

2-DAY
WATER SEMINAR
JUNE 18th-19th
PORTLAND COMMUNITY COLLEGE
SYLVANIA CAMPUS



Commercial, Industrial & Institutional Water Conservation



A Hands-On Training to Better Understand an Overlooked & Undervalued Resource

Introducing a 2-day seminar specifically focused on building the skills required to effectively and accurately implement Water Conservation within real world 'every day' scenarios.

LEARNING OBJECTIVES

* How to identify the most promising and cost effective water conservation opportunities (excluding irrigation) for various types of facilities

* How to select water efficient equipment that really works and/or cost effective upgrades

+ Plus How to accurately quantify savings potential and confirm results, using ultrasonic meters and other equipment

Participants also receive electronic resources for their future use!



The training will cover a wide variety of commercial water consuming processes and equipment including cooling towers, medical vacuum pumps and sterilizers, single pass HVAC units, commercial laundry systems, reverse osmosis, restaurant equipment, food processing equipment, high efficiency restroom fixtures, and industrial product rinsing. Actual case studies will be interspersed with detailed equipment and process descriptions, educational videos, and hands-on exercises with recommended measuring equipment to create a fast paced and varied learning experience.

TOPIC DETAILS & SCHEDULE ON NEXT PAGE ...

COST
\$400

REGISTER TODAY
ONLINE

nweei.org/register-today





DAY 1

- Intro to Commercial (CII) Water Conservation
- ▶ Video Case Study: UW
 - Importance of Measurement
 - Tools of the Trade
 - Flow Bags and Graduated Containers
 - In-line Flow Meters
 - Ultrasonic Flow Meters
 - Hand Held Conductivity Meters
- 💧 Hands-on Exercise:
 - Setting up Ultrasonic Flow Meters
 - Calibrating Conductivity Meters
- ~ Morning Break ~
- Opportunities: Restroom Fixtures
- ▶ Video Case Study: High Efficiency Restroom Fixtures
 - Toilet and Urinal Basics
 - How to Select Fixtures that Work
 - Testing/Commissioning Toilets & Urinals
 - What to look for in Commercial Showers and Faucets
- ~ Lunch Break ~
- Opportunities: Cooling Towers
 - Cooling Tower Basics
 - Water Chemistry Basics
 - Cooling Tower Treatment Options
- ▶ Video(s) : Cooling Tower Water Treatment
- Seattle Cooling Tower Study Results
- SPU's Cooling Tower Incentive Program
- ~ Afternoon Break ~
- Opportunities: Food Service Facilities
 - Dishwashers and Pre-Rinse Spray Valves
 - Steamers and Wok Ovens
 - Ice Machines and Walk-in Coolers
- Additional Opportunities: Office Buildings/Hotels/Prisons
 - Laundry Facilities
 - Decorative Fountains
 - Booster Pumps
 - Penal Fixtures
- 📄 Case Study: King County

DAY 2

- Opportunities: Health Care Facilities and Laboratories
- ▶ Video Case Study: Fred Hutchinson Cancer Research Center
 - Reverse Osmosis
 - Sterilizers and Glass Washers
 - Vacuum Producers
 - Water Reuse
- ~ Morning Break ~
- Additional Opportunities: Beverage and Food Processing
 - Reverse Osmosis and Filtration
 - Single Pass Cooling
 - Container Rinsing
 - Cleanup
- Opportunities: Vehicle Wash Facilities
 - Nozzle Selection
 - Water Reuse
- Opportunities: Commercial Laundry Facilities
 - Re-programming Formulas
 - Alternative Cleaning Agents
 - Water Reuse
- ~ Lunch Break ~
- Hands-on Exercise: Downloading and Analyzing data from an ultrasonic meter
- Additional Opportunities: Manufacturing
 - 📄 Case Study: Steel Mill
 - Air Compressors
 - Oxygen Generators
 - Dust Control and Quenching
 - Water Reuse
- ~ Afternoon Break ~
- Considerations when Providing Technical Assistance regarding Equipment Selection
 - Will it fit?
 - Will it actually conserve potable water
 - Will it work as advertised?
- Cost Effectiveness
- Rating Systems:
 - LEED, WaterSense, MaP
- EPACT & Building Codes
- Commissioning & Post-install Evaluation

June 18th-19th
PORTLAND COMMUNITY COLLEGE - SYLVANIA CAMPUS
1200 SW 49th Ave
Portland, OR 97219

Technology Classroom Building (TCB) Room 218

COST \$400

REGISTRATION

Register for the EMC course via our convenient 1-page online registration form.

nweei.org/register-today



INSTRUCTOR PROFILE

ROGER E. VAN GELDER P.E.



Roger has expertise in evaluating a wide variety large scale water consuming processes and equipment. He has extensive experience using ultrasonic water meters, inline meters, motor loggers, conductivity meters, and other equipment to accurately characterize usage patterns, and verify potential and realized water savings.

In his free time, Roger is an award winning wildlife photographer who has documented some stunning wildlife, nature preserves and wetland areas.

Cancellation Policy

Cancellations 2 weeks prior to start of the workshop will be issued a 50% forfeit fee. Participant substitutions are allowed. NWEEI reserves the right to cancel up to 1-week prior to start of workshop if a minimum number of registrations is not met.

ABOUT NWEEI

The Northwest Water and Energy Education Institute (NWEEI) offers learning opportunities for energy and water industry practitioners. Customized training is offered for professionals around the Northwest, Nationally and Internationally. For over 30 years, the organization has successfully provided significant opportunities to train professional technicians who can immediately contribute to water and energy cost savings in their own communities.



COURSE LED BY INSTRUCTOR AND CONSULTING ENGINEER
 Roger Van Gelder, P.E.
rogervangelder@aol.com

For more additional information, contact Elaine Vidal:

541-463-6163 or online www.nweei.org