



June 7-9, 2023 Saratoga Springs, NY

NYWEA-NEWEA Joint Spring Technical Conference and Exhibition Saratoga Hilton & City Center

One for Water!

# Celebrating Essential Water Workers

https://pheedloop.com/jointSpringMeeting/

All for One &



## Patricia,

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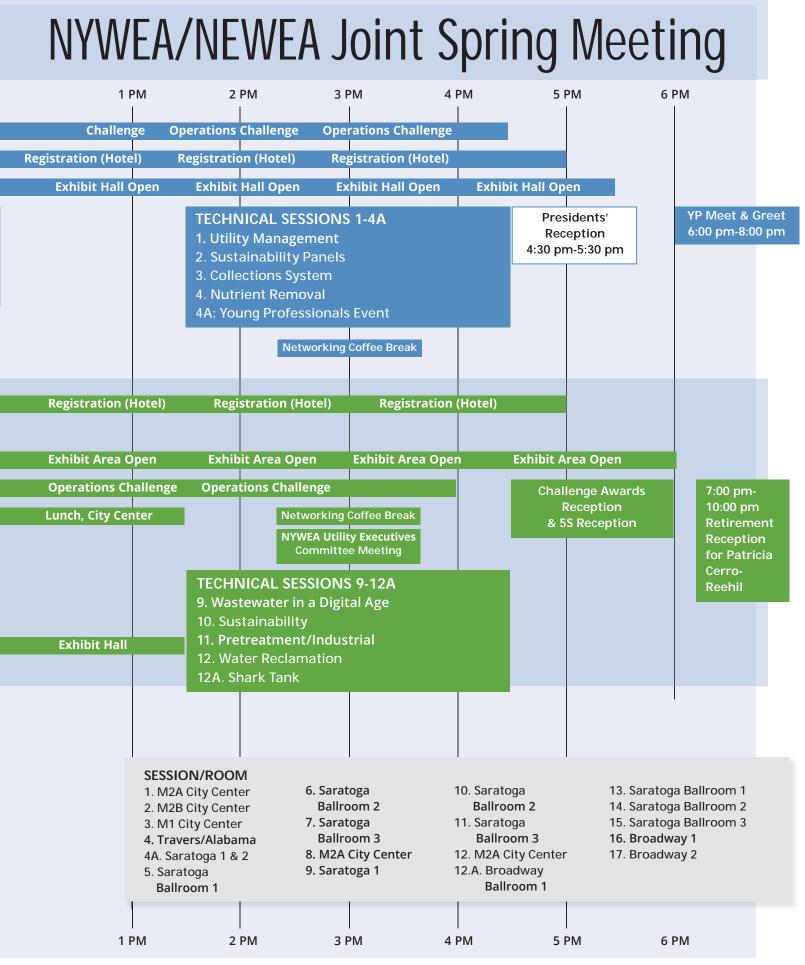
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# SCHEDULE-AT-A-GLANCE, JUNE 7-9

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	June 8				Operations Challe		s Challenge
					Networking		h, City Center
					Coffee Break		
				5. Panel on PFA	S: What's Next?		Keynote Speaker
					ement/Unique R	etrofits	12:15 pm- 12:45 pm
				8. Resiliency	erspective		Lunch in
	Fun Run	/Walk	Regis	stration (Hotel)	Registration (H	otel)	Saratoga
			Continental	TECHNICAL SE			Spa State Park
	Friday June 9		Breakfast	13. PFAS			Tour
				14. Residuals & 15. Infrastructu			Skidmore Green Infrastructure
				16. Stormwater 17. Equitable Le			Tour
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2023 Joint NYWEA/NEWEA Spring Technical Conference & <b>Exhibition</b> Saratoga Springs Saratoga, NY June 7-9, 2023	Table of ContentsAdvertisers.3Exhibitors and Floor Plan28-31Meeting-at-a-Glance4-5NEWEA Board of Directors39NYWEA Board of Directors38Operations Challenge32-33Professional Tours34Speaker Contact Information36-37Special Events34Sponsors34Sponsors34Sponsors41
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New England (Massachusetts, Rhode Island, Connecticut, Maine, New Hampshire, Vermont) Contact Training Hours (TCHs) for Operator Re-Certification will be offered as	Session 15Infrastructure Funding26Session 16Stormwater26Session 17Equitable Leadership27Speaker Evaluations link: https://pheedloop.com/JointSpringMeeting/
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	June 7-9, 2023
	NYWEA-NEWEA Joint Spring Technical Conference and Exhibition
	All for One & One for Water!
	Celebrating Essential Water Workers (Location: M1 – City Center)
10:00 am-5:00 pm 9:00 am-4:30 pm 12:00 pm 12:00 pm-5:30 pm 12:00 pm-12:15 pm	Wednesday, June 7, 2023 Registration Hours Operations Challenge <i>(See page 32-33 for details.)</i> Welcome and Ribbon Cutting in City Center followed by Lunch Exhibit Hall Open (CONTACT HOURS: Water 1.0) Presidential Plenary <i>(Location: M1 – City Center Main Hall)</i> NYWEA President, Donna Grudier NEWEA President, Bob Fischer
MODERATORS	Session 1: Utility Management (Location: M2A – City Center) Mike Lannon, Will Stradling, Siewert Equipment
CONTACT HOURS	2.0 Engineer 2.0 Wastewater 0.5 Water <sup>†</sup>
1:30 pm 1.1	Maintaining Service During Water Reclamation Facility Upgrades David Nowak, Joseph Rigney, Delve Underground; Solai Sundaram, Greeley and Hansen During major facility upgrades of water reclamation facilities, the requirement to provide uninterrupted service often poses large challenges. This presentation will cover the challenges that were overcome at the South Shore Water Reclamation Facility to design and install a new diversion structure around an existing effluent conduit while maintaining flow. The continuous operation of the existing conduit was maintained during construction by incorporating the existing structure into the final structure's design and leveraging 4D modeling.
2:00 pm 1.2	GHG 101: Measuring and Mitigating Climate Impacts from Wastewater Operations Bill Brower, Brown and Caldwell; Janine Burke-Wells, North East Biosolids & Residuals Association Wastewater utilities have a significant role to play in addressing climate change by cutting greenhouse gas (GHG) emissions and increasing carbon sequestration. This presentation will provide an overview of the sources and sinks of greenhouse gases in wastewater collection and treatment systems, the tools available to estimate climate impact for a utility, and approaches to reducing climate impact.
2:30 pm-3:30 pm	Networking Coffee Break, Exhibit Hall (City Center)
3:30 pm 1.3	Overcoming the Challenges of a Minimum Continuous UV Dose Requirement for Disinfection of Secondary Effluent <sup>†</sup> Matthew Hross, Hazen and Sawyer The Stamford WPCA recently upgraded and expanded an existing UV disinfection system at its Stamford WPCF. Primary drivers for this evaluation included planning for compliance with more stringent permit limits for Enterococcus, the need to replace the existing UV disinfection equipment at the end of its useful life, the need to add standby UV disinfection equipment, and measures needed to comply with the plant's NPDES permit requirement for a minimum continuous UV dose.

