

MARY L. HOWELL

Mary L. Howell has over 35 years experience in the water industry. She has worked with many states on rule-writing and education, including Texas, Washington, Idaho, Hawaii, Oregon, and West Virginia. Ms. Howell reviewed the EPA White Paper on cross connections for technical content. She has implemented cross connection control programs throughout the United States for systems ranging in size from 25 people to over 1 million people. Ms. Howell was on the PNWS-AWWA Cross Connection Control Committee, and oversaw the writing of the organization's Seventh Edition Cross Connection Control Manual. She is a member of the Oregon Chapter ABPA, and is a past member of the National AWWA 512 committee on cross connections. Ms. Howell chaired the committee on the rewrite of the Third Edition AWWA M-14 Manual. She is a past chair of the State of Oregon Department of Human Services Cross Connection Control Advisory Board, and remains a current member of the Board. Ms. Howell served on the Technical Work Group for the FACA Committee for total coliform rule revisions and was a member of National AWWA Small Systems Division for 10 years. She worked with the Washington Department of Health and Evergreen Rural Water of Washington on a project that brought classes to small systems and she still conducts trainings throughout Washington. Ms. Howell is the Founder of Backflow Management Inc., a successful training and consulting company.

Ms. Howell is known throughout water-related industries as a gifted Instructor, Speaker, and Consultant with a passion for educating others and promoting clean, safe drinking water for all.

EDUCATION

- General Chemistry, Miami Dade College, Miami, Florida
- Environmental Chemistry, Portland State University
- Water and Wastewater Certification classes, Clackamas Community College

CERTIFICATIONS

- Water Distribution Systems Operator, State of Oregon
- Cross Connection Control Specialist and Instructor, State of Oregon
- Cross Connection Specialist, State of Washington
- ASSE, AWWA, DHS and TNRCC-approved Instructor

PROJECTS

- Cross Connection Control Program Training, Implementation & Maintenance – Nationwide
Ms. Howell has been working in the Cross Connection Control (CCC) field for over 35 years. In addition to drafting CCC Ordinances and Standard Operating Procedures Manuals, she also establishes and maintains CCC Programs for water systems of all sizes. These programs encompass all necessary CCC elements, including but not limited to residential and commercial surveys, hazard identification, backflow assembly testing, record keeping and legal liability issues. Her expertise in this field prompted her to develop BMI's popular CCC data management software program, *Cross-Track*. She regularly receives invitations to train members of industry organizations and collaborate with regulatory agencies. Ms. Howell currently serves as the *Cross Connection Specialist of Record* for several water systems in Washington and Oregon and is responsible for the day-to-day management of their CCC Programs.
- Water and Wastewater Certification Exam Reviews/Safe Drinking Water Act (SDWA) Trainings – Nationwide
Ms. Howell regularly conducts group and individual trainings on a variety of topics throughout the United States. She has created Water Distribution and Water Treatment Exam Review curriculum for all Operator levels which align with the Association of Boards of Certification's "Need to Know" criteria. Ms. Howell and her staff have compiled several manuals and workbooks which serve as study guides to assist students in passing their exams. Her Water and Wastewater students have a documented pass rate of greater than 90%. Students who need expedited assistance enjoy her flexible 1-on-1 training sessions.

PROJECTS, Continued

- Water Quality Assistance – Oregon and Washington
Ms. Howell works with systems of all sizes on SDWA compliance to include monitoring, Consumer Confidence Reports, Water Use Efficiency, and Written Program Plans.
- Material Preparation and Trainings – Washington
BMI and ERWoW partnered to create presentations for over 25 different classes that assist small system operators in fulfilling their new certification requirements.
- Water Operator Certification Training – Portland Water Bureau
Ms. Howell is contracted with the Portland Water Bureau, the second largest system in the Pacific Northwest, to prepare its staff members to pass Oregon's Water Distribution Certification Exams. The seven-week session consists of three separate classes- Exam Review for Levels 1 & 2, Exam Review for Levels 3 & 4 and a math class for all levels.
- Basics Course for Small Public Drinking Water Systems – Washington (2007 - 2008)
Ms. Howell provided technical review on this training project to create a CD for small public drinking water systems in Washington. The CD was designed to assist small systems under 3,300 connections to understand the basics of running a water system.
- Tribal Trainings – Environmental Protection Agency
BMI and ERWoW teamed up to work with Native American Tribes throughout Region 10 on training, compiling and implementing Emergency Response Plans and SDWA compliance.
- Vulnerability Assessment and Emergency Response Plan Trainings –Washington
After the events of Sept 11, 2001 Ms. Howell began offering trainings to water systems throughout Washington focusing on how to conduct Vulnerability Assessments and prepare Emergency Response Plans.
- Oregon Association of Water Utilities
BMI has taught classes throughout Oregon for OAWU on various topics relative to the drinking water industry from 1987 to present. The main focus of these classes is for small water systems.
- Keynote Speaker - Nationwide
Ms. Howell has presented many keynote addresses for various organizations, seminars and conventions.

INDUSTRY ARTICLES

- "Lead", *ERWoW Operator's Quarterly*, 2016
- "Our Ethics Affect Lives", *IAPMO Drinking Water & Backflow Prevention Magazine*, 2014
- "A World Water Day Challenge", *ERWoW Operators Quarterly*, 2014
- "Setting Meaningful Goals", *IAPMO Drinking Water & Backflow Prevention Magazine*, 2014
- "Leave the Cell Phone Alone", *CRWA Water Journal*, 2014

ORGANIZATION MEMBERSHIPS

- American Backflow Prevention Association
- American Water Works Association
- American Society of Sanitary Engineering
- Evergreen Rural Water of Washington
- Hawaii Rural Water Association
- Association of Boards of Certification
- Idaho Rural Water Association
- Oregon Association of Water Utilities