



2025 Annual Conference

March 24-27, 2025

WWW.PRWA.COM/CONFERENCE

Penn Stater Hotel & Conference Center | State College, PA

Thank You to our Event Sponsors



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A&H Equipment Co.
Advanced Rehabilitation Tech
E.J. Prescott, Inc.
Exeter Supply Co., Inc.

Heritage Environmental
LB Water / S3 / 540 Technologies
US Municipal Supply



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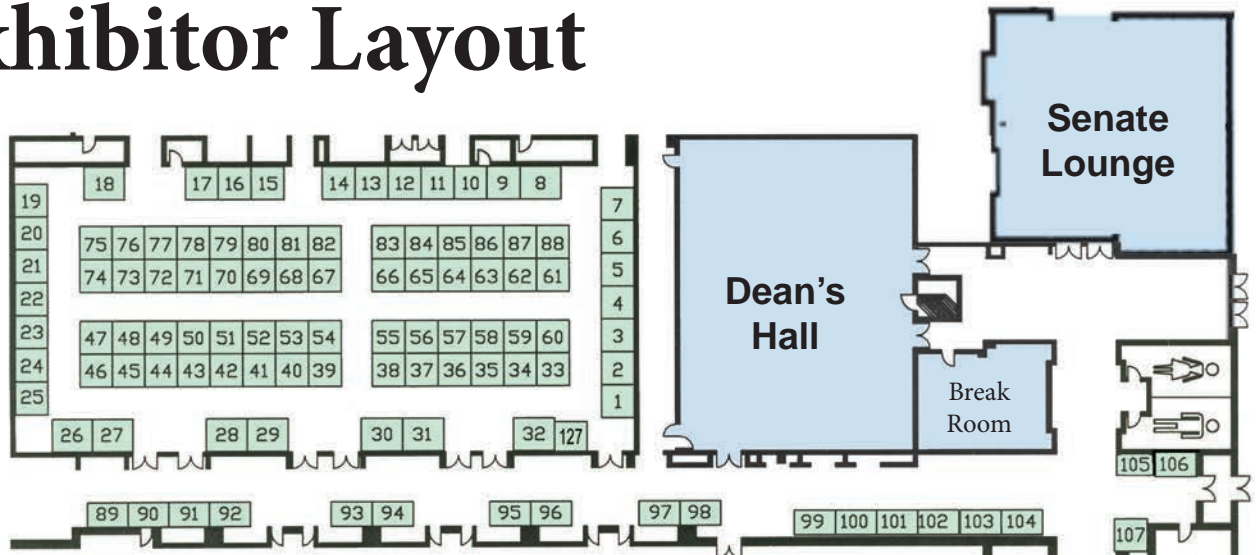
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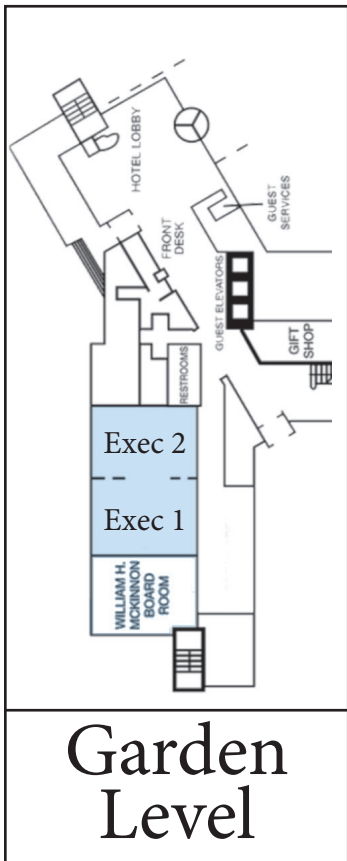
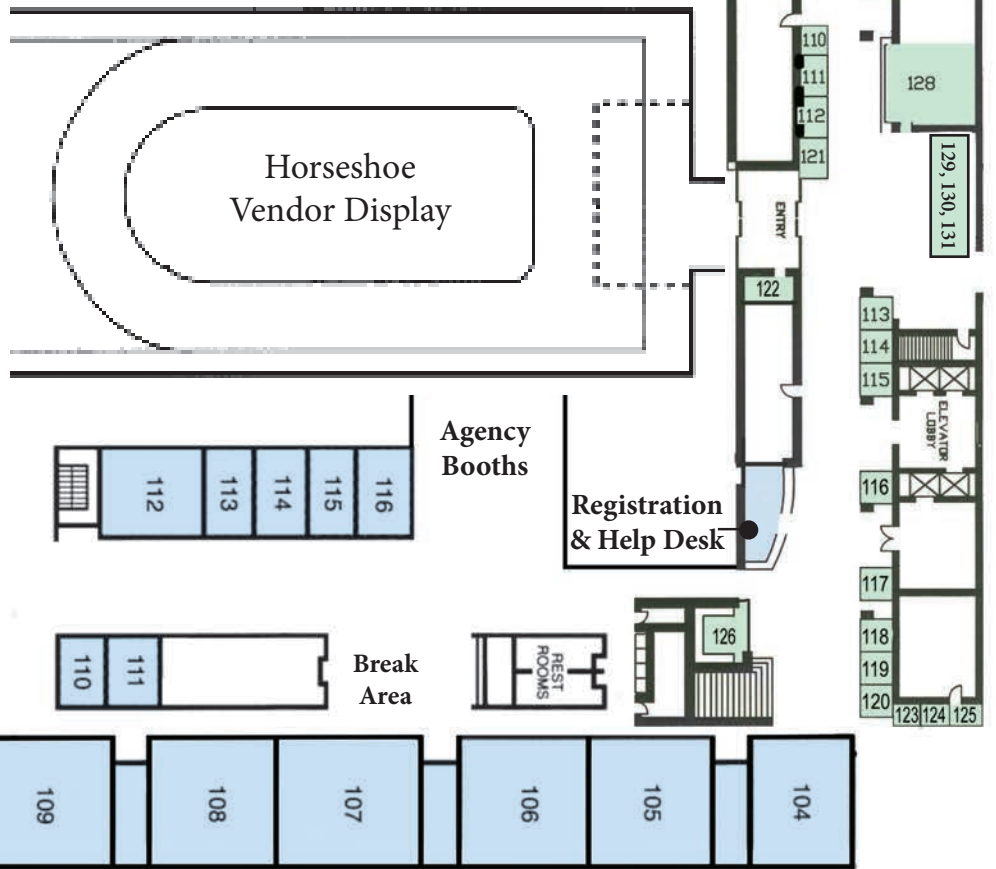
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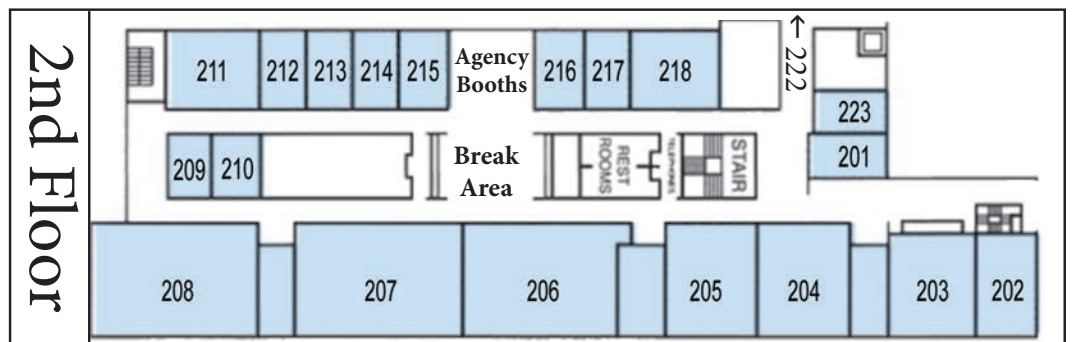
Penn Stater Floor Plan & Exhibitor Layout