4:00 pm 1.4	Sewer Systems Are Like Your Arteries: You Want to Keep Them Flowing Kara Keleher, Donald Gallucci, Weston & Sampson; Dylan Ludy, City of Worcester Worcester is the heart of Massachusetts and the second largest city in New England with a population of nearly 200,000. The municipal sanitary sewer system in the city is comprised of approximately 450 miles of sewer, of which approximately 40 miles constitutes the city's Interceptor System, which consists of pipelines that are greater than 18-inch in diameter. In the last 10 years, the city has focused on cleaning and maintaining their interceptors and siphons. This has resulted in the removal of more than 2,200 cubic yards or 3,740 tons of sewer grit and debris from sewers, siphons and interceptors across the city. This presentation will get into projects related to the evaluation, cleaning and improvement of several interceptors and siphons throughout the city. It will focus on initial conditions, costs for cleaning and disposal, and resulting outcome after cleaning.
MODERATORS CONTACT HOURS 1:30 pm-2:30 pm 2.1.2	<ul> <li>Session 2: Sustainability Panels (Location: City Center, Room M2B)</li> <li>Courtney Eaton, Kleinfelder; Wayne Bates, Tighe &amp; Bond</li> <li>2.0 Engineer 2.0 Wastewater 2.0 Water</li> <li>Sustainability - Meaning and Metrics - NEWEA and NYWEA Sustainability Committees</li> <li>Wayne Bates, Tighe &amp; Bond; Courtney Eaton, Kleinfelder</li> <li>The NEWEA and NYWEA Sustainability Committees propose to conduct an interactive educational session on sustainability. This session will provide an overview of the meaning of sustainability as it applies to infrastructure projects followed by an overview of available assessment tools and reporting metrics. We propose conducting this session in two one-hour parts as summarized below.</li> </ul>
	<ul> <li>Part 1 - The Meaning of Sustainability</li> <li>Session 1A - The Meaning of Sustainability (30 minutes)</li> <li>Wayne Bates, Tighe &amp; Bond, Presenter and Moderator</li> <li>Panelists <ul> <li>Howard Carter, Saco WWTP</li> <li>Anastasia Rudenko, GHD, NEWEA Water Reuse Chair</li> <li>Steven King, Danvers Town Engineer, NEWEA DEI Chair</li> <li>James Plummer, NEIWPCC</li> </ul> </li> <li>This session will provide an overview of sustainability that starts by defining the meaning of sustainability and how it applies to infrastructure projects. It will provide insight into the three overlapping responsibilities of sustainability (i.e., social, economic, environment) and how and why municipalities and design professionals should consider these responsibilities on infrastructure projects. This session will be led by Wayne Bates, PhD, PE, ENV SP who is the chair of the NEWEA Sustainability Committee, is a Vice President leading the Tighe &amp; Bond resiliency services, and teaches graduate courses on Sustainable Infrastructure at WPI and UMass Dartmouth.</li> </ul>
	This panel will consist of industry practitioners, which may include NEWEA and/or NYWEA committee chairs, and will be facilitated by Dr. Bates who will ask panel members to share what sustainability means to their respective committees and the organizations in which they work. Panelists will be encouraged to share the various challenges they face in assessing and/or implementing sustainability.
2:30 pm-3:30 pm	Networking Coffee Break, Exhibit Hall (City Center)
3:30 pm-4:30 pm 2.3.4	Part 2 – Measuring Sustainability Session 2A – Sustainability Metrics (30 minutes) Courtney Eaton, Kleinfelder, Presenter and Moderator Panelists • Erika Jozwiak, NYC Mayor's Office, NYWEA Sustainability Chair • Jen Muir, JK Muir, NYWEA Sustainability Committee • Paul Knowles, Hazen & Sawyer, NYWEA Sustainability Committee • Shawn Syde, City of New Bedford

This presentation will provide an overview of how sustainable aspects a project can be identified, assessed, and measured from both a quantitative and qualitative perspective. Tools such as the Envision Framework, the EPA's Augmented Alternatives Analysis, or home-grown methods using multi-criteria decision analyses. This session will be led by Courtney Eaton, PE, ENV SP who is the former chair of the NEWEA Sustainability Committee and a Project Manager at Kleinfelder.

### Session 2B - Applying Sustainability Metrics - Panel Discussion (30 minutes)

This panel will consist of industry practitioners, which may include NEWEA and/or NYWEA committee chairs and will be facilitated by Ms. Eaton who will lead the panel members in sharing their experience in measuring sustainability. Panelists will be encouraged to share the various challenges they face in assessing and/or implementing sustainability.

The learning outcomes for this two part session include:

- 1. Provide a working understanding of the meaning of sustainability
- 2. Understand how sustainability applies to infrastructure projects
- 3. Hear about projects that successfully incorporated sustainability
- 4. Hear from a panel of committee chairs about how they are, or will be, integrating sustainability into their committee
- 5. Learn about approaches for evaluating the sustainability of projects
- 6. Learn about reporting platforms for sustainability

### Session 3: Collections System (Location: M1 – City Center)

David Barnes, Jacobs; Scott Lander, Retain It 2.0 Engineer 2.0 Wastewater

MODERATORS CONTACT HOURS

1:30 pm 3.1

### Leveraging Intermunicipal Cooperation to Fund and Construct a Sewage Collection System

Greg Levasseur, James M. Vierling, H2M architects + engineers

The Village of Westhampton Beach was faced with a crowded main street business district, a shallow groundwater table and inadequate onsite sewage disposal systems. The existing septic systems were outdated and did not provide the required separation from groundwater. With the assistance of H2M the Village undertook a multi-year project of planning, funding and ultimately constructing a sewage collection system to serve the main street district and surround high-density residential parcels.

### 2:00 pm

## pmSetting Up for Success: Using the EPA's Sanitary Sewer Overflow Analysis and Planning (SSOAP)3.2Toolbox to Extract Key Flow Metrics and Inform an I/I Source Reduction Program

### Julia Manzano, Savannah Steinly, Arcadis

Infiltration and inflow (I/I) quantification is an essential step in identifying failing sewer infrastructure and where rehabilitation is most effective. The EPA's Sanitary Sewer Overflow Analysis and Planning (SSOAP) Toolbox is a free and reliable tool for quantifying flow metrics and setting users up for further analysis. This presentation will review the fundamental concepts of I/I studies while demonstrating just a few of SSOAP's capabilities and how it was customized to inform several specific projects.

### 2:30 pm-3:30 pm Networking Coffee Break, Exhibit Hall (City Center)

### 3:30 pm

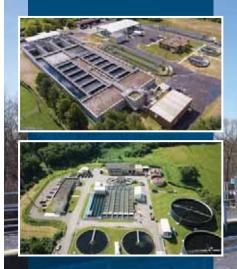
### A City with a Plan is a City with a Vision.

