

## William Keefer

Senior Planner wkeefer@horsleywitten.com

#### **Areas of Expertise**

Drinking Water Quality
Water Security
Environmental Permitting & Compliance
Emergency Preparedness & Response
Education, Facilitation & Training
All Hazard Exercise Development and
Facilitation

# Professional Registrations & Affiliations

Certified Municipal Vulnerability Preparedness Provider FEMA Certifications: ICS-100/200 IS-700 NIMS IS-701 MACS

IS-702 Public Information

**IS-800 NRF** 

Memberships:

American Water Works Association (AWWA)/New England Water Works Association (NEWWA)

#### **Academic Background**

Project Management Certification, 2009, Association for Project Management (APMP)

Master of Science, 2004
Environmental Science, American
University

Bachelor of Science, 2002
Environmental Science, University of Delaware

#### **Professional Experience**

Horsley Witten Group, Inc. Planner, 2011 to Present

Atkins Global, Process Engineer, 2008 to 2010

United Water New Jersey, Compliance Specialist, 2006 to 2007

DC Water and Sewer Authority, Water Quality Specialist, 2003 to 2006 Disaster Research Center, Undergraduate Research Assistant, 2001 to 2002



Will Keefer has 20 years of professional experience and his main areas of expertise include water security training, drinking water quality analysis, environmental regulatory compliance, asset management/planning, and system health monitoring gained through work in the United States, United Kingdom, and United Arab Emirates. Will schedules, develops, and facilitates a variety of water sector specific training events across the United States to help water sector utilities and their response partners be better prepared for water and wastewater system disasters, both natural and man-made. In addition, supports other EPA projects on the topics of climate change adaptation, community-based resiliency, cybersecurity, lead in drinking water, and environmental policy.

#### **KEY PROJECTS**

**U.S. Environmental Protection Agency (EPA) Support:** Provides contract support to the EPA Water Security Division in the form of training and exercise development as well as the development of tools for the water sector. This includes routinely provides training to Regional-level staff with a focus on enhancing support to state drinking water agencies. Training topics include America's Water Infrastructure Act (AWIA) compliance, drought resilience and water loss, black sky planning, community-based water resiliency, and many other water security initiatives.

**U.S. EPA Region 3 (Philadelphia, Pennsylvania):** Provides support specifically for EPA Region 3 staff and their assigned states and utilities. As the primacy agency for the District of Columbia, Region 3 staff have unique roles and responsibilities that are normally found at the state level. Assistance to the Region includes emergency response training and exercises for the staff to enhance their capability to support DC Water and other states in the region.

**Water and Wastewater Agency Response Network (WARN) Support:** Leads the development, planning, and conducting of WARN intrastate and interstate seminars, tabletop exercises and functional exercises for the 50 WARNs across the country. In addition, efforts involve supporting the annual WARN Chairpersons Meeting.

Water Sector Incident Command System (ICS) and National Incident Management System (NIMS) Training: Develops the content and acts as an instructor for this training series that presented across the United States. Through presentations and group learning activities, thousands of water sector professionals receive their ICS and NIMS certifications and are more prepared to respond to incidents that impact their utilities.

**DC Water Emergency Preparedness Support:** Supports DC Water in preparedness activities to include Incident Command System training; designing and conducting tabletop, functional exercises and drills for Incident Management Team members and field staff; and facilitating events for DC Water customers and partner agencies. Events include after action conferences after major incidents and annual critical customer engagement sessions. The training events result in actionable improvement planning items for local, state and federal stakeholders to improve coordination in the future.

**Source Water Protection Training:** Plans, develops and facilitates source water protection workshops, tabletop and functional exercises across focused on preparing for releases. The events provide an opportunity for water suppliers to plan and discuss response capabilities with local, county, state and federal response partners.

### William Keefer

Senior Planner wkeefer@horsleywitten.com



**State and Regional Level Full Scale Exercises:** Plans and facilitates full scale exercises that test the capabilities of utilities to respond to a resources requests by deploying personnel and equipment to a requesting member's location. In addition, emergency response agencies and local, state and federal stakeholders have the opportunity to communicate and coordinate an activated emergency operations center.

**Community and County-Level Exercises:** Plans and facilitates sessions designed to bring together local emergency responders to provide response training, enhance coordination and communication between all responders, improve understanding of roles and responsibilities, and allow participants to discuss steps to prepare for a future, multi-agency, "all hazards" emergency scenario.

**Cybersecurity Assessments, Technical Assistance and Workshops:** Conducts confidential cybersecurity assessments for water and wastewater utilities around the country. Based on the assessment, a utility receives a customized cyber action plan and subsequent assistance that helps them to implement the plan's identified cybersecurity best practices. In addition, involved in the development and facilitation of cybersecurity workshops and cyber incident response exercises throughout the United States.

**W.K. Kellogg Foundation: Lead in Drinking Water in Schools and Homes:** Led the development of a "Managing Lead in Drinking Water at Schools and Early Childhood Education Facilities" guide and fact sheets regarding how to better manage risk of lead in drinking water in homes and apartments. Created a website with information on lead in drinking water resources for homeowners in each of the U.S. states.

**Development and Implementation of Southern Water Asset Management Program, Epsom, United Kingdom:** Prioritized schemes identified based on cost, benefit, and overall business value for inclusion to deliver a prioritized scheduling of Water Supply Works investigations in response to a significant increase of bacterial failures, the monitoring of the completion of system wide disinfection compliance improvement schemes, and the delivery of a pump optimization program which identified £141,000 yearly savings for Southern Water.

**Chlorination Systems Evaluation, Abu Dhabi, United Arab Emirates:** Led the collection and analysis of potable water samples at strategic locations across the emirate and performed capacity and residual analysis of the chlorination systems in order to provide recommendations as to how to improve water quality

Management of Environmental Regulatory Compliance Programs, Haworth, New Jersey: Coordinated with all departments of United Water New Jersey to maintain compliance with applicable laws and regulations. Submitted regulatory reports, managed the permit renewal and termination process, created a document index for permits, developed the yearly disaster response drill, directed regulatory site inspections of the Haworth Water Treatment Plant, and supervised the cleanup of spills in the watershed.

**Lead in Drinking Water Mitigation, Washington, District of Columbia:** Completed a research and development project which mitigated lead problems in Washington, DC drinking water and deferred a major service line replacement program. Developed a sampling program of residential, commercial and government locations and investigated suspected drinking water contaminations and customer water quality complaints.