Main Level



Garden Level



2nd Floor

Exhibitors

A&H Equipment Co. 121	Forberg Smith 78	North East Technical Sales, Inc. 85
A.Y. McDonald 17	Ford Meter Box Co., Inc. 41	North End Electric / Environmental
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AECOM.....NB	GapVax..... 88	Pow-R Mole Trenchless Solutions... 128
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Apex Companies LLC..... 100	Gilson Engineering Sales, Inc. 59	PSI Process 123
Aptus Control Systems..... 124	Golden Equipment Co., Inc. 114	Pumpman Pittsburgh..... 6 & 7
Aquasmart Inc. 25	GovDeals 125	Pyrz Water Supply 36
ARRO Consulting, Inc..... 84	Gwin Dobson & Foreman, Inc. 103	RAM Industrial Services, LLC..... 120
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Atlas Technical Consultants..... 50	Hawkins Inc.NB	Riordan Materials Corporation 64
Azuria.....81	Herbert, Rowland & Grubic..... 63	Robinson Pipe Cleaning Company... 99
Bassett Engineering, Inc. 77	Heritage Environmental 122	Rockacy & Associates 56
Bissnuss Inc. 48	HF Scientific..... 110	Romac Industries..... 3
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CITCO Water..... 43	Insight Pipe Contracting, LLC..... 38	Sherwood Logan & Associates 52
Cla-Val 55	JHA Companies..... 72	Site Specific Design 97
Cleanwater1..... 69	Kappe Associates 53	Southern Corrosion 115
Concrete Pipe & Precast 104	Kennedy Valve & M&H Valve 39	Spotts, Stevens and McCoy 73
Control Systems 21..... 117	Keystone Engineering Group, Inc.... 35	Stiffler, McGraw & Associates..... 62
Core and Main 65 & 66	KLH Engineers, Inc..... 79	Suburban Testing Labs..... 37
CoStream 14	Larson Design Group..... 10	Sullivan Environmental Tech.....NB
Coyne Chemical Enviro. Services.....95	LB Water / S3 / 540 Tech 1, 2 & 127	The EADS Group..... 91
Daman Superior 126	Learco Equipment Co. 61	Theia LLC 112
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Dutchland, LLC 44	Maryland Biochemical Co., Inc. 46	USA Bluebook 129, 130, 131
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EAP Industries, Inc 16	McClure Company.....NB	Utility Services Group, Inc. 51
Eastcom Associates 118	Metiri Group 30	Valve Tech Sales 28
Eastern Controls, Inc. 87	Mid Atlantic Storage Systems, Inc.... 29	V-SystemsNB
Entech Engineering, Inc. 40	Miller Energy 108	W.K. Merriman, Inc. 19
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EnviroScience, Inc. 102	Modern Pump & Equipment, Inc. 18	Watermark Enviro. Systems, Inc..... 83
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Exeter Supply Co., Inc..... 21 & 22	Mueller Company..... 12 & 13	Worobey Transport Inc.....NB
Express Water LLCNB	Municipal Maintenance Co..... 80	Xylem Water Solutions USA 31
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Event Sponsors

Exhibit Hall Sponsors

AGENCY TABLES - BREAK AREA

1st Floor:

ENetPay
Environ

Express Water LLC
NAWSC
PNC Bank

PENNVEST
USDA

2nd Floor:

AWWA - Partnership for Safe Water
DEP Tech & Financial Assistance

PA Municipal Authority Assoc.
PaWARN

Thanks to Exeter Supply for sponsoring the printing of the programs.

Monday, March 24, 2025

		Room #
4:00 pm - 5:30 pm	Registration Desk Open	
5:00 pm	AWOP Awards	Dean's Hall
6:00 pm	Welcome Dinner with Tommy Wareham "The Piano Man" <i>Sponsored by: Core & Main</i>	Dean's Hall
8:00 pm	Bingo <i>Sponsored by: NAWSC</i>	Senate Lounge

Sponsored Hotels for Tuesday Meet N' Greet Shuttles



Penn Stater Hotel & Conference Center
215 Innovation Blvd., State College



SpringHill Suites
1935 Waddle Rd., State College



Hampton Inn
1101 E. College Ave., State College



Hampton Inn & Suites
1955 Waddle Rd., State College



Holiday Inn Express
1925 Waddle Rd., State College



Sleep Inn
111 Village Dr., State College

Thanks to our Exhibit Hall Sponsors!!!



Tuesday, March 25, 2025

		Course ID	Trainer	Room #
7:00 am - 6:00 pm	Registration Desk Open			
7:00 am - 8:45 am	Continental Breakfast			
8:00 am	Annual Business Meeting			202
9:00 am - 12:30 pm	1-01 Intro to the Business of Water (1 DW & WW)	9653	PRWA Staff / PADEP	112
	1-02 Public Communication in the Instant Information Age - Lead, Copper (LCR) and PFAS (3 DW & WW)	9205	WaterPIO	109
	1-03 Gas Chlorination and On-Site Hypochlorite Generation Technology (3 DW & WW)	9418	Environmental Service & Equipment Co., Inc. / Heritage Environmental	207
	1-04 Proper Sampling Techniques and Handling (3 DW & WW)	7536	Suburban Testing Labs	208
	1-05 Introduction Locator Class - PA One Call (3 DW & WW)	5491	PA One Call	106
	1-06 Jar Testing Basics (3 DW & WW)	7513	CITCO Water	203
	1-07 Flow Measurement Methods and Principles (3 DW & WW)	6528	LRM, Krohne Inc.	108
	1-08 Basic Motor Control for Operators PART 1 of 2 (*Must attend both for CH) (6 DW & WW)	9643	Advanced Process Controls	107
	1-09 Intervention Without Service Disruption (3 DW & WW)	9615	Hydra-Stop	204
	1-10 Advanced Disinfection Technologies for W & WW PART 1 of 2 (*Must attend both for CH) (6 DW & WW)	7577	C. Michael Harrington	105
	1-11 Wastewater Treatment Biological Processes (3 WW)	9356	Aqua-Aerobic Systems, Inc.	104
	1-12 Biosolids Thickening, Digestion, and Management (3 WW)	8853	GHD	206
	1-13 Understanding the ISO Fire Suppression Rating Schedule- Water Supply Evaluation (3 DW)	7754	ISO Verisk	205
	1-15 Agricultural Best Management Practices and Resources for Water Quality for Source Water Protection (3 DW)	9620	PSU Ag Extension / PRWA	218
	1-16 Automatic Control Valves for Water Distribution Systems (3 DW)	8796	Cla-Val	211
	1-17 How Pumps Work (3 DW & WW)	5806	Rain for Rent	Exec 1&2
	12:00 pm - 1:30 pm	Lunch - Sponsored by: LB Water, S3 & 540 Technologies		
12:00 pm - 3:30 pm	Associate Member Registration and Exhibit Hall Setup			
1:30 pm - 5:00 pm	2-01 Treating Your Drinking Water or Wastewater Operation Like a Business (3 DW & WW)	7516	Darryl Jenkins P.E.	109
	2-02 Effective Communication: A Key to Successful System Management (1 DW & WW)	9654	Milliron & Goodman / Salzmann & Hughes / Napoli & Shkolnik	112
	2-03 CPR and First Aid Overview (3 DW & WW)	9402	Mark Stephens P.G., EMT	211
	2-04 Toxic and Combustible Gas Detection Practices (3 DW & WW)	8967	Draeger, Inc / Neal Systems Inc.	108
	2-05 Valve Workshop (3 DW & WW)	5348	Ferguson / Mueller / Rockacy & Assoc.	208
	2-06 Membrane Filtration Basics for Water and Wastewater (3 DW & WW)	4064	Gwin, Dobson & Foreman	207
	2-07 Confined Space (3 DW & WW)	2588	RIO Supply	205
	2-08 Basic Motor Control for Operators PART 2 of 2 (*Must attend both for CH) (6 DW & WW)	9643	Advanced Process Controls	107
	2-09 How Pumps Work (3 DW & WW)	5806	Rain for Rent	202
	2-10 Advanced Disinfection Technologies for W & WW PART 2 of 2 (*Must attend both for CH) (6 DW & WW)	7577	C. Michael Harrington	105
	2-11 How do I run this DAMN BNR plant my Engineer just designed (3 WW)	5803	Entech Engineering, Inc.	204
	2-12 Science of Manhole Inspections (3 WW)	8471	J. Scott Shipe	104
	2-13 Asset Management & Asset Maintenance for Water Systems (3 DW)	9330	USG Water	203
	2-14 Groundwater Supply Development in Pennsylvania (3 DW)	8466	ARM Group LLC	106
	2-15 Phosphorus - A Holistic Approach to Corrosion Control and Water Quality (3 DW)	9190	AquaSmart, Inc.	218
	2-16 Reduction of Non-Revenue and Un-Accounted for Water thru Leak Detection and Metering (3 DW)	5800	Ferguson / Master Meter	206
Exam Review 1:30 pm - 5:00 pm	2-17 Disinfection Math Review (3 DW & WW)	8403	PRWA Staff	Exec1
	2-18 WW General Exam Review (1 WW)	9654	USEPA/PADEP	Exec 2
5:00 pm - 6:30 pm	Exhibit Hall Grand Opening			<i>Sponsored by: Express Water, LLC</i>
6:30 pm - 9:00 pm	Meet & Greet Party at Champ's			<i>Sponsored by: Gwin Dobson & Foreman</i>
Transportation provided to and from sponsored hotels (meet in front of hotel lobby) *See List of Hotels on opposite page.				