3.3

### Developing the City-Wide Sewer Separation Master Plan in Chelsea, Massachusetts

Steven Perdios, Peter Garvey, Dewberry Engineers Inc.

The City of Chelsea endeavors to improve and upgrade outdated drainage infrastructure city-wide to allow for future growth, mitigate climate change, eliminate CSOs via sewer separation, and remove inflows to the sanitary system to reduce costs and increase capacity. As such, a multi-step modeling and planning effort was carried out to develop a city-wide Master Plan for Sewer Separation and Drainage Infrastructure Upgrades detailing a systematically-phased execution of projects over the next few decades.



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<b>4:00 pm</b> 3.4	Eliminating the Wet Well with Direct In-Line Pumping James Huck, Brad Hitselberger, Industrial Flow Solutions
	In traditional wastewater lift stations utilities have limited resources and ever-increasing maintenance events. A direct in-line pumping system is a technology that completely eliminates a wet well. This pumping system is proven (dating back to 2003, when it was invented in Europe) to solve that, by reducing pump downtime, odor issues, unplanned/planned maintenance, and pump failures. Best of all are the safety improvements this system offers by eliminating hydrogen sulfide.
MODERATORS	Session 4: Nutrient Removal (Travers/Alabama) Nancy Struzenski, Alpha Labs; Chris Pierce, Wright-Pierce
CONTACT HOURS	2.0 Engineer 2.0 Wastewater
1:30 pm 4.1	Advanced Controls at a NY WWTP Achieve Ultra-Low Nitrogen Levels without Supplemental Carbon
	Dave Holland, Aqua-Aerobic Systems, Inc.; Tim Allen, City of Riverhead, NY; Timothy Nordberg, H2M Architects and Engineers; Ben Antrim, Koch Separation Solutions This presentation describes how a batch MBR with an advanced process control system has been in operation at the Riverhead, NY, reuse plant for the last seven years, enabling the plant to consistently achieve an effluent containing less than 3 mg/L of total nitrogen without the addition of supplemental carbon.
<b>2:00 pm</b> 4.2	Ammonium Sensor Placement for Improved Ammonia-Based Aeration Control at Brockton AWRF Benjamin Barker, YSI Inc., a Xylem brand; John Downey, Veolia Brockton, AWRF Ammonia-based aeration control is simple in theory but often challenging to implement. Among those challenges is choosing a location for the ammonium sensor, which can affect the control strategy and the performance of the sensor. This presentation will cover the lessons learned during the aeration upgrade at Brockton AWRF and their approach to choosing an ammonium sensor location.
2:30 pm-3:30 pm	Networking Coffee Break, Exhibit Hall (City Center)
3:30 pm 4.3	Planning and Piloting New England's First Granular Activated Sludge Plant to Provide Nitrogen Removal, Improve Plant Resiliency, and Reduce Combined Sewer Overflows on a Small Site Frederick Mueller, Kyle Coolidge, Tighe & Bond; Howard Carter, Stacy Thompson, Saco, Maine WRRF We will discuss how Granular Activated Sludge was selected as the preferred technology to upgrade Saco Maine's WRRF to address anticipated future nitrogen limits, rising sea levels, and reduce CSOs. We will then discuss the progress made to date including the results of a four-month pilot study, facility plan conclusions, and current status of the plant upgrade design, which will be delivered using the CMAR (Construction Manager at Risk) method.
<b>4:00 pm</b> 4.4	Successful Full-Scale Continuous Flow Densification of Activated Sludge at Crooked Creek Water Reclamation Facility without Physical Selection Micah Blate, Wendell Khunjar, Hazen and Sawyer In this presentation, we demonstrate successful densification of activated sludge at the Crooked Creek Water Reclamation Facility, Gwinnett County, Georgia, utilizing conventional bioreactors and secondary clarifiers. Densification was achieved through control of substrate utilization rates (kinetic selection) and use of anaerobic conditions (metabolic selection).
2:00 pm-4:30 pm 4.A.1	<ul> <li>Session 4A: Young Professionals (Location: Saratoga Ballrooms 1 &amp; 2)</li> <li>YP Leadership Training</li> <li>This will be interactive, small-group leadership training and discussions focusing on the following leadership topics: <ul> <li>(1) Emotional intelligence,</li> <li>(2) Professional credibility,</li> <li>(3) Ability to inspire, and</li> <li>(4) Communication.</li> </ul> </li> </ul>

2:30 pm-3:30 pm	Networking Coffee Break, Exhibit Hall (City Center)
4:30 pm-5:30 pm	<b>Presidents' Reception</b> ( <i>Location: City Center</i> ) Please join NYWEA President Donna Grudier and NEWEA President Bob Fischer in welcoming the members in attendance to this joint meeting!
6:00 pm-8:00 pm	Young Professionals Meet & Greet (Parting Glass in Saratoga Springs) A special thank you to the Capital Chapter, F.R. Mahony & Associates and Siewert Equipment for their support of this event!
7.20 cm 5.00 pm	Thursday, June 8, 2023
7:30 am-5:00 pm 7:30 am-9:00 am 8:30 am-6:00 pm 8:30 am-4:00 pm 2:30 pm-3:30 pm 4:30 pm-6:00 pm 7:00 pm-10:00 pm	Registration Hours Continental Breakfast Exhibit Hall Open (CONTACT HOURS: Water 1.0) Operations Challenge Competition NYWEA Utility Executives Meeting, Location TBA Operations Challenge Awards Reception and 5S Reception Retirement Reception for Patricia Cerro-Reehil
MODERATORS CONTACT HOURS	Session 5: Residuals & Biosolids 1 (Location: Saratoga Ballroom 1) Magdalena Gasior, Greeley & Hansen; Colin O'Brien, Brown & Caldwell 2.0 Engineer 2.0 Wastewater
9:00 am 5.1	Future of Biosolids Management: Biochar George Bevington, Richard Straut, Sean Sweeney, Barton & Loguidice Wastewater managers and operators are faced with the management and disposal of biosolids generated in the treatment process. Currently the ultimate disposal of biosolids via incineration, landfilling and land application are the most common. The question is what will the future regulations relating to PFAS and other emerging containments for these disposal techniques be? If new limits are developed, what can a WRRF manager do? How does all of this relate to climate change?
<b>9:30 am</b> 5.2	The Evolution of Gasification as a Proven Method for WWTP Biosolid Carbon Conversion Dion Banks, Christopher Holcomb, Ecoremedy Ecoremedy's presentation offers an overview of Fluid Lift Gasification <sup>™</sup> as a proven method for biosolid carbon conversion at wastewater treatment plants. Declared non-incineration by the EPA, gasification
	eliminates dependence on fossil fuels for power, avoids hauling sludge to landfills and destructs polyfluoroalkyl substances (PFAS). Systems can be tuned to increase energy recovery for renewable use and to produce biochar – a marketable product from carbon recovery.
10:00 am-11:00 am	Networking Coffee Break, Exhibit Hall (City Center)
11:00 am 5.3	Sludge Dewatering and Sludge Drying: What Bellows Falls, Vermont, Has Gained in Five Years of Dewatering and Two Years of Drying Sludge Chris Hubbard, PW Tech; Paul Russell, Russell Resources; Bill Bennett and Robert Wheeler, Bellows Falls, Vermont WWTP By using a screw press and dryer to remove more water from sludge, Bellows Falls, Vermont Wastewater Treatment Plant significantly reduced disposal costs, minimized solids handling challenges and kept more water in its waterways, realizing significant operational and environmental benefits. Accounting for the challenges faced by the facility, the city's new screw press and dryer delivered cost savings while generating higher solids production and reducing landfill stress.

