 2009:**

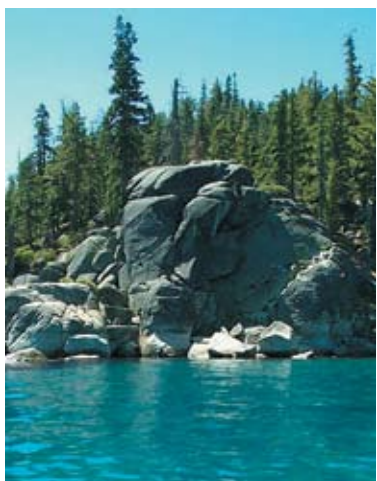
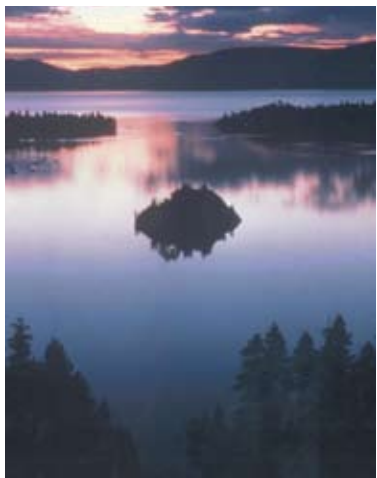
### Water Treatment Operator Test Prep, Grades I & II

Water operators who are interested in learning the basics of water treatment and water math, and others planning to take the California or Nevada Water Treatment Operator Certification test (Grades I and II) are invited to attend and participate in this workshop covering water distribution topics. Topics covered include: study and test tips, water quality, preliminary treatment, coagulation, flocculation, sedimentation, filtration, disinfection, safety, water softening, ion exchange and water math. (6 contact hours)

**December 29, 2009:**

### Surface Water Treatment Rule, Groundwater Rule & the Disinfection By-Product Rule

Learn about the main elements of these important regulations, and how they effect the day-to-day operations of your water system. (6 contact hours)



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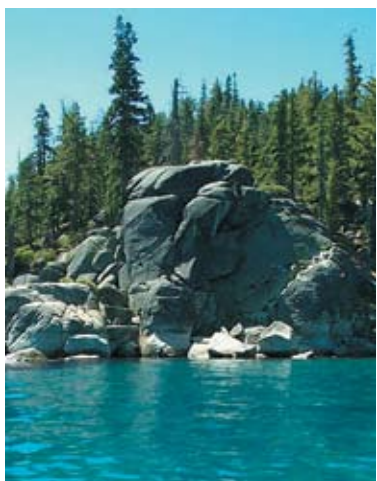
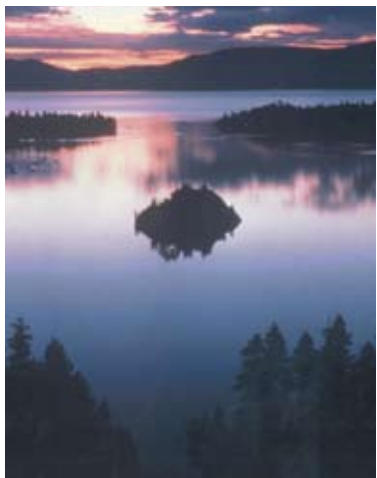


Human Resource Services

**Expense Reimbursement Grant**  
and

The April 2010 workshop is funded  
as part of the RCAP/EPA Small  
Community Wastewater Project,  
an RCAP network project.

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**January 12, 2010:**

### **Clean Water Act & Source Water Protection**

How does the clean water act relate to the day-to-day operations of your water system? Learn about this important regulation, and how to use limited resources to promote source water protection efforts in your area. (6 contact hours)

**February 10, 2010:**

### **Fundamentals of Pumps and Motors**

Have you ever needed to order a pump or a motor and were asked questions by the supplier that you couldn't answer? This workshop will cover the basics of pump design, selection, terminology and hydraulics. Participants will learn to use a free online pump horsepower calculator, solve basic wire-to-water efficiency calculations, learn about friction loss in pipes and fittings, and how to determine total dynamic head (TDH). We'll cover the basics of electric motor design, terminology, service factors, NEMA frame types and common variable speed features. (7 contact hours)

**March 18, 2010:**

### **Water Distribution Operator Test Prep, Grades I & II**

Water operators who are interested in learning the basics of water distribution and water math, and others planning to take the California or Nevada Water Distribution Operator Certification test (Grades I and II) are invited to attend and participate in this workshop covering water distribution topics. Topics covered include: study and test tips, water quality, pipes, hydrants, valves, meters, water storage, disinfection, safety and water math. (6 contact hours)

**April 14-15, 2010:**

### **Wastewater Operator Test Prep, Grades I & II**

Wastewater operators who are interested in learning the basics of wastewater treatment and wastewater math, and others planning to take the Nevada or California Wastewater Certification test (Grades I and II) are invited to attend and participate in this workshop covering wastewater topics such as ponds, trickling filters & RBC's, activated sludge, disinfection, sampling, safety, O&M, wastewater math, practice questions and test taking tips.