Thanks to Exeter Supply for sponsoring the printing of the programs.



Wednesday, March 26, 2025

		Course ID	Trainer	Room #
7:00 am - 8:45 am	Continental Breakfast - Sponsored by: LB Water, S3 & 540 Technologies			
7:00 am - 5:00 pm	Registration Desk Open			
8:00 am - 11:30 am	3-01 What are Budgets, Balance Sheets, and Bookkeeping Reports? (1 DW & WW)	9655	PRWA Staff	112
	3-02 Maintaining Water Quality Through the Budgetary Process (3 DW & WW)	7166	Entech Engineering, Inc.	108
	3-03 Importance of Air Release Valves in W & WW Systems (3 DW & WW)	6820	ARI USA / Rockacy & Assoc.	106
	3-04 PFAS Treatment & Destruction - Methods & Challenges (3 DW & WW)	9621	Theia LLC	208
	3-05 Basic Motor Control for Operators PART 1 of 2 (*Must attend both for CH) (6 DW & WW)	9643	Advanced Process Controls	107
	3-06 Operation & Maintenance of Submersible Pumps (3 DW & WW)	6516	Xylem, Inc	206
	3-07 Not All It's Cracked Up to Be - Our Failing Pipe Infrastructure (3 DW & WW)	7194	Utility Services Group, Inc. / Entech Engineering, Inc.	207
	3-08 Intro to Geographic Information Systems (GIS) (3 DW & WW)	6817	PRWA Staff	105
	3-09 Instrumentation for Nutrient Optimization (3 WW)	9225	PADEP	218
	3-10 Modern Trickling Filters (3 WW)	9413	Brentwood Industries / Bethel Park WWTW & SKG Containment	211
	3-11 Holistic Approach to Inflow and Infiltration (3 WW)	9409	DLVEWS, Inc. / Avanti Grout	104
	3-12 From Leak Detection to Leak Management (3 DW)	7749	Kunkel Water Efficiency Consulting	205
	3-14 Science of Dry Barrel Fire Hydrant Inspection & Comprehensive Audits (3 DW)	9152	J. Scott Shipe	202
	3-15 Disinfection for Small Water Systems (3 DW)	6815	Accent PDIR	203
	3-16 Pennsylvania Geology and Aquifer Characteristics (3 DW)	6814	Mark Stephens P.G.	109
	8:00 am - 12:00 pm	3-13 Electrical Hazards: Metallic Water Service Lines and Mains (3.5 DW)	7418	Dale Skinner
Exam Review	3-17 DW Exam Review - Part 1 of 4: General Exam (1 DW)	9655	PRWA Staff	Exec 1
8:00 am - 11:30 am	3-18 WW Exam Review - Part 1 of 4: Activated Sludge (1 WW)	9655	PRWA Staff	Exec 2
11:30 am - 1:30 pm	Lunch - Sponsored by: LB Water, S3 & 540 Technologies Exhibit Hall Open			
1:30 pm - 5:00 pm	4-01 Funding and Financing for DW and WW Systems (1 DW & WW)	9656	PENNVEST / USDA / PA DCED / PNC Capital Markets LLC	112
	4-02 Rate Setting Workshop (3 DW & WW)	5475	PRWA Staff	108
	4-03 Basic Electrical, Instrumentation, Controls and SCADA for Operators (3 DW & WW)	7501	Keystone Engineering Group, Inc.	208
	4-04 Confined Space and Trenching (3 DW & WW)	9612	Scott Melego	206
	4-05 Basic Motor Control for Operators PART 2 of 2 (*Must attend both for CH) (6 DW & WW)	9643	Advanced Process Controls	107
	4-06 Leadership Skills for Industry Professionals (3 DW & WW)	9600	Darryl Jenkins P.E.	109
	4-07 How Do You Measure Up? Metering Non-Traditional Water Flows (3 DW & WW)	7515	LB Water / 540 Tech.	205
	4-08 Basics of Centrifugal Pumps and Hydraulics (3 DW & WW)	9131	Brian Sekula, P.E.	105
	4-09 PFAS Sample Collection, Preparation and Analysis (3 DW & WW)	9417	Suburban Testing Labs	207
	4-10 Collection System Inspections for Failing Infrastructure (3 WW)	3611	Utility Services Group, Inc. / Entech Engineering, Inc.	204
	4-11 Chemistry 101 (3 DW & WW)	4077	PRWA Staff	202
	4-12 Science of Pipe Cleaning: Levels Leading to Tier III (3 WW)	8968	KEG / A&H Equip.	203
	4-13 Protecting Our Waters at the Source - Stormwater Issues (3 DW)	7503	Stormwater Solution Source, S3, LLC/PRWA	211
	4-14 Filter Inspections, Optimization and Compliance (3 DW)	8424	Water Service Professionals	104
	4-15 Water Loss Management (3 DW)	3621	Exeter Supply	218
	4-16 Greensand Filtration (3 DW)	5785	JHA Companies	106
Exam Review	4-17 DW Exam Review - Part 2 of 4: Math Concepts (1 DW)	9656	PRWA Staff	Exec 1
1:30 pm - 5:00 pm	4-18 WW Exam Review - Part 2 of 4: Activated Sludge (1 WW)	9656	PRWA Staff	Exec 2
5:00 pm - 8:00 pm	Exhibit Hall Extravaganza & Dinner <i>Sponsored by: Exeter Supply, Badger Meter, CCI Piping Systems, PowerSeal, Rockacy & Associates, Apollo Conbraco Backflow & Mueller Co.</i>		Dean's Hall	
7:00 pm	Disney Dream Vacation Give-Away <i>Sponsored by: Exeter Supply and Star Pipe</i>		Booth 21 & 22	
7:30 pm	Golf Simulator <i>Sponsored by: Sensus Meters & LB Water</i>		Outside Senate Lounge	
8:30 pm	Cornhole Tournament with music by Tommy Wareham & the Intrigues <i>Sponsored by: A&H Equipment</i>		Dean's Hall	