11:30 am 5.4	<ul> <li>Ultra-High Temperature Gasification for Biosolids Treatment, PFAS Destruction and</li> <li>Hydrogen Production</li> <li>Jim Henderson, Brandon Davis, Jeff Snyder, Heartland Water Technology</li> <li>HelioStorm™ is a novel ultra-high temperature gasification technology that can be used as an environmentally-</li> </ul>		
	friendly means to dispose of dried biosolids from wastewater treatment plants as well other waste feedstocks such as municipal solid waste [MSW] and refuse derived fuels [RDF]. Electrically driven and combustion-free, the high temperature process destroys chemical contaminants and volatile organic compounds (VOCs), including destruction of perfluoroalkyl compounds (PFAS).		
12:00 pm-1:30 pm 12:15 pm-12:45 pm	Lunch (Location: M1 - City Center)Keynote SpeakerPersuasion, Innovation & CommunicationFeaturing George Hawkins, Moonshot MissionsGeorge Hawkins, Moonshot Missions		
MODERATORS CONTACT HOURS	Session 6: Asset Management/Unique Retrofits (Location: Saratoga Ballroom 2) Arthur Simonian, Mattabassett District; Jim Barsanti, Hazen & Sawyer 2.0 Engineer 2.0 Wastewater		
<b>9:00 am</b> 6.1	Asset Management Implementation for Saratoga County Sewer District Danielle Grennon, Barton & Loguidice; Andrew Marsden, Daniel Rourke, Saratoga County Sewer District Barton & Loguidice (B&L) worked with Saratoga County in the development of a CMMS/Asset Management Program for the sewer district. The county's goal in implementing an asset management program was to assist with preventative maintenance, work orders, asset inventory, risk prioritization, asset record reporting for NYSDEC, customizable inspection forms and fleet management. B&L worked with the county to populate and implement Utility Cloud to meet the needs of Saratoga County's Waste water Treatment plant.		
9:30 am 6.2	Monroe County – Investing in the Future Matthew Czora, Arcadis; Corky Kelsey, Monroe County Monroe County embarked on a multi-year capital improvements program (the Program) to simultaneously pilot, test, design and construct improvement projects for three main systems at FEV: the Aeration System, Secondary Clarifiers, and Electrical System. Construction of these major projects is being performed under a Project Labor Agreement (PLA), which also initiated a new apprenticeship training requirement pilot program. The total projected construction cost of the Program is over \$35,000,000. To add to the immense task of completing construction on three major facility systems concurrently, FEV is operating under a Consent Order from the New York State Department of Environmental Conservation (NYSDEC). However, thanks to careful planning and the dedicated work of DES staff, no permit exceedances have occurred due to the construction operations. This presentation will review the key components of the project, highlight operational considerations for the design, piloting and construction of the planned improvements, and highlight how state level funding (from EFC and DEC) can help communities pursue these programs.		
10:00 am-11:00 am	Networking Coffee Break, Exhibit Hall (City Center)		
11:00 am 6.3	<b>Optimizing Secondary Clarifiers - From Conception to Field Testing</b> Hannah Rockwell, Arcadis; Alan Oates, Monroe County This presentation will cover an in-depth analysis of the steps required to optimize improvements to existing 145-foot-square secondary clarifiers for overall performance. A detailed case study of FEV WRRF which is permitted for 135-MGD (200-mgd peak) through high-rate secondary treatment will be reviewed with a specific focus on the critical connection between field work and detailed design. A phased approach to evaluating potential improvements was implemented to yield optimized modifications in a Test Clarifier that could be repeated in the remaining five secondary clarifiers, reducing risk of costly adjustments to enhance performance in the secondary clarifiers.		



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11:30 am 6.4	Now We Are in Over Our Heads! A New Deep Outfall at the Kingston WWTP Erin K. Moore, David Seche, Tighe & Bond; David Railsback, Schnabel Engineering; John Schultheis, Allen Winchell, City of Kingston By investigating historic assumptions regarding Kingston's permit, a compromise was reached that allowed for achievable SPDES effluent limits without a new advanced treatment process but required the City of Kingston to lower its WWTP's surface level outfall to 20-feet below mean water level in the tidal Rondout Creek. We will review the pre-design analysis that facilitated this compromise, the design approach, construction methodologies and resulting completed outfall while discussing important construction considerations and concerns.
MODERATORS CONTACT HOURS	Session 7: Operator Perspectives (Location: Saratoga Ballroom 3) Phil Tucker, York Sewer District; Sana Barakat, Arcadis 2.0 Engineer 2.0 Wastewater 0.5 Water <sup>†</sup>
9:00 am 7.1	Are Masking Agents and Counteractants Good Odor Management Technologies? Michael Lannan, Tech Environmental These products have their place in the "odor control toolbox," and each has their "sweet spot" with respect to improving the odor hedonic tone (relative pleasantness). These products can be considered for a broad range of applications, but their effectiveness will vary, and will be site specific. In some cases they should not be considered, as well. This presentation explains how one should request a proper pilot study for their facility, if desired.
9:30 am 7.2	Don't Get Burned on Chemical Storage Tank Inspections <sup>†</sup> Gary Arthur, Fiberglass Reinforced Plastics Institute, Inc. Owners of Fiberglass Reinforced Plastic above ground chemical bulk storage tanks are getting burned by inspections mandated by law. Inspection determinations often lead to excessive inspection, unnecessary repairs, early tank retirement plus unexpected leaks, spills and discharges. Owners are at risk of or experiencing financial, safety and environmental hardship. This presentation shows tank inspection challenges, with a discussion around inspection regulations, standard procedures and hardship prevention opportunities.
10:00 am-11:00 am	Networking Coffee Break, Exhibit Hall (City Center)
<b>11:00 am</b> 7.3	Out with the Old, in with the New: Challenges and Efficiencies of Decontaminating, Upgrading and Storm Hardening a 50-Year-Old Wastewater Pump Station Ryan Palzere, Tighe & Bond; Kiari Williams, Town of Southington This presentation will discuss the history and challenges of decontaminating, upgrading, storm hardening and improving operator safety at one of Southington, Connecticut's aging wastewater pump stations.
11:30 am 7.4	WWTP Hauled Waste Receiving and Treatment Impacts Jeff Tudini, AECOM; Alex Emmerson, Buffalo Sewer Authority Evaluation of a WWTP's hauled waste receiving program and impacts to treatment will be discussed. The system was having issues with BOD removal and a review of hauled waste receiving and handling was reviewed and modeled to determine the impact to BOD removal.

