Water, Public Health, and Healthcare Coordination Workshop

Washington Street Conference Center, 221 S First Avenue, Hillsboro

September 19, 2023
8:30 AM—3:30 PM

The U.S. Environmental Protection Agency (EPA) is hosting a workshop to bring water utility, public health, healthcare professionals, state health authority, local and state emergency management, and other response partners together to discuss planning for and providing alternate water supplies to hospitals and healthcare facilities during a water disruption incident.

The workshop will be divided into three parts:

- **Morning (in-person and virtual)**: Presentations by local hospitals and water utilities. Following the presentations, a panel of water and healthcare/public health sector representatives will discuss cross-sector coordination and lessons learned from past water disruption incidents.
- **Lunch**: Light morning refreshments and lunch will be provided.
- **Afternoon (in-person only)**: A hypothetical, scenario-based discussion regarding recovery from a catastrophic earthquake event. Public health, healthcare, and water sectors will hear each other's concerns and needs and discuss expected cross-sector coordination and communication activities.

Please Register (space is limited!)

You must attend in person to participate in the full day. A virtual option is available for the morning only.

- In-person (all day): https://OR-Coordination.eventbrite.com
- Virtual (morning only): https://bit.ly/OR-Coordination

EPA is applying for CEUs for Oregon Public Water System Operators who attend the workshop in full.

For more information:

Chrissy Dangel
Dangel.Chrissy@epa.gov

Water, Public Health, and Healthcare Coordination
Workshop
September 19, 2023 · 8:30 AM – 3:30 PM
Portland, Oregon

Time (Central)	Activity	Facilitators
8:00 a.m. – 8:30 a.m.	Participant Check-in	• Tom Noble, Horsley Witten (HW)
8:30 a.m. – 8:45 a.m.	Welcome and Introductions	• Jonna Papaefthimiou, Chief Resilience Officer, State of Oregon • Samina Panwhar, Section Manager, Oregon Health Authority - Drinking Water Services
8:45 a.m. – 9:30 a.m.	Overview of Healthcare/Hospitals in Area	• Jeff Caulfield, Oregon Health Authority • Susan Ferguson, MSN, RN, Healthcare Emergency Manager, Oregon Health & Sciences University • Tonia Shaw, MPA, HEM, Director of Facilities Safety & Risk Management, Environmental Health & Safety, Emergency Preparedness & Workplace Violence, Kaiser Permanente
9:30 a.m. – 10:45 a.m.	Water Utility Overview	• Yone Akagi, Water Quality Manager, Portland Water Bureau • Wade Hathhorn, General Manager, Sunrise Water Authority • Michelle Henry, Senior Engineer, City of Vancouver
10:45 a.m. – 11:00 a.m.	**Break**	
11:00 a.m. – 12:15 p.m.	Lessons Learned on Communication and Coordination – Panel and Audience Discussion	• Chris Dotson, Environment of Care Manager, Legacy Emanuel Medical Center • Meghan O'Connell, MPH, Regional Manager, Providence Health & Services Emergency Management • Garth Didlick, Senior Director Environment for Care, Providence • Andy Mason, Facilities Director, Providence • Tyler Anderson, Facilities Director, Providence • Barbara Dommert-Breckler, Quality Improvement Director, Comagine Health - End Stage Renal Disease (ESRD) Network 16 • Ed Colson, Public Health Emergency Preparedness Coordinator, Tillamook County • Dr. Sarah Present, Health Officer, Clackamas County and Deputy Health Officer, Tri-county Area
12:00 p.m. – 1:00 p.m.	**Lunch Break**	
1:00 p.m. – 2:00 p.m.	Facilitated Tabletop Planning Exercise	• Tom Noble, HW
2:00 p.m. – 2:10 p.m.	**Break**	
2:10 p.m. – 3:00 p.m.	Facilitated Tabletop Planning Exercise (Continued)	• Tom Noble, HW
3:00 p.m. – 3:30 p.m.	Planning Gaps and Action Items/Wrap-Up	• Large Group Discussion • Chrissy Dangel, Environmental/Public Health Scientist, EPA