Thursday, March 27, 2025

		Course ID	Trainer	Room #
7:00 am - 8:45 am	Continental Breakfast - Sponsored by: LB Water, S3 & 540 Technologies			
7:00 am - 5:00 pm	Registration Desk Open			
8:00 am - 11:30 am	5-01 Skills for Successful Communication (3 DW & WW)	9380	PRWA Staff	109
	5-02 Knowledge Transfer: Attracting, Training, and Retaining the Next Generation / PRWA Apprenticeship and Certification Programs (1 DW & WW)	9657	Entech; Miller Environmental; City of Lebanon Authority / PRWA	112
	5-03 Health and Safety Considerations for Water and Wastewater Operators (3 DW & WW)	4042	PRWA Staff	218
	5-04 Basic Math Refresher (3 DW & WW)	5757	Brian Sekula, P.E.	104
	5-05 Lubrication 101- Application of Lubrication Fundamentals (3 DW & WW)	7173	Lubriplate Lubricants Company	206
	5-07 Line Locating Techniques and Tips (3 DW & WW)	8091	Eastcom Associates	208
	5-08 Emergency and Bypass Pumping - Sizing and Specifications (3 DW & WW)	9414	Xylem Dewatering Solutions	204
	5-09 Nutrient Removal Processes in Wastewater Treatment (3 WW)	6270	Entech Engineering, Inc.	108
	5-12 Activated Sludge and BNR (3 WW)	9601	Advanced Process Controls	105
	5-14 Science of Water Main Breaks (3 DW)	9395	J. Scott Shipe	107
5-15 A.I. (After the Inventory) Lead and Copper Rule Improvements (3 DW)	9623	Entech Engineering, Inc.	207	
8:00 am - 12:00 pm	5-10 Responsibilities of Clean Water Professionals (3.5 WW)	7122	PADEP	205
	5-13 Fire Hydrant Operation and Maintenance (3.5 DW)	5673	Kennedy Valve and M&H	106
Exam Review 8:00 am - 11:30 am	5-17 DW Exam Review Part 3 of 4: Distribution Exam (1 DW)	9657	PRWA Staff	Exec1
	5-18 WW Exam Review Part 3 of 4 - General and Collection (1 WW)	9657	PRWA Staff	Exec2
11:30 am - 1:30 pm	Lunch - Sponsored by: LB Water, S3 & 540 Technologies Exhibit Hall Open			
1:30 pm - 3:45 pm	6-01 Employee Evaluation Basics (1 DW & WW)	9658	PRWA Staff	112
	6-02 Cybersecurity in the W/WW Sector - Sanitary Survey Checklist (2 DW & WW)	9618	PADEP	108
	6-03 Why We Chlorinate - the Basics (2 DW & WW)	6514	Larson Design Group	106
	6-04 PVC Pipe and Fittings (2 DW & WW)	9135	IPEX USA	207
	6-05 Active Shooter/Workplace Violence (2 DW & WW)	9425	J Reif Consulting	208
	6-06 PFAS Management: What to do BEFORE you do it (2 DW & WW)	9224	Clear Creek Systems, Inc.	206
	6-07 Storage Tanks - Pros and Cons (2 DW & WW)	4099	Mid-Atlantic Storage Systems, Inc	107
	6-08 Food/Microorganism Ratio (F/M) & Mean Cell Residence Time (MCRT) (2 WW)	8549	PRWA Staff	104
	6-10 Introduction to Smart Meters and Meter Reading Systems (2 DW)	9415	EAP Industries, Inc.	218
	6-12 Purpose and Benefits of Tracer Studies in PWS (2 DW)	5440	JHA Companies	204
1:30 pm - 5:00 pm	6-13 Leadership Skills for Industry Professionals (3 DW & WW)	9600	Chester Water Auth	109
	6-15 Workplace Safety: Personal Protection Equipment (PPE) and Injury Prevention (3 DW & WW)	9604	PA Labor & Industry	205
	6-16 Lubrication 101- Application of Lubrication Fundamentals (3 DW & WW)	7173	Lubriplate Lubricants Company	105
Exam Review 1:30 pm - 5:00 pm	6-17 DW Exam Review Part 4 of 4: Practice Questions (1 DW)	9658	PRWA Staff	Exec1
	6-18 WW Exam Review Part 4 of 4 - General and Collection (1 WW)	9658	PRWA Staff	Exec2
3:30 pm	Ice Cream Social	Sponsored by: Century Engineering		1st Floor Registration Area

Many of these courses have been offered at conference or in the field within the last 3 years. Be sure you have not taken a class within your current cycle. Repeats receive NO contact hours. **If you are unsure, we can assist you at the help desk or check your Earthwise Transcript.**

Thanks to Daman Superior for being our Conference Classrooms Sponsor for the Annual Conference.



Thanks to Exeter Supply for sponsoring the printing of the programs.



Tuesday Morning
3 Hour Classes: 9:00 am – 12:30 pm

- 1-01 Intro to the Business of Water:** Introductory presentation and discussion for new Board Members, new Managers or anyone new to the DW & WW industry. Hear from PRWA staff and industry representatives on what it takes to manage and operate a system in 2025 and beyond. *Trainer: PRWA Staff / PADEP & Industry Specialists* Earn 1 DW & WW CH
- 1-02 Public Communication in the Instant Information Age - Lead, Copper (LCR) and PFAS:** Participants will learn how to create and implement a variety of crisis communications plans. The course will cover communications processes throughout the initial and ongoing stages of the crisis. Updated with the latest on LCR, PFAS and Fluoride. *Trainer: Mike McGill - WaterPIO* Earn 3 DW & WW CH
- 1-03 Gas Chlorination and On-Site Hypochlorite Generation Technology:** This course provides an overview of two chlorine disinfection processes commonly used in water and wastewater treatment. The primary focus is gas chlorination and some information on the basics of on-site hypochlorite generating systems. *Outside Demo - Dress appropriately. Trainer: George Solymosi, Patrick Greer, Ray Kyle - Environmental Service & Equipment Company, Inc.* Earn 3 DW & WW CH
- 1-04 Proper Sampling Techniques and Handling:** This class will provide an overview of SDWA and CWA sampling regulations, sampling procedures and proper handling, including Chain of Custody. This class will show the importance of proper sampling to yield correct data which is submitted to the PA DEP. *Trainer: Sara Kuzma-Stump - Suburban Testing Labs* Earn 3 DW & WW CH
- 1-05 Introduction Locator Class - PA One Call:** To prevent damage to underground utilities and to promote safety, the PA One Call system provides an efficient communications network among designers, excavators and facility owners / operators. *Trainer: Blaire Prough - PA One Call* Earn 3 DW & WW CH
- 1-06 Jar Testing Basics:** This class covers basic jar test concepts and techniques, and how the jar test can aid operators in the process control of treatment. Focus on math review, creating stock solutions and demo of jar testing. *Trainer: Darrell Cates - CITCO Water* Earn 3 DW & WW CH
- 1-07 Flow Measurement Methods and Principles:** This course covers the most common technologies employed and principles of operation related to typical flow measurement applications for measuring liquid and gaseous flow rates. Topics covered include means of verification and/or calibration. *Trainer: Mark Crawford, Mack Crawford, Rich Lowrie - LRM, Krohne Inc.* Earn 3 DW & WW CH
- 1-08 Basic Motor Control for Operators:** This course will familiarize operators with the circuits and controls used to operate motors in a treatment system. The topics covered include types of switches, ladder logic, transformers, relays, and starters. The course also includes hands on activities. LIMITED SEATING. **Must attend both AM and PM sessions for Contact Hours.** *Trainer: Steve Flinn, Eric Buskirk, Camden Nickell, John Buskirk - Advanced Process Controls* Earn 6 DW & WW CH *This class is offered again on Wednesday morning, class #3-05.*
- 1-09 Intervention Without Service Disruption:** Line Tapping, Line Stopping, and Valve Insertions are maintenance techniques done under pressure to reduce associated risks and provide a more productive method of maintaining and repairing distribution and collection systems without complete system shutdown. The proper application of these techniques and other benefits will be discussed in this presentation. *Trainer: Bill Roome - Hydra-Stop* Earn 3 DW & WW CH
- 1-10 Advanced Disinfection Technologies for Water and Wastewater:** This class reviews chlorination basics utilizing gas, solid and liquid and then covers alternatives, such as chlorine dioxide and chloramination. Advantages and disadvantages of each are covered. **Must attend both AM and PM sessions for Contact Hours.** *Trainer: C. Michael Harrington - Industry Specialist* Earn 6 DW & WW CH
- 1-11 Wastewater Treatment Biological Processes:** This course covers the treatment processes required for removal of the main influent constituents, highlighting the nutrients present in wastewater and how these are removed by emerging treatment technologies. *Trainer: Manuel de los Santos: Thea Davis - Aqua-Aerobic Systems, Inc.* Earn 3 WW CH
- 1-12 Biosolids Thickening, Digestion, and Management:** This course covers the basics of biosolids handling and disposal, including mechanical and gravity thickening, anaerobic digestion, aerobic digestion, digested solids processing, and disposal management. *Trainer: Andy Glitzer, Howard Butler, Charles Winslow - GHD* Earn 3 WW CH
- 1-13 Understanding the ISO Fire Suppression Rating Schedule-Water Supply Evaluation:** This course covers the impact that a water service provider has on the communities it serves as it pertains to commercial and residential property insurance. *Trainer: Tyler D. Olsen, MA CFPS BCO, William Bekanich CFPS - ISO Verisk* Earn 3 DW CH
- 1-15 Agricultural Best Management Practices and Resources for Water Quality for Source Water Protection:** This course will help operators identify agricultural water impairment, various best management practices, and technical and funding assistance for source water protection. The effect of PFAS on agricultural systems and associated risks from biosolids application will be considered from recent research efforts. *Trainer: Faith Kibuye, Danielle Rhea, Genevieve Christ - PSU AG Extension / Kurt Wagner - PRWA* Earn 3 DW CH
- 1-16 Automatic Control Valves for Water Distribution Systems:** This course familiarizes the operator with the operation, troubleshooting and required maintenance of automatic control valves. Additional emphasis will be given to preventative maintenance and main valve rebuilds. *Trainer: Jim Graber, Andrew Furman - Cla-Val* Earn 3 DW CH
- 1-17 How Pumps Work:** This course covers the basics of pump design and operation, pump applications, troubleshooting methods for continuous maintenance, including basics of how to read pump curves. *Trainers: Patrick Witts, Michael Bolsar - Rain for Rent* Earn 3 DW & WW CH *This class is offered again on Tuesday afternoon, class #2-09.*