MODERATORS CONTACT HOURS <b>9:00 am</b> 8.1	<ul> <li>Session 8: Resiliency (Location: M2A – City Center)</li> <li>Danyel J. King, NYSDEC; Peter Garvey, Dewberry Engineers Inc.</li> <li>2.0 Engineer 1.5 Wastewater<sup>‡</sup></li> <li>How Bangor, Maine Expanded a 20-Year-Old Storage Facility Threefold along a Vibrant Waterfront<sup>‡</sup></li> <li>Gregory Heath, AECOM</li> </ul>
	Bangor, Maine implemented the Davis Brook Storage Tank (DBST), as required by Consent Decree, to increase CSO control beyond that provided for in its 1993 LTCP. The DBST stores 3.8 million gallons (MG) adjacent to the existing 1.2 MG Davis Brook Storage Conduit for a total 5.0 MG storage volume. This project showcases an innovative approach for expanding previously implemented CSO controls that will benefit others needing to increase their level of CSO control following LTCP implementation.
<b>9:30 am</b> 8.2	Separation vs. Storage: Dawn of CSO Abatement <sup>‡</sup> Jess Locke, Matthew Corbin, Wright-Pierce The City of Haverhill, MA, is reducing combined sewer overflows (CSOs) to meet its Consent Decree. Two methods to reduce CSOs in the Locke Street Interceptor Area were evaluated: underground storage and combined sewer separation. While the question of separation versus storage may seem straightforward, many different factors needed to be evaluated to ensure the selected approach would reduce CSOs in accordance with the Consent Decree and maintain capacity throughout the sanitary sewer and stormwater systems.
10:00 am-11:00 am	Coffee Break, Exhibit Hall (City Center)
11:00 am 8.3	Using Smart Systems to Meet Stormwater Requirements and Preserve the Aesthetic Character of Two Historic Ponds in Harrisburg, Pennsylvania – An Update on Actual System Performance Andrea Braga, Susan Beck, Jacobs; Claire Maulhardt, Capital Region Water; Andy Potts, Jacobs This is a pond retrofit plan for two ponds to improve water quality, optimize stormwater management, provide safe conveyance for extreme events, and improve aesthetics and ecological benefits. The design includes a continuous monitoring and adaptive control (CMAC) system to maximize storage volume and control outflows from the ponds to provide wet weather flow reductions. The project was constructed and the CMAC system was brought online in February 2023. Preliminary performance results for the system will be shared.
11:30 am 8.4	<b>Challenges in Upgrading the City of Chicopee's Largest Wastewater Pump Station<sup>‡</sup></b> Joe Popielarczyk, Tighe & Bond; Quinn Lonczak, City of Chicopee The City of Chicopee's Jones Ferry Wastewater Pump Station (WWPS) was constructed in 1974 and is the largest in the city designed to handle approximately 19 MGD. The WWPS discharges directly to the city's Water Pollution Control Facility (WPCF) and accounts for approximately half of its wet weather flow. Adjacent to the WWPS, the city also owns and operates a Combined Sewer Overflow Facility that works in tandem with the WWPS and WPCF to treat wastewater prior to discharging to the Connecticut River.
12:00 pm-1:30 pm	Lunch (City Center)
MODERATORS CONTACT HOURS 1:30 pm 9.1	<ul> <li>Session 9: Wastewater in a Digital Age (Location: Saratoga 1)</li> <li>Kevin Garvey, Wright-Pierce; Maureen Neville, Woodard &amp; Curran</li> <li>2.0 Engineer 2.0 Wastewater 0.5 Water<sup>†</sup></li> <li>Machine Learning in the Water Industry</li> <li>Micah Blate, Katya Bilyk, Hazen and Sawyer</li> <li>Two applications of machine learning (ML) in the water space were developed to illustrate the power of these tools: 1) A fully deployed model predicting influent wastewater flow for wet weather management. 2) A desktop model predicting the percent total solids (%TS) in cake on any given day. Both of these ML models provide operational staff with insight that could not be generated through other means (i.e., mechanistic models) by virtue of the way the machine learning algorithms look for explanatory variables.</li> </ul>

### 2:00 pm | Digital Approaches to Improving Collection System Asset Management in an Ever-Evolving World

### 9.2 Jennifer Baldwin, Jacobs

Many utilities are currently dealing with the deterioration of their buried infrastructure, especially within their water and wastewater conveyance and distribution systems. Specific to wastewater collection systems, utilities also need to accommodate anticipated increased sewer flows due to increased population densities and economic development. This presentation will focus on two digital approaches to maximizing the life of these important assets: condition assessment and optimization of O&M. Condition assessment has been a necessary process to cost-effectively identify which assets are the most deteriorated and in need of rehabilitation or replacement. Utilities are advised to adopt proactive strategies instead of reactive ones to help prioritize operational budgets and establish a reliable and resilient conveyance system. A portion of the presentation will focus on the advent and utilization of Artificial Intelligence (AI) and Machine Learning (ML) tools for the effective management of buried assets and providing prescriptive asset management guidance. Utilities are also facing increasing pressures in operating and maintaining their collection and treatment systems, including staffing issues due to retirements and staff retention, shrinking budgets, and more stringent regulations. These pressures lead utilities to new ways of working, including using a smart sewers approach. The second half of the presentation will focus on a tool that provides a dashboard for smart sensors from multiple platforms and machine learning/predictive analytics to provide new and better ways of operating wastewater collection systems.

### 2:30 pm-3:30 pm Networking Coffee Break, Exhibit Hall (City Center)

### 3:30 pm

9.3

### **Benefits of 3D Laser Survey in the Design of Vertical Upgrades**<sup>†</sup> Kyle Coolidge, Sam Taugher and Colin Powers, Tighe & Bond

3D laser scanning is a valuable technology for precise surveys of our plant's buildings, tanks, process equipment, piping, etc. We will demonstrate the benefits of using this technology, including improved accuracy of existing conditions, reduced site visits, virtual collaboration with project stakeholders, and the creation of record drawings. As engineering technology evolves, this presentation will help engineers and operators better understand what is best for you and your project.

4:00 pm 9.4

## MWRA Nut Island Headworks Odor Control – Using Lasers and Power BI to Build, Startup and Operate New Systems in an Existing Facility

### Nicholas Ellis, Hazen and Sawyer

Hazen used 3D laser scanning and 4D design techniques to install new ventilation and odor control systems in MWRA's Nut Island Headworks, while maintaining operation, ventilation and permit compliance. In addition, the team utilized power BI (software) to analyze data collected during startup and testing of the wet scrubber and associated chemical systems to identify operational issues, and optimize system operation.