**May 13-14, 2010:**

### **Water Treatment Operator Test Prep, Grades I & II**

Water operators who are interested in learning the basics of water treatment and water math, and others planning to take the California or Nevada Water Treatment Operator Certification test (Grades I and II) are invited to attend and participate in this workshop covering water distribution topics. Topics covered include: study and test tips, water quality, preliminary treatment, coagulation, flocculation, sedimentation, filtration, disinfection, safety, water softening, ion exchange and water math. (12 contact hours)

**June 9, 2010:**

### **Water Audits and Leak Detection**

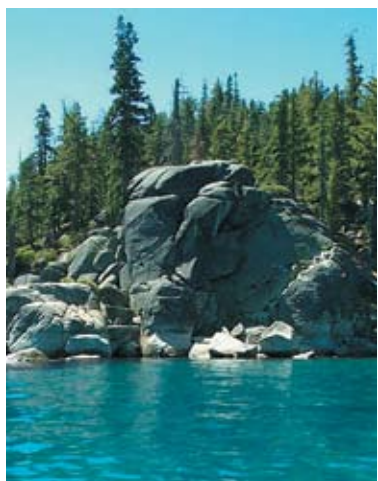
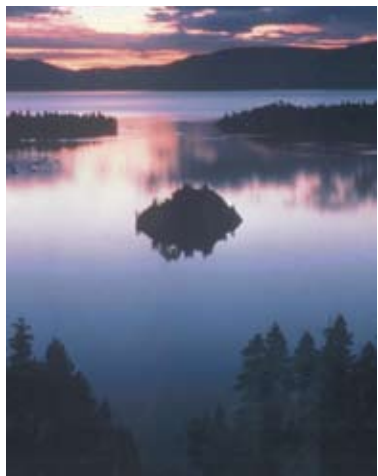
After a swarm of minor earthquakes last month, your unaccounted-for water suddenly doubled. Your aging distribution system seems to be losing more water every year! Underground leaks don't just cost your system money from repairs and lost revenue. Leaky distribution systems are a major cause of contamination, especially in older and poorly designed systems. A water audit is a thorough accounting of all water into and out of a utility as well as an in-depth record and field examination of the distribution system to identify sources of water loss and revenue loss. This workshop will describe how and where leaks happen, the technology that's available for locating them, and the step-by-step methodology of locating underground leaks BEFORE the first hole is dug. (6 contact hours)

**July 13, 2010:**

### **System Security, Emergency Response Planning and CalWARN**

Your certified operator has made a simple mistake during a routine repair job, contaminating a major portion of your distribution system. Who do you call in this emergency? Do you have written step-by-step procedures? What kinds of outside help will you need? How will you inform your customers? A water system emergency is any situation in which your customers are without water or the water is unsafe to drink, and they can occur in any water system at any time. This workshop will describe the features and benefits of the CalWARN system, which is a system of policies, procedures, contacts and an omnibus mutual aid agreement that enables its members to respond quickly and effectively in emergency situations. (6 contact hours)

For more information on any of these workshops, please contact Stevan Palmer, RCAC,  
at 775/750-1884 or by e-mail at [spalmer@rcac.org](mailto:spalmer@rcac.org)



# North Lake Tahoe Water & Wastewater Workshops

## July 2009 through July 2010

### Registration:

Please complete a separate form for each person registering. All workshops qualify for contact hours. There is no cost to attend, however priority registration for the drinking water workshops will be given to OPERATORS from small water systems. You can copy this form, or download additional forms or register online at [www.rcac.org](http://www.rcac.org), under Trainings and Events.

Name \_\_\_\_\_  
Agency \_\_\_\_\_ Water system number \_\_\_\_\_  
Operator certification number \_\_\_\_\_ E-mail \_\_\_\_\_  
Mailing address \_\_\_\_\_  
City/State/Zip \_\_\_\_\_  
Phone ( \_\_\_\_\_ ) \_\_\_\_\_ Fax ( \_\_\_\_\_ ) \_\_\_\_\_

**Special needs:** If you have special needs addressed by the Americans with Disability Act, please notify RCAC at 916/447-9832 ext. 1009 at least one week prior to the workshop(s) that you are attending, so that we may make accommodations for you.

### Workshop selection: Please register me for the following workshop(s):

- ☐ July 31, 2009: Arsenic Remediation
- ☐ Aug. 12, 2009: Water Distribution Operator Test Prep, Grades I & II
- ☐ Sept. 22, 2009: Pathogens and Nuisance Organisms in Drinking Water
- ☐ Oct. 9, 2009: Water Conservation
- ☐ Nov. 18, 2009: Water Treatment Operator Test Prep, Grades I & II
- ☐ Dec. 29, 2009: Surface Water Treatment Rule, Groundwater Rule & the Disinfection By-Product Rule
- ☐ Jan. 12, 2010: Clean Water Act & Source Water Protection
- ☐ Feb. 10, 2010: Fundamentals of Pumps and Motors
- ☐ Mar. 18, 2010: Water Distribution Operator Test Prep, Grades I & II
- ☐ Apr. 14,-15 2010: Wastewater Operator Test Prep, Grades I & II
- ☐ May 13-14, 2010: Water Treatment Operator Test Prep, Grades I & II
- ☐ June 9, 2010: Water Audits and Leak Detection
- ☐ July 13, 2010: System Security, Emergency Response Planning and CalWARN

Please mail or fax your registration to:

RCAC Attn: Mark Wiseman

3120 Freeboard Drive, Suite 201 • West Sacramento, CA 95691

916/447-9832 ext. 1029 • fax: 916/372-5636

Or you can register online at: [www.rcac.org](http://www.rcac.org), under Trainings and Events

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