Many of these courses have been offered at conference or in the field within the last 3 years. Be sure you have not taken a class within your current cycle. Repeats receive NO contact hours. **If you are unsure, we can assist you at the help desk or check your Earthwise Transcript.**

Tuesday Afternoon

3 Hour Classes: 1:30 pm – 5:00 pm

- 2-01 Treating Your Drinking Water or Wastewater Operation Like a Business:** This class covers the fundamental principles of system financial management for long term viability and sustainability. Introductory class applicable to all system personnel. *Trainer: Darryl Jenkins - Chester Water Auth* **Earn 3 DW & WW CH**
- 2-02 Effective Communication: A Key to Successful System Management:** Communication at all levels both inside and outside of your system is critical to successful system management. Hear from experienced speakers on how to communicate important matters both within your system, including well-run meetings and effectively conveying your larger concerns to your local legislators and regulators. Topics will include communication skills, agenda requirements, public comment, managing unruly participants, and handling large public turnout in meetings. *Trainer: Erik Ross / E. Lee Stinnett / Stephen Acquario - Milliron & Goodman / Salzmann & Hughes / Napoli & Shkolnik* **Earn 1 DW & WW CH**
- 2-03 CPR and First Aid Overview:** The nature of our work makes accidents and injuries possible. Staff may need to provide basic first aid or CPR until medical professionals arrive. This course provides an overview of these skills. No certification is offered. *Trainer: Mark Stephens P.G., EMT. - Industry Specialist* **Earn 3 DW & WW CH**
- 2-04 Toxic and Combustible Gas Detection Practices:** This course will cover atmospheric hazards, identification of those hazards, choosing the proper equipment for identification, and maintenance of that equipment. *Trainer: Steve Slavutsky; Taylor Kimble - Draeger, Inc / Neal Systems Inc.* **Earn 3 DW & WW CH**
- 2-05 Valve Workshop:** This course educates on the importance of proper valve function, maintenance and repair for water and wastewater operators. We will cover the proper applications, performance and technical specifications for gate, butterfly and check valves. *Trainer: Otto Schaefer / Andrew Quinn / Stephen Sharps - CPMR - Ferguson / Mueller / Rockacy and Associates* **Earn 3 DW & WW CH**
- 2-06 Membrane Filtration Basics for Water and Wastewater:** This course covers the basics of membrane filtration for public water and wastewater treatment systems in PA. The program includes membrane filtration types, principles of operation, components, applications, pros and cons, and case studies. *Trainer: Christopher M. Eckenrode, P.E. - Gwin, Dobson & Foreman, Inc* **Earn 3 DW & WW CH**
- 2-07 Confined Space:** This course was developed to help operators make the right choices based on knowledge of the hazards of a confined space and OSHA regs. *Trainer: William Kasper - RIO Supply* **Earn 3 DW & WW CH**
- 2-08 Basic Motor Control for Operators:** Full day course. LIMITED SEATING. See Description for Session 1-08 - Tuesday morning. **Must attend both AM and PM sessions for Contact Hours.** *Trainer: Steve Flinn, Eric Buskirk, Camden Nickell, John Buskirk - Advanced Process Controls* **Earn 6 DW & WW CH** This class is offered again on Wednesday morning, class #3-05.
- 2-09 How Pumps Work:** See 1-17 for description. *Trainer: Patrick Witts, Michael Bolsar - Rain for Rent* **Earn 3 DW & WW CH** This course also offered Tuesday morning - session 1-17.
- 2-10 Advanced Disinfection Technologies for Water and Wastewater:** Full day course. See Description for Session 1-10 - Tuesday morning. **Must attend both AM and PM sessions for Contact Hours.** *Trainer: C. Michael Harrington - Industry Specialist* **Earn 6 DW & WW CH**
- 2-11 How do I run this DAMN BNR plant my Engineer just designed:** This course covers control parameters to operate an Activated Sludge Process plant designed for Biological Nutrient Removal (BNR). The course is geared to making the operator understand the day-to-day adjustments of running a BNR plant. *Trainer: Ed Pietroski, P.E. - Entech Engineering, Inc.* **Earn 3 WW CH**
- 2-12 Science of Manhole Inspections:** This course covers inspection of manholes. How to design inspection maps, develop a maintenance program as well as understanding flood plain elevations and soil types is reviewed. *Outside Demo - Dress appropriately.* *Trainer: J. Scott Shipe - Scott Infrastructure Science* **Earn 3 WW CH**
- 2-13 Asset Management & Asset Maintenance for Water Systems:** Keep high-dollar, large, aging assets in service and maintained for as long as possible. What happens when they fail? Risks can be passive or active. Doing nothing is a type of action. *Trainer: Nick Rapagnani, Dan Frum - USG Water* **Earn 3 DW CH**
- 2-14 Groundwater Supply Development in Pennsylvania:** A review of the regulatory requirements pertaining to the construction and permitting of a public groundwater supply well. Includes wells for Community and Non-Community water supplies. *Trainer: Chris Finton, P.G. - ARM Group LLC* **Earn 3 DW CH**
- 2-15 Phosphorus - A Holistic Approach to Corrosion Control and Water Quality:** This course explores the relationship between corrosion control and other water quality treatment processes and the use of phosphorus-based chemical additives to address these issues with an end goal of using less phosphorus. *Trainer: Matt Tyrrell, Aidan Kelly - AquaSmart, Inc.* **Earn 3 DW CH**
- 2-16 Reduction of Non-Revenue and Un-Accounted for Water thru Leak Detection and Metering:** This course will provide a student with the ability to identify and reduce both un-accounted for and non-revenue water in their system. The course will show how this is achieved through the implementation of system-wide leak detection and metering programs. *Trainer: Cam Thompson / Kerry Hoffman - Ferguson / Master Meter* **Earn 3 DW CH**
- 2-17 Disinfection Math Review:** This course covers math calculations operators need to perform when using gas chlorination and hypochlorite disinfection. Good math review for disinfection exams. *Trainer: Pete Weaver - PRWA* **Earn 3 DW & WW CH**
- 2-18 Wastewater General Exam Review:** Review for those taking the wastewater certification exams in 2025. During this session review will focus on the General Exam. This course is designed to bring the students up to speed on vocabulary and subjects they might find on the general wastewater exam. *Trainer: Walter Higgins / Jeremy Miller - USEPA / PADEP* **Earn 1 WW CH**