### MODERATORS CONTACT HOURS 1:30 pm 10.1

### Session 10: Sustainability (Location: Saratoga Ballroom 2)

Bonnie Starr, NYSDEC; Adam Yanulis, Tighe & Bond 2.0 Engineer 2.0 Wastewater 1.0 Water<sup>†</sup>

## Navigating Greenhouse Gas Reporting, Justice40, and Other Policy Drivers to Inform Sustainable Water Treatment and Biosolids Management $^\dagger$

Melissa Harclerode, Chris Campbell, Megan Schlosser, Davonna Moore, CDM Smith

Recent policy drivers, such as Bipartisan Infrastructure Law and America's Water Infrastructure Act, and customer demand have put new stressors on utilities and industry to report on greenhouse gases and consider equitable distribution of infrastructure improvement benefits to disadvantaged communities. This presentation will provide an overview of industry-vetted sustainability tools, including GHG emission models and demographic mapping tools, to meet society's call to action.

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# Engineering a better environment

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<b>2:00 pm</b> 10.2	Low-Carbon, Clean Construction Trends <sup>†</sup> Jen Muir, Megan Coleman, JK Muir, LLC
	With a call to action on climate change, there is increasing pressure from the public, regulators and society to incorporate sustainability into every facet of our work as wastewater professionals. This presentation will endeavor to define clean construction and how to incorporate it into each phase of wastewater infrastructure projects. Topics include low-concrete specifications, environmental product declarations, low-
	emission vehicles, and life cycle assessment.
2:30 pm-3:30 pm	Networking Coffee Break, Exhibit Hall (City Center)
3:30 pm	Stormwater Biofiltration for Nutrient Control: A Summary of Three Years of Field-based
10.3	Investigations Douglas Daley, Jessica Buhrle, SUNY College of Environmental Science and Forestry (SUNY ESF) Biofiltration systems are effective at removing solid phase pollutants from stormwater runoff, but questions remaining about their effectiveness in treating aqueous phase pollutants. The effects of organic matter content, hydraulic loading, vegetation status and hydraulic residence time on treatment effectiveness of aqueous-phase stormwater biofiltration systems were evaluated during a three-year long demonstration project. Replicated treatments using mesocosms were irrigated with "synthetic stormwater" to determine treatment effectiveness of the biofiltration system for nitrogen, phosphorous, copper and zinc removal.
<b>4:00 pm</b> 10.4	Sustainable Practices for Odor Control Systems Raymond Porter, Porter Odor Control; Michael Lannan, Tech Environmental The evaluation of odor control systems is usually evaluated with respect to the improvement of the human environment by reducing adverse odor impacts. An odor control system can have a tremendous impact on the energy demand and carbon footprint of a water resource recovery facility. This presentation will discuss the ways in which the design and operation of an odor control facility can reduce its energy impact and carbon footprint.
MODERATORS	Session 11: Pretreatment/Industrial (Location: Saratoga Ballroom 3) Tim Clayton, Surpass Chemical; Matt Dickson, Haley Ward
CONTACT HOURS	2.0 Engineer 2.0 Wastewater
1:30 pm	Industrial Wastewater Pretreatment Programs 101
(1 hour) <b>11.1.2</b>	Alexandre Remnek, United States Environmental Protection Agency Municipal pretreatment programs protect municipal wastewater treatment plants from operational interference or pass-through due to non-sanitary pollutants from industrial and commercial sources and ensures compliance with NPDES and biosolid disposal permits. In this presentation, EPA presenters describe the steps that are involved by EPA or the State in conducting a pretreatment audit of a POTW. The presenters will cover what POTWs can do to prepare for an EPA pretreatment program audit. Both small and large system operators and program coordinators will benefit from the information, as well as those POTWs that do not yet have a pretreatment program but may need one.
2:30 pm-3:30 pm	Networking Coffee Break, Exhibit Hall (City Center)
3:30 pm	Industrial Wastewater Pretreatment Panel Discussion
11.3	Craig Hurteau, Albany County Water Purification District The United States EPA pretreatment regulations provide guidance for industrial pretreatment limits for wastewater utilities. Local limits can differ and be specific to the industrial manufacturing facility and development of permit limits can be difficult. This is often due low flow, high concentration wastewater that manufacturing facilities discharge, particularly with a recent focus on reduced water usage. This panel discussion will be made up of several municipal industrial pretreatment coordinators from across New York State to discuss a range of topics including: sewer use ordinances, industrial pretreatment permit development, what are technically based local limits, wastewater surcharges, and enforcement actions.

4:00 pm 11.4	Industrial Wastewater Pretreatment Systems Kevin Hickey, Wright-Pierce No two manufacturing facilities are the same. How do we determine the correct pretreatment system for each industrial manufacturer and how is the municipality involved with, if at all, the treatment selection? This presentation will review why an evaluation of each industrial wastewater stream is important and how to select treatment alternatives. It will conclude with recommendations for local pretreatment coordinators for how to be involved with its significant industrial users, particularly with pretreatment permit guidelines and treatment selections.
MODERATORS CONTACT HOURS <b>1:30 pm</b> 12.1	Session 12: Water Reclamation (Location: M2A – City Center) Deborah Mahoney, Brown & Caldwell; Silvia Marpicati, Arcadis 2.0 Engineer 2.0 Wastewater Improving Infrastructure While Protecting the Great South Bay Keith Kelly, CDM Smith NY Inc.; Janice McGovern, Suffolk County Department of Public Works CDM Smith evaluated the existing 14,200-foot section of the Bergen Point WWTP outfall under the Great South Bay and determined it to be in a failed state. CDM Smith developed an engineering report of potential replacement alternatives, designed the recommended 10-foot diameter replacement tunnel and oversaw its construction. The work included a multiphase geotechnical program, incorporating ground freezing into the project and developing a construction program that maintained outfall and effluent pump station operation throughout construction.
<b>2:00 pm</b> 12.2	Quenching the Data Center Thirst – Emerging Trends for Managing Cooling Water Demands Darcy Sachs, Brandon Yallaly, Carollo Engineers, Inc. Data centers represent one of the largest infrastructure expansions in United States history. These centers also use large quantities of water that must be discharged. The wastewater discharge often contains high levels of salts, silica, biocides, antiscalants and disinfectants. This presentation will discuss the shift to water reclamation, states with mature regulatory frameworks, and state-of-the-art strategies for treating cooling tower supply and blow down. Factors regulators and utilities can consider and steps that can be take will be presented. This includes emerging trends for the application of reclaimed water POTWs are often designed to manage more traditional domestic and commercial waste streams, leaving them vulnerable to the impacts of the unique constituents present in data center cooling tower blowdown streams.
2:30 pm-3:30 pm	Networking Coffee Break, Exhibit Hall (City Center)
3:30 pm 12.3	Strategies for Meeting the Extreme Effluent Phosphorus Limits at Several New Hampshire Fish & Game Fish Hatcheries Samuel Brown, Mahsa Mehrdad, HDR Evaluating effluent treatment technologies for meeting extreme phosphorus limits at several New Hampshire Fish & Game fish hatcheries.
<b>4:00 pm</b> 12.4	Solving Problems in Wastewater - One Dirty Picture at a Time Steve McCuskey, VEGA This presentation will provide a case study on problems typical to wastewater plants as it relates to level measurement and what simple solutions plant operators have taken to overcome them. The presentation will rely heavily on photographs to discuss lessons learned specifically related to level measurement.