Event Time Breakdown

Time	Duration (Hrs.)	Agenda Item
8:00 a.m. - 8:30 a.m.	**-**	**Check-In/Registration**
8:30 a.m. - 10:45 a.m.	2.25	Presentations
10:45 a.m. – 11:00 a.m.	**-**	**Break**
11:00 a.m. – 12:00 p.m.	1.25	Presentations
12:00 p.m. – 1:00 p.m.	**-**	**Lunch Break**
1:00 p.m. – 2:00 p.m.	1	Tabletop Planning Exercise
2:00 p.m. – 2:10 p.m.	**-**	**Break**
2:10 p.m. – 3:30 p.m.	1.25	Presentations
3:00 – 3:00	**-**	**Extra Time/ Event Adjourns**
Event Total	**5.75 Hours**	

Thomas Noble

Associate Principal
tnoble@horsleywitten.com

Areas of Expertise

Emergency Preparedness & Response
Water Sector Infrastructure Protection
Education, Facilitation & Training
Integrated Water Resources Management
Environmental Permitting & Compliance
Site Assessment & Remediation

Professional Registrations & Affiliations

RAM-W for Small/Medium Water Systems
FEMA Certifications:
ICS-100/200/300/400
ICS Train-the-Trainer
IS-26 Points of Distribution
IS-139 Exercise Design
IS-275 EOC Role
IS-630 Public Assistance
IS-700 NIMS
IS-706 NIMS Intrastate Mutual Aid
IS-800B NRF
L960 DIV Supervisor
American Water Works Association (AWWA)
New England Water Works Association (NEWWA)

Academic Background

Master of Science, Hydrology, University of New Hampshire
Bachelor of Science, Geology, The College of William and Mary in Virginia

Professional Experience

Horsley Witten Group, Inc., Senior Project Manager and Associate Principal, 2000 to Present
Town of Essex, Massachusetts, Wastewater Program Coordinator, 1996 to 2000
Installation Restoration Program, Otis Air National Guard Base, Massachusetts, Hydrologist, 1991 to 1994

Horsley Witten Group
Sustainable Environmental Solutions

Tom Noble, since 1991, assists both government agencies and private clients with Safe Drinking Water Act, Clean Water Act, America's Water Infrastructure Act, Bioterrorism Act, and federal, state, and local environmental regulations compliance. Tom also serves as the HW's water sector infrastructure preparedness and protection lead, helping the U.S. EPA Water Infrastructure and Cyber Resilience Division and both state and local governments to better prepare for, respond to, and recover from all-hazards disasters. He also advises drinking water and wastewater systems on risk and resilience, to include the expected impacts from climate change, and both the adaptation and mitigation strategies that can be employed to offset identified risks. Additionally, Tom has a long track record of aiding governments, organizations, and communities to develop and implement engagement strategies that strengthen their emergency plans.

KEY PROJECTS

Technical Support to States for Lead Service Line (LSL) Inventories & Replacement: Principal-in-Charge, overseeing this U.S. EPA funded project to provide technical assistance to states to help address the barriers disadvantaged communities face when removing LSLs. The project will serve up to 10 disadvantaged communities, in up to two states, to help overcome obstacles in accessing Bipartisan Infrastructure Law (BIL) LSL replacement funding. The goal is to build capacity within the states to provide both community-level engineering and technical support and the tools needed to help develop LSL inventories, replacement plans, and community engagement plans. Ultimately, the project will enable disadvantaged communities to receive BIL LSL replacement funding and improve public health outcomes through the provision of safe drinking water.

DC Water COVID-19 Recovery Support: Assisted the Authority with return-to-workplace planning as pandemic conditions eased and staff were directed to return to their physical offices. Support consisted of convening a workgroup to make decisions on items such as vaccination status tracking, daily self-health screenings, masking policies, desk spacing and sneeze guard installations, office signage, and a comprehensive return-to-workplace information packet for DC Water staff. Tom also worked with DC Water staff and others to develop a DC Water COVID-19 Vaccination Policy for all contractors. Tom provided weekly status updates to the Authority's Chief Operating Officer and Executive Vice President on return-to-workplace progress.

Risk and Resilience Assessments for Drinking Water Utilities: Uses the American Water Works Association J-100 method to assess drinking water utilities for risk exposure and resilience to natural (e.g., climate change), man-made (e.g., terrorism) and cybersecurity threats and hazards. With this method, he guides the utilities through a facilitated process to identify critical assets, threats, potential consequences, vulnerabilities, and threat likelihoods which helps utilities to select appropriate mitigation measures as they develop a risk management program.

Drinking Water Utility Emergency Response Plan (ERP) Template: With U.S. EPA, Tom developed a template to assist water utilities with developing an ERP in accordance with America's Water Infrastructure Act of 2018 Section 2013(b). The template describes strategies, resources, plans, and procedures utilities can use to prepare for and respond to an incident, natural or man-made, that threatens life, property, or the environment.

Black Sky Planning: With U.S. EPA, Tom works with water and electric utilities in several regions of the country to better prepare for power outages that may last 30 days or longer. This effort includes conducting workshops and exercises where utilities and their response partners can work through scenarios to help identify and implement preparedness actions.

Thomas Noble
Associate Principal
tnoble@horsleywitten.com

Public Safety Power Shutoff (PSPS) Standard Operating Procedure (SOP): With U.S. EPA and California water and electric utilities, Tom helped develop this SOP to assist water utilities to prepare, respond, and recover from intentional power shutoffs by electrical utilities to reduce wildfire risks.

Emergency Drinking Water Supply (EDWS) Plan Template: Tom and the U.S. EPA developed this template as an important tool for state drinking water primacy agencies that allows for optimal coordination with the state emergency management agency and other stakeholders on providing emergency drinking water supplies. This resource helps state primacy agencies develop an EDWS plan and comply with 40 CFR 142, Subpart B.

Cybersecurity Assessments and Technical Assistance: With the U.S. EPA, Tom provides both broad oversight for and 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.

Tribal Circuit Rider Services: Tom served as Program Manager on this six-year U.S. EPA Region 9 project which supported tribes in Arizona, California, and Nevada by providing technical assistance and training on how to operate and maintain both drinking water and wastewater systems to protect public health. The Rural Community Assistance Corporation served as a subcontractor on this project.

Freshwater Pond Phosphorus Regulation: Tom drafted a Board of Health regulation for the Town of Brewster, Massachusetts designed to protect approximately 80 freshwater ponds from water quality degradation due to anthropogenic phosphorus inputs. A first of its kind regulation for the Town, it is currently being reviewed by the Board in preparation for public hearing and comment and eventual adoption.

Water Sector Cybersecurity Workshops: Tom served as Principal-in-Charge of this U.S. EPA funded project to develop and conduct one-day cybersecurity workshops and cyber incident response exercises throughout the United States. Tom oversaw the development of the multiple training presentations used to support this workshop and exercise series.

Cybersecurity Assessments of Drinking Water Utilities in Virginia: Tom led this project to assess cybersecurity of 30 Virginia waterworks' industrial control and business computer systems. Summary tables and charts were used for identifying statewide trends and patterns.

Innovative Preparedness and Response Practices to Support Water System Resilience: Tom served as Project Manager for this Water Research Foundation project designed to identify water sector innovative preparedness and response practices. Tom oversaw the development of a guide, designed in a user-friendly, clickable PDF format allowing users to quickly identify implementable and actionable emergency management techniques that will enhance their ability to respond and to recover more quickly from a disaster.

Regional Hazard Mitigation Planning in Florida's Panhandle: As Principal-in-Charge Tom oversaw development of flood mitigation planning in the Florida Panhandle. Tom ensured that communities' water and wastewater utilities coordinated with their hazard mitigation planners to incorporate utility projects into hazard mitigation plans for FEMA funding eligibility.

Route to Resilience (RtoR) Tool: Tom and his team designed the RtoR Tool that integrates web resources into a comprehensive, coherent, and compelling message to utilities on specific steps to take in becoming resilient to all-hazards events that they may face.

DC Water Emergency Preparedness Support: Tom supported 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 preparedness events for DC Water customers and partner agencies.

EPA Water and Energy Nexus in Disasters Workshops: Tom serves as Lead Facilitator for this workshop that increases water utilities' understanding of the capabilities and limitations of energy utilities and gives information on options for back-up power and resiliency. The workshop also aims to increase the energy sector's prioritization of water utility power restoration.

Satisfactory Course Completion Requirements – Webinars and Virtual Workshops

Horsley Witten will verify participant participation through the following methods for those participants who attend virtually:

- The webinar software that will be used allows participants to view and hear the presentations and provide feedback through a Q&A function and polling.
- The webinar software will provide the facilitators with a report of who was logged into the webinar and the time spent viewing the webinar to track attendance.
- Participants will be encouraged participate individually from their own computer, but the event facilitators will provide a sign-in sheet in situations where multiple participants are viewing the virtual event (e.g., social distancing in a utility conference room).
- The event facilitators will provide a link to an online feedback form for participants to provide their feedback after the event concludes.
- Once the attendance report is reviewed and confirms the time that the participant was logged into the webinar software, each participant will receive a certificate as proof of participation.