Please be courteous to speakers and colleagues by silencing your cell phones during training sessions, meetings, and events. We ask that all phone calls be made outside of the training rooms & event rooms if a call must be made.

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Wednesday Morning
3 Hour Classes: 8:00 am – 11:30 am

- 3-01 What are Budgets, Balance Sheets, and Bookkeeping Reports?:** This session will cover the basics of financial statements and how to budget. It will also include an overview of the reports generated by popular financial programs such as Quickbooks. The speaker will also cover key tips to help develop internal controls to detect and prevent financial fraud. *Trainer: Chad Heister - PRWA Earn 1 DW & WW CH*
- 3-02 Maintaining Water Quality Through the Budgetary Process:** The core of most water quality issues can be traced back to the budgetary process. The focus of this class is to review some basic methods applied during the creation of an Authority/Municipal budget. The information is intended to give operators an understanding of their roles and responsibilities with regard to the allocation and use of funds. *Trainer: Chris Hannum, P.E. - Entech Engineering, Inc. Earn 3 DW & WW CH*
- 3-03 Importance of Air Release Valves in Water and Wastewater Systems:** This course covers air valve design and maintenance, including surge effects of trapped air in pipelines, proper sizing, location and the health and safety effects resulting from negative pipeline pressure. *Trainer: D. Kim Sorensen, P.E. - ARI USA / Rockacy & Associates Earn 3 DW & WW CH*
- 3-04 PFAS Treatment and Destruction - Methods and Challenges:** This course covers methods of removing PFAS from water resources, current technologies and the challenges associated with treatment. Also covers some research on destruction technologies for PFAS contaminated media/soils. *Trainer: George Federico - Theia LLC Earn 3 DW & WW CH*
- 3-05 Basic Motor Control for Operators:** See Description for Session 1-08 - Tuesday morning. LIMITED SEATING. **Must attend both AM and PM sessions for Contact Hours.** *Trainer: Steve Flinn, Eric Buskirk, Camden Nickell, John Buskirk - Advanced Process Controls Earn 6 DW & WW CH This class is also offered on Tuesday morning, class #1-08.*
- 3-06 Operation & Maintenance of Submersible Pumps:** This course acquaints the operator with the principles of operation and maintenance of submersible pumps. *Trainer: Sean Melrose, Kenneth Kisamore - Xylem, Inc Earn 3 DW & WW CH*
- 3-07 Not All It's Cracked Up to Be - Our Failing Pipe Infrastructure:** This course covers the history of pipes, expected lifespans and considerations for line replacement. A combination of old pipes and earlier than expected failure of newer pipes has led to a "perfect storm" in our pipe infrastructures. *Trainer: William Friedah, P.E. / Matthew Quinn - Utility Services Group, Inc. / Entech Engineering, Inc. Earn 3 DW & WW CH*
- 3-08 Intro to Geographic Information Systems (GIS):** This course covers the basics of Geographic Information Systems (GIS) for mapping your water/wastewater system. Includes GIS hardware, software, background, data types and collection, and a field demonstration. *Trainer: Mike Emery - PRWA Earn 3 DW & WW CH*

- 3-09 Instrumentation for Nutrient Optimization:** This course educates operators on the nitrification, denitrification, and phosphorus removal processes and how monitoring with various types of meters and probes can assist in optimization. *Trainer: Marc Neville - PADEP Earn 3 WW CH*
- 3-10 Modern Trickling Filters:** This course covers strategies/best practices of optimizing trickling filter operation. Includes how to retrofit an existing trickling filter to increase treatment capacity and/or improve treatment level. *Trainer: Joshua Sablan / Scott Dunn - Brentwood Industries / Bethel Park WWTP & SKG Containment Earn 3 WW CH*
- 3-11 Holistic Approach to Inflow and Infiltration:** This course covers common Inflow and Infiltration (I&I) issues in wastewater collection systems. Topics include manhole rehabilitation including rings, composite covers, sealing, grouting and lining. *Trainer: Grant Miller / Chris Hamilton - DLVEWS, Inc. / Avanti Grout Earn 3 WW CH*
- 3-12 From Leak Detection to Leak Management:** This course will present a number of additional activities that water utilities can employ, along with traditional acoustic leak detection, to give them an effective way to control leakage in their systems. *Trainer: George Kunkel, P.E. - Kunkel Water Efficiency Consulting Earn 3 DW CH*
- 3-13 Electrical Hazards: Metallic Water Service Lines and Mains:** This course covers the causes of electrical hazards and the dangers of electrical shock from water lines. It reviews protective procedures and equipment to prevent electrical shock, and the dangers of thawing metallic water pipes with high DC or AC current. *Trainer: Dale Skinner - Industry Specialist Earn 3.5 DW CH*
- 3-14 Science of Dry Barrel Fire Hydrant Inspection and Comprehensive Audits:** This course will provide operators with the information to begin inspecting hydrants, common issues, and basic maintenance for hydrants. *Outside Demo - Dress appropriately. Trainer: J. Scott Shipe - Scott Infrastructure Science Earn 3 DW CH*
- 3-15 Disinfection for Small Water Systems:** This session reviews the most common disinfection chemicals and methods. It will identify potential disinfection systems that provide control, data logging for reporting and remote communications. *Trainer: John Kurtz - Accent PDIR Earn 3 DW CH*
- 3-16 Pennsylvania Geology and Aquifer Characteristics:** This course provides a basic understanding of the relationship between geological and hydrological processes. It provides the fundamental concepts of quality, and quantity of groundwater and its relationships to contaminate fate and transport. *Trainer: Mark Stephens P.G. - Industry Specialist Earn 3 DW CH*
- 3-17 DW Exam Review - Part 1 of 4: General Exam:** Review for those taking the drinking water certification exams in 2025. During this session review will focus on the general exam. *Trainer: Wendy Malehorn - PRWA Earn 1 DW CH*
- 3-18 WW Exam Review - Part 1 of 4: Activated Sludge:** Review for those taking the wastewater certification exams in 2025. During this session review will focus on Activated Sludge. *Trainer: Tom Goehring - PRWA Earn 1 WW CH*

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Wednesday Afternoon
3 Hour Classes: 1:30 pm – 5:00 pm