2.20	Session 12A: Shark Tank (Location: Broadway Ballroom 1)
3:30 pm	Shark Tank
12A	Hosted by the NEWEA Innovation Council A lighthearted version of the popular Shark Tank TV show, the NEWEA Innovation Council's Shark Tank provides an opportunity for water technology innovators to pitch their innovation ideas to a targeted audience. Startups will pitch their technology to attendees of the Spring Meeting: engineers, consultants, scientists, operators and students. The goal of this event is to increase awareness of new technologies that may be able to improve operational efficiency, increase sustainability, improve treatment processes, increase water reuse capabilities and more. A panel of judges will hear startup companies explain important topics related to their technology such as the challenge, the solution, key product features, market fit, competitive landscape, revenue and operating models, traction, projections, and any other applicable topics/ideas. After each pitch session, a Q&A session will be held by the judges, followed by any questions from the audience. Once all of the pitches have been heard, a "winner" will be determined by the judges.
4:30 pm-6:00 pm	Operations Challenge and 5S Awards Reception
8:00 am-12:00 pm 8:00 am-9:00 am	Friday, June 9, 2023 Registration Hours Continental Breakfast
	Session 13: PFAS (Location: Saratoga 1)
MODERATORS	Brian Skidmore, Barton & Loguidice; Brian Olsen, Carlsen Systems
CONTACT HOURS	2.0 Engineer 1.0 Wastewater <sup>‡</sup> 1.0 Water <sup>†</sup>
9:00 am	Programmatic Approach to Implementing PFAS Treatment in Rockland and Putnam Counties <sup>†</sup>
13.1	Jonathan Tardiff, Veolia North America; Keith F. Kelly, CDM Smith NY Inc. New York State set the MCL for PFOA and PFOS of 10 ppt in August 2020. This required treatment was to be implemented immediately unless a NYSDOH Deferral was issued. Veolia Water implemented a program that included deferral approval, bench testing, well sampling, procuring carbon vessels and media, procuring seven Design Build (DB) contracts, and setting design standards. The 17 PFAS treatment facilities in the Design-Build contracts are anticipated to meet the August 2023 deadline.
9:30 am	PFAS Contamination in the New England and New York Areas: Impact of Regulations and What Utilities Can Do $^{\dagger}$
13.2	Ken Sansone, SL Environmental Law Group
	Harmful PFAS substances are an urgent public health and environmental issue. The EPA is implementing its Strategic Roadmap, including the release of federal standards for PFAS in drinking water. This presentation will discuss how new regulations will now impact water suppliers in the New England and New York areas, what recourse utilities have to cover clean-up costs, and updates on current legal action that many water systems are already taking to shift costs to manufacturers.
10:00 am-10:30 am	Networking Coffee Break (Hotel)
10:30 am	All Hands On Deck! How Biosolids Associations Are Helping Members Manage PFAS Challenges $^{\ddagger}$
13.3	Janine Burke-Wells, North East Biosolids & Residuals Association; Mary Firestone, Mid-Atlantic Biosolids Association (MABA) With all the legislative, regulatory and media attention focused on PFAS in wastewater sludges, especially those treated biosolids being recycled to soil, water utilities need help learning and communicating about PFAS and someone to advocate for them. You will hear about the North East Biosolids & Residuals Association and Mid-Atlantic Biosolids Association's collective efforts on advocacy and programs developed to assist members with proactively addressing PFAS in their wastewater treatment systems.

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11:00 am	Research Update on			fication and Incine	ration <sup>‡</sup>
13.4	Lloyd Winchell, John R Findings from a recent			nt in biosolids will be	presented, as well as a
	-				and a pyrolysis facility.
	Session 14: Residu		÷ .		
MODERATORS	Kathryn Serra, CT Mal		IDR		
CONTACT HOURS	8	astewater			
9:00 am	Maximizing Polyme		lin e		
14.1	Steve Wardell, Ryan Pe			vears Now more t	han ever, receiving the
					attendees how to use
		-			g, and handling will pay
	dividends and save m				
9:30 am	Energy Reduction wi	th Thermal Dryers			
14.2	Julie Barown, J.A. Lang	ge, Inc.; Chip Pless, LCI	Corporation		
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	•	-	-		as climate change and
					dryers, ways to reduce ers are affected by the
	future of energy in the				ers are affected by the
10:00 am-10:30 am	Networking Coffee B	<b>Break</b> (Hotel)			
10:30 am	Design and Performa	ance Evaluation of a	Solar-Assisted Drye	r with Decentralize	d Thermal
14.3	Recovery Gasificatio	n System	-		
	Alexander Kraemer, H	arvest Technology, LL	C; Steffen Ritterbuscl	n, engineering4envir	onment
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					m. The dried biosolids
	<b>3 3</b>				returned to the drying er temperatures of the
					with high P-availability.
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11:00 am	Manufactured Bioso	lids and the Circular	Economy		
14.4	Christina Adams, RMI				
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	BIOSOIIUS, WOOU ASII	and Sand we can pr	ovide a solution for		
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Donna Grudier

Frederick McNeill

Mary Barry

Patricia Cerro-

Reehil

### MODERATORS CONTACT HOURS 9:00 am

### Session 15: Infrastructure Funding (Location: Saratoga 3)

Elaine Yarbrough, GA Fleet; Peter Ozzolek, Methuen Construction 2.0 Water 2.0 Wastewater

### Effective Funding and Finance Technical Assistance Approaches:

15.1 Insights from New York and New England Environmental Finance Centers

Tess Clark, Syracuse University Environmental Finance Center; Martha Shiels, Chloe Shields, New England Environmental Finance Center at the University of Southern Maine As a historic amount of funding makes its way through state revolving loan programs and other grant opportunities, it's beneficial to reflect on and learn from the role technical assistance (TA) providers can play in funding processes. In this presentation, representatives from both New York and New England "EFCs" will discuss TA case studies on water infrastructure and resilience projects from across New York and New England. The talk will also cover common barriers to funding and finance.

### 9:30 am M 15.2 In

# Modern Investments in Water and Sewer Infrastructure, A Review of Two of the Primary Infrastructure Investment Laws in the Nation with Examples of Their Implementation in New England

Sebastian Amenta, Comprehensive Environmental Inc.; Jillian Jagling, Teno West, West Group Law PLLC The American Rescue Plan Act and the Bi-Partisan Infrastructure Law injected billions of dollars into infrastructure projects throughout the nation. This program will provide a review of ARPA's and BIL's requirements and investments in water and drinking projects in the nation and in New England to date, with specific examples of projects implemented in New England, including lead service line replacement and emerging contaminant projects.

### 10:00 am-10:30 am Networking Coffee Break (Hotel)

### 10:30 am

### Am Financing the Springfield Water and Wastewater Infrastructure Renewal Program

### 15.3 with USEPA's WIFIA Program

Jorianne Jernberg, US Environmental Protection Agency;

Joshua Schimmel, Springfield Water and Sewer Commission

In this session, USEPA will provide an overview of the WIFIA program, describe WIFIA's water infrastructurerelated eligibilities and priorities, discuss the benefits of WIFIA financing, explain how to apply for a WIFIA loan under the program's new rolling submission process, and hear from Springfield Water and Sewer Commission's about their WIFIA loan and experience.

### 11:00 am

15.4

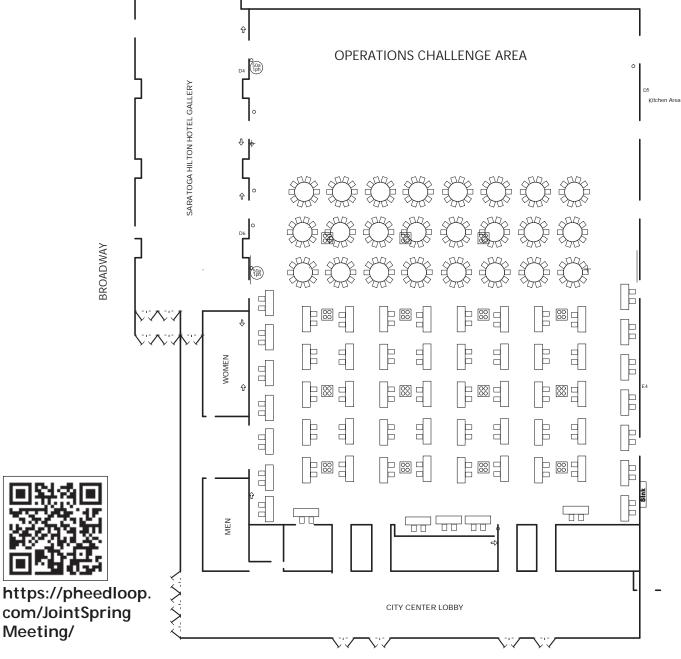
### Infrastructure Funding: Competing with the Big Guys lessica Richard, Wright-Pierce

News about federal infrastructure funding is coming out every day, creating a sense of information overload, especially for small communities and utilities. Federal guidance can be overwhelming, and the cost of completing these grant applications can be in the thousands of dollars with no guarantee of success. This presentation will provide helpful information on how to access technical assistance and position their projects for funding.

MODERATORS	Session 16: Stormwater (Location: Broadway 1) Michael Manning, Ramboll; Joanna Sullivan, VHB
CONTACT HOURS	2.0 Engineer 1.0 Wastewater <sup>‡</sup>
9:00 am	New Bedford Green Infrastructure Master Strategy and Implementation Roadmap $^\ddagger$
16.1	Virginia Roach, Michael Dodson, Nicholas Watkins, CDM Smith; Shawn Syde, City of New Bedford
	Department of Public Infrastructure
	This presentation takes a holistic look at all of New Bedford's major drainage areas, assesses existing and proposed future infrastructure outlined in the city's Long Term Control and Integrated Capital Improvements
	Plan and other city projects, identifies green infrastructure opportunities and sets priority actions for
	implementation. The plan prioritizes Environmental Justice neighborhoods and areas of urban flooding
	where the additional co-benefits from green infrastructure will improve the neighborhoods and create more
	resilient, equitable communities.

9:30 am	Needle in the Haystack? Found It! How to Locate Green Infrastructure's in Dense Urban
16.2	Environments <sup>‡</sup>
	Peter Garvey, Michael Hanley, Dewberry Engineers Inc.
	Finding locations to implement green infrastructure in dense urban environments, to meet the myriad
	necessary and cumulative siting criteria is generally a headache, time-consuming and prone to errors. This
	presentation will describe our automated GIS-based tool which identifies locations that meet all stated
	criteria for GIS implementation. As an added bonus, the tool also estimates the pollutant removal ability of
	selected GI locations.
10.00 and 10.20 and	Networking Coffee Breek (latel)
10:00 am-10:30 am	Networking Coffee Break (Hotel)
10:30 am	Engaging Stakeholders to Identify Sustainable Solutions for Flooding
16.3	in Newport's Prescott Hall Neighborhood
10.5	
	McKenzie Schmitz, Jacobs; Robert Schultz, City of Newport
	Historically the Prescott Hall neighborhood in Newport, RI has experienced significant street flooding
	and private property flooding during large precipitation events. The city has initiated a drainage study to
	investigate the causes of flooding and identify potential mitigation measures. The city worked in parallel with
	key stakeholders to identify a solution that is both effective and feasible. Alternatives were evaluated using
	a 2D hydraulic model and presented at a series of public workshops.
11:00 am	The Why, the What and the How of Stormwater Conveyance Tunnel Design
16.4	Zachary R. Hollenbeck, Howard County Government; Christopher Brooks, McCormick Taylor, Water
	Resources; Edward Cronin, Brown and Caldwell; Christopher Nelsen, Delve Underground
	Recent major flash floods have inundated Historic Ellicott City, Maryland, resulting in loss of life and property
	damage spurring the development of the Safe and Sound Plan that includes a proposed stormwater
	conveyance tunnel. This presentation will cover three aspects of the design process: the Why, the What and
	the How. Specifically, the presenters will address the hydrology and flood level analysis, the diversion and
	tunnel hydraulics, and the aspects geo-structural design of the tunnel.
	Session 17: Equitable Leadership (Location: Broadway 2)
MODERATORS	Kathleen O'Connor, NYSERDA; Katie McKitrick, City of Albany Department of Water and Water Supply
CONTACT HOURS	2.0 Engineer 2.0 Water
	5
9:00 am 17.1.2	Navigating Parallel Career Paths towards Equitable Leadership in Water Industries and Associations
17.1.2	
	Stephen King, Town of Danvers, Massachusetts; Walt A. Walker, Greeley and Hansen
	This interactive hour-long session will feature a moderated four-person panel discussion on ideas, success
	stories, and lessons learned regarding the parallel paths of equitable leadership in the water industry
	(workforce sector) and professional associations (like NYWEA and NEWEA).
10:00 am-10:30 am	Networking Coffee Break (Hotel)
10:30 am	Constructing Confidence in the Field
17.3.4	Sydney Lewