



Instructor Background And Information Form

Thank you for filling out this form.

Presentation Title: _____

Presenter: _____ Title: _____

Employer: _____ Address: _____

City: _____ State: _____ Zip: _____ Phone: _____

Summary of Lesson content: _____

Professional Background: (Note a brief - 2 page maximum - resume may be submitted in lieu of the following data. Please be sure the resume includes all requested information. Qualifications should be related to your presentation.) Use the reverse side of this form if more room is needed to fully answer the following questions.

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Related papers/instruction you have presented:

Title: _____ Date: _____ Event: _____

Title _____ Date: _____ Event: _____

Professional Organizations/Activities: _____ Date: _____

_____ Date: _____

Course sponsor: _____

Signature of Instructor: _____ Date: _____

DO NOT WRITE BELOW THIS LINE

Date Evaluated: _____ By: _____ Approved: Yes _____ No _____

Return Completed Form To: OESAC CEU COMMITTEE
P.O. Box 577
Canby, OR 97013-0577

Email: info@oesac.org
Phone: 503-698-6486



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



Since 1991, Tom Noble has assisted both government agencies and private clients in complying with America's Water Infrastructure Act, the Bioterrorism Act, the Safe Drinking Water Act, the Clean Water Act, Superfund legislation, and both state and local environmental laws and regulations. Tom assists the U.S. EPA Water Security Division, states, and local governments to better prepare for, respond to, and recover from water and wastewater system disasters, both natural and man-made. He also advises drinking water and wastewater systems on the expected impacts from climate change and the adaptation and mitigation strategies that can be employed to offset those impacts. Tom is a veteran of the armed services.

KEY PROJECTS

Emergency Preparedness & Response/Water Sector Infrastructure

Protection: DC Water Emergency Preparedness Support: 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 events for DC Water customers and partner agencies.

Regional Hazard Mitigation Planning in Florida's Panhandle: As Principal in Charge developed 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.

Water and Wastewater Agency Response Network (WARN) Support:

Principal in Charge for the development, planning, and conducting of WARN intrastate and interstate seminars and tabletop exercises across the country. In addition, supported the annual WARN Chairpersons Meeting.

EPA Water and Energy Nexus in Disasters Workshops: 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.

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

EPA Extreme Events Resiliency Planning Workshop for Communities and Utilities:

Project Manager and developer for this Climate Ready Water Utilities program national workshop series designed to support efforts by communities and their drinking water and wastewater utilities to integrate climate change and extreme event planning into existing plans.

Morro Bay Estuary Climate Ready Water Utilities Project: Managed this project for the study of climate impacts to water resources in California's Morro Bay watershed using the Climate Resilience Evaluation and Awareness Tool (CREAT) and the SEAWAT model to assess potential changes in groundwater quality from projected climate change.



EPA Preparing for Extreme Weather Events - Workshop Planner for the Water Sector: As Project Manager developed this HTML-based tool which helps drinking water, wastewater and stormwater utilities prepare for extreme events by providing materials needed to plan, facilitate and conduct an extreme weather adaptation planning workshop.

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.

Update and Development of an Emergency Operations Plan for the Rhode Island Office of Drinking Water Quality: Led this project to update the Rhode Island Department of Health Office of Drinking Water Quality's Emergency Operations Plan. He also developed and conducted both a seminar and a tabletop exercise to familiarize staff with the new plan.

EPA Water Sector Incident Command System (ICS) and National Incident Management System (NIMS) Training: Tom served as a Lead Instructor and developer for this training presented across the United States. Through presentations and group learning activities, he ensures that thousands of water sector professionals will receive their ICS and NIMS certifications.

Aquifer Exemption Database: Co-managed the development and completion of this national database. Projected in GIS, the database allows aquifer exemptions to be cross-referenced with other programs and any potential conflicts identified.

Evaluation of Impacts to Underground Sources of Drinking Water (USDWs) by Hydraulic Fracturing of Coalbed Methane Reservoirs: Examined whether coalbed methane hydraulic fracturing processes could potentially affect Underground Sources of Drinking Water throughout the United States. After an extensive research, he wrote summary reports for approximately 1/3 of the major US coal basins.

Source Water Protection Program, Nicaragua: Performed example hydrological calculations to help determine aquifer characteristics and to calculate protective radii around drinking water wells in Nicaragua. He also helped to develop contaminant inventory lists and wrote bilingual guidance documents so that locals could run the program.

Groundwater Modeling, The Villages at Camp Street, Yarmouth, Massachusetts: Modified a regional MODFLOW model and demonstrated feasibility for a proposed 46,000 gpd wastewater treatment facility at the site. He used particle tracking analysis to show that time-of-travel from the facility to drinking water supply wells was protective.

Hydrologic Data Collection, Forest County Potawatomi Community, Crandon, Wisconsin: For three years, Tom assisted the Community in gathering water quality and quantity data. The data aided the Community in establishing water and air quality permitting guidelines to protect tribal resources from land uses adjacent to tribal lands.



Instructor Background And Information Form

Thank you for filling out this form.

Presentation Title: Water and Electric Sector Overview and Emergency Operations

Presenter: Chris Wanner Title: Director of Operations

Employer: Portland Water Bureau Address: 644 N. Tillamook Street

City: Portland/Oregon State: OR Zip: 97227 Phone: 503-823-4050

Summary of Lesson content: Overview of water and electric sector coordination and preparedness.

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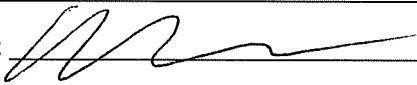
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Professional Organizations/Activities: _____ Date: _____

Course sponsor: United States Environmental Protection Agency (EPA)

Signature of Instructor:  Date: 2-27-20

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Chris Wanner, Director of Operations for the Portland Water Bureau, is responsible for management of operations and maintenance of surface and groundwater supplies, including treatment, compliance, transmission, storage, distribution, pump stations and tanks, system analysis, security and the SCADA system. Mr. Wanner is a veteran NCO having served in US Army Aviation units prior to working for the bureau. He is the designated Direct Responsible Charge for the bureau with the State of Oregon and holds certifications for both Water Distribution (WD4) and Water Treatment (WT4). Mr. Wanner serves as a commissioner on the national Blue Ribbon Commission for Onsite Non-potable Water Systems. He also serves on the State's Drinking Water Advisory Committee, is the Chair of ORWARN and is developing a Leadership Symposium as an ad hoc committee for the PNWS/AWWA. He has worked on many facets of asset management including participating in Water Services Association of Australia benchmarking and Leading Edge of Strategic AM efforts.