- 4-01 Funding and Financing for DW and WW Systems:** Join PENNVEST, USDA and PADCED for an overview of funding programs, changes and new opportunities and the latest updates on accessing federal and state funding. PNC Capital Markets will also provide information on private funding opportunities. *Trainer: Brendan Linton - PENNVEST / Linda Thomas - USDA / Devin Gray - PA DCED / David Payne, Timothy Care - PNC Capital Markets LLC* **Earn 1 DW & WW CH**
- 4-02 Rate Setting Workshop:** This short course introduces the basic concepts of how to best determine and set rates. The financial health of a utility can mean the difference between success and failure. A system cannot be financially viable if their rates do not cover the expense of running the system and accumulate cash reserves for the future. *Trainer: Chad Heister - PRWA* **Earn 3 DW & WW CH**
- 4-03 Basic Electrical, Instrumentation, Controls and SCADA for Operators:** This course covers the basics of how to work safely with electricity and how understanding your electrical setup ties together with all your system controls, including the basics of industrial electrical systems, instrumentation, process controls, and SCADA systems. *Trainer: Adam Menko P.E., Trevor Morris - Keystone Engineering Group, Inc.* **Earn 3 DW & WW CH**
- 4-04 Confined Space and Trenching:** Protecting the health and safety of workers is important to the operation of the system. Two threats to these workers are confined spaces and trenches. Upon completion of this course, participants will understand the steps they can take to make themselves and others safer in these dangerous areas. *Trainer: Scott Melego - Industry Specialist* **Earn 3 DW & WW CH**
- 4-05 Basic Motor Control for Operators:** Full day course. LIMITED SEATING. See Description for Session 1-08 - Tuesday morning. **Must attend both AM and PM sessions for Contact Hours.** *Trainer: Steve Flinn, Eric Buskirk, Camden Nickell, John Buskirk - Advanced Process Controls* **Earn 6 DW & WW CH** *This class is also offered on Tuesday morning, class #1-08.*
- 4-06 Leadership Skills for Industry Professionals:** This course assists new and experienced leaders in navigating these conditions, with a focus on understanding the organizational structure, their personal leadership style, and the expectations of a leader in a water utility. *Trainer: Darryl Jenkins - Chester Water Auth* **Earn 3 DW & WW CH** *This class is offered again on Thursday afternoon, class #6-13.*
- 4-07 How Do You Measure Up? Metering Non-Traditional Water Flows:** This course covers conventional flow measurement through current technologies to meter non-traditional water flows. This includes partially filled pipes, troughs, weirs, flumes, channels, sub-metering in pressurized pipes, etc. *Trainer: Sam DeCara, Josh Dickert - LB Water / 540 Technologies* **Earn 3 DW & WW CH**
- 4-08 Basics of Centrifugal Pumps and Hydraulics:** This course will review the basics of hydraulics, how to size and select a pump, reading impeller curves, and how to maintain centrifugal pumps. *Trainer: Brian Sekula, P.E. - Industry Specialist* **Earn 3 DW & WW CH**
- 4-09 PFAS Sample Collection, Preparation and Analysis:** This course reviews current methods for PFOS and PFAS analysis and sampling procedures for water, wastewater and solids. *Trainer: Richard C. Stump, III - Suburban Testing Labs* **Earn 3 DW & WW CH**
- 4-10 Collection System Inspections for Failing Infrastructure:** This course will help systems find, inspect and address the pressing problem of failing infrastructure. *Trainer: Michael Paladino / Tim Lester, P.E. - Utility Services Group, Inc. / Entech Engineering, Inc.* **Earn 3 WW CH**
- 4-11 Chemistry 101:** Review of the chemistry basics that water/wastewater operators should know to perform daily operations and prep for exams. *Trainer: Pete Weaver, Phil Giunta - PRWA* **Earn 3 DW & WW CH**
- 4-12 Science of Pipe Cleaning: Levels Leading to Tier III:** This course will cover proper pipe-cleaning routines and the correct tools in underground infrastructure maintenance. Understanding of fluid mechanics and jetting equipment will help with efficient, safe, and correct cleaning. *Outside Demo - Dress appropriately. Trainer: Jeremy McConnaughey - KEG / A&H Equipment Co. Inc.* **Earn 3 WW CH**
- 4-13 Protecting Our Waters at the Source - Stormwater Issues:** This course covers Best Management Practices (BMPs) common to SWP and stormwater management. Understanding the inter-relationship between stormwater controls, source water area management and drinking treatment are critical for your community. *Trainer: Colin Gardner / Ryan Orgitano - Stormwater Solution Source, S3, LLC / PRWA* **Earn 3 DW CH**
- 4-14 Filter Inspections, Optimization and Compliance:** This course covers the background on filter technology, backwashing principles, inspection methods and what is needed to comply with the new PA requirements on filter evaluations by water systems. *Trainer: Matt Seeker - Water Service Professionals* **Earn 3 DW CH**
- 4-15 Water Loss Management:** This course will provide systems with some simple ways to reduce unaccounted-for water and thus recover lost revenue. *Trainer: Ian Moore, Dustin Miller - Exeter Supply* **Earn 3 DW CH**
- 4-16 Greensand Filtration:** This course covers the background and basic chemistry of iron and manganese in source waters and the various treatment alternatives. The course focuses on greensand filtration, the most widely used treatment method for iron and manganese removal. *Trainer: Travis Long, CEP - JHA Companies* **Earn 3 DW CH**
- 4-17 DW Exam Review - Part 2 of 4: Math Concepts:** Review for those taking the drinking water certification exams in 2025. During this session review will focus on basic math concepts. *Trainer: Wendy Malehorn - PRWA* **Earn 1 DW CH**

Don't forget to check out the exhibit hall!

Tuesday

5:00 pm - 6:30 pm

Wednesday

11:30 am - 1:30 pm & 5:00 pm - 8:00 pm

Thursday

11:30 am - 1:30 pm

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4-18 WW Exam Review - Part 2 of 4: Activated Sludge: Review for those taking the wastewater certification exams in 2025. During this session review will focus on Activated Sludge (*note this is a continuation of the morning AM session*) *Trainer: Tom Goehring - PRWA Earn 1 WW CH*

Thursday Morning

3 Hour Classes: 8:00 am – 11:30 am

5-01 Skills for Successful Communication: Communication is important to ensure effective work is done. Water and Wastewater utilities must communicate with customers and outside entities. Successful use of communication skills will assist all staff functioning. *Trainer: Eric Hartley, Michael Emery - PRWA Earn 3 DW & WW CH*

5-02 Knowledge Transfer: Attracting, Training, and Retaining the Next Generation / PRWA Apprenticeship and Certification Programs: Your community will always need water and sewer services. Are you preparing the next generation to provide those services? Come hear and talk to our panel of experts and (1) understand the principles of workforce development and why it is needed in the water and wastewater industry. (2) Leverage an array of outreach and branding tools for the engagement of stakeholders. (3) Build upon the foundations of workforce planning, organizational change, job analysis, and organizational learning. *Trainer: Tori Morgan, Dean Miller, Heath Edelman, Cora Shenk, Jason Neidig, Bryon Killian / PRWA Staff - Entech; Miller Environmental; City of Lebanon Authority / PRWA Earn 1 DW & WW CH*

5-03 Health and Safety Considerations for Water and Wastewater Operators: This class covers common safety issues including: an overview of OSHA, fall protection, hazard communication, excavation safety, confined space entry rules, electrical safety and lock out/tag out. *Trainer: Rebecca Holler - PRWA Earn 3 DW & WW CH*

5-04 Basic Math Refresher: This course provides an overview of the basic mathematical principles required to operate a water treatment plant or a wastewater treatment plant or review for an operator certification exam. *Trainer: Brian Sekula, P.E. - Industry Specialist Earn 3 DW & WW CH*

5-05 Lubrication 101- Application of Lubrication Fundamentals: This course covers the fundamentals of lubrication and application towards problem solving in the DW and WW industry. Actual applications and problems will be discussed with the class, with an emphasis on machinery reliability and uptime. *Trainer: Edward H. Blank Sr. - Lubriplate Lubricants Company Earn 3 DW & WW CH This class is offered again on Thursday afternoon, class #6-16.*

5-07 Line Locating Techniques and Tips: This course covers proper line locating techniques through classroom and equipment demo. Line location prevents property damage to utility lines, thus reducing cost and down time. *Trainer: Jim Verga, Jim Flint - Eastcom Associates Earn 3 DW & WW CH*

5-08 Emergency and Bypass Pumping - Sizing and Specifications: This course covers many of the important topics when performing emergency and bypass pumping. The course will cover general safety aspects of diesel and electric driven pumps. Includes self-priming diesel pump outdoor demonstration. *Trainer: Jared Carothers, EIT, James Basden - Xylem Dewatering Solutions Earn 3 DW & WW CH*

5-09 Nutrient Removal Processes in Wastewater Treatment: This program is an introduction to nitrogen and phosphorus removal within wastewater and will identify several treatment processes designed to remove nitrogen and phosphorus. This course will also provide a general understanding of the instrumentation used in BNR. *Trainer: Chris Hannum, P.E. - Entech Engineering, Inc. Earn 3 WW CH*

5-10 Responsibilities of Clean Water Professionals: This workshop introduces the WW Operator Code of Ethics; identifies elements of asset management, cybersecurity & emergency planning and provides an overview of the laws, rules and regulations that impact a certified WW operator in PA. *Trainer: Erick Ammon, Marc Neville, Kevin Buss - PADEP Earn 3.5 WW CH*

5-12 Activated Sludge and BNR: This course will cover the basics of activated sludge and a thorough explanation of how the biological nutrient removal processes work. *Trainer: John Buskirk - Advanced Process Controls Earn 3 WW CH*

5-13 Fire Hydrant Operation and Maintenance: The course covers the evolution of fire hydrant design, explaining the benefits of today's designs. The program focuses on the proper operation, maintenance, and repair of fire hydrants. *Trainer: Ryan Caron, Tim Storch - Kennedy Valve and M&H Earn 3.5 DW CH*

5-14 Science of Water Main Breaks: This course will focus on the steps to repairing and tracing the causes of water main breaks. Mains are under threat from age, soils, corrosion, and other factors. Systems need to be prepared to handle these breaks before they happen. *Trainer: J. Scott Shipe - Scott Infrastructure Science Earn 3 DW CH*

5-15 A.I. (After the Inventory) Lead and Copper Rule Improvements: This course covers the regulatory review and requirements of the Lead and Copper Rule Revision (LCRR) and Lead and Copper Rule Improvements (LCRI). *Trainer: Stacy Silva, Elizabeth Rafsnider - Entech Engineering, Inc. Earn 3 DW CH*

5-17 DW Exam Review - Part 3 of 4: Distribution Exam: Review for those taking the drinking water certification exams in 2025. During this session review will focus on the distribution exam. *Trainer: Wendy Malehorn - PRWA Earn 1 DW CH*

5-18 WW Exam Review - Part 3 of 4: General and Collection: Review for those taking the wastewater certification exams in 2025. This session will focus on the General and Collection exams. *Trainer: Phil Giunta - PRWA Earn 1 WW CH*

Thursday Afternoon

2 Hour Classes: 1:30 pm – 3:45 pm

6-01 Employee Evaluation Basics: Learn the basics of effective employee evaluations. It's more than filling out a form, answering prefabricated questions and checking some boxes. When done correctly, an evaluation is a process, not a document. It is a way of structuring a relationship with employees that helps the employees grow and thus, organizational success. *Trainer: Pete Weaver - PRWA Earn 1 DW & WW CH*

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Thursday Afternoon
3 Hour Classes: 1:30 pm – 5:00 pm

6-02 Cybersecurity in the Water/WW Sector – Sanitary Survey Checklist: The PA DEP is adding 13 inspection questions relative to cybersecurity for all sanitary survey inspections at community water systems. This course will review those questions. The overall cybersecurity concepts also apply to wastewater systems. *Trainer: Jill Anderson - PADEP Earn 2 DW & WW CH*

6-03 Why We Chlorinate - the Basics: The course covers the history and importance of chlorination, case studies on waterborne disease outbreaks, basic chlorination theory, chemistry and math, typical chlorination equipment layout, operation and maintenance, safe handling and storage, record keeping and troubleshooting. Introductory chlorination course for water and wastewater. *Trainer: Nathan Jones, P.E. - Larson Design Group Earn 2 DW & WW CH*

6-04 PVC Pipe and Fittings: This course covers historic and current, more versatile PVC pipe products, including which products to choose and knowing how to install them to ensure a cost-effective, long-lasting result. *Trainer: Richard St-Aubin, P.E. - IPEX USA Earn 2 DW & WW CH*

6-05 Active Shooter/Workplace Violence: The course educates the proper response to active shooters, active threats, illegal intruders, and workplace violence incidents in your facility and provides you with the tactics necessary to protect yourself and co-workers. *Trainer: James Reif; James Knapp - J Reif Consulting Earn 2 DW & WW CH*

6-06 PFAS Management: What to do BEFORE you do it: This course covers current technology to address the concerns of PFAS/PFOA and similar "forever" chemicals. Topics range from removal during treatment to concerns over proper disposal of contaminated media and solids. *Trainer: Phil Farina, Mike Rizzo, Charles Ramirez - Clear Creek Systems, Inc. Earn 2 DW & WW CH*

6-07 Storage Tanks - Pros and Cons: This course covers best practices and guidelines for tank selection with regards to tank performance and cost efficiency in water storage applications. Tank construction process, standard operational and maintenance procedures are covered. *Trainer: Ralph Wawrzyniakowski - Mid-Atlantic Storage Systems, Inc Earn 2 DW & WW CH*

6-08 Food/Microorganism Ratio (F/M) And Mean Cell Residence Time (MCRT): An activated sludge treatment system is a living ecosystem and requires special care to ensure that the organisms are healthy and provided with the proper environment for them to flourish. There are many factors that can have an effect on the efficiency and overall operations of an activated sludge treatment plant and there are many operational adjustments that need to be made on a daily basis to keep the system running at its best. Two calculations that are often used to determine those adjustments are food/microorganism (F/M) ratio and mean cell residence time (MCRT). *Trainer: Brian Little - PRWA Earn 2 WW CH*

6-10 Introduction to Smart Meters and Meter Reading Systems: This course provides technical information, and reviews when and where to use ultrasonic meters and reading systems. The advantages, disadvantages, and maintenance needs are discussed. *Trainer: Sharon DelSignore - EAP Industries, Inc. Earn 2 DW CH*

6-12 Purpose and Benefits of Tracer Studies in PWS: This course reviews the means/methods to evaluate chlorine contact time to help prepare water suppliers with the "balancing act" of maintaining adequate inactivation while avoiding over disinfection leading to byproduct formation. *Trainer: Travis Long, CEP - JHA Companies Earn 2 DW CH*

6-13 Leadership Skills for Industry Professionals: This course also offered Wednesday afternoon - session 4-06. See 4-06 for description. *Trainer: Darryl Jenkins - Chester Water Auth Earn 3 DW & WW CH*

6-15 Workplace Safety: Personal Protection Equipment (PPE) and Injury Prevention: This course covers the basics of personal protection equipment (PPE), its selection, proper use, and also safe work practices for injury prevention with a specific focus on ergonomics. *Trainer: Joe Zinobile, CSP - PA L&I Earn 3 DW & WW CH*

6-16 Lubrication 101- Application of Lubrication Fundamentals: This course also offered Thursday morning - session 5-05. See 5-05 for description. *Trainer: Edward H. Blank Sr. - Lubriplate Lubricants Company Earn 3 DW & WW CH*

6-17 DW Exam Review - Part 4 of 4: Practice Questions: Review for those taking the drinking water certification exams in 2025. During this session, test taking tips will be reviewed in addition to practicing multiple questions. *Trainer: Wendy Malehorn - PRWA Earn 1 DW CH*

6-18 WW Exam Review - Part 4 of 4: General and Collection: Review for those taking the Wastewater Exams in 2025. This session will focus on the General and Collection Exams (*note this is continuation of the Thursday morning session*) *Trainer: Phil Giunta- PRWA Earn 1 WW CH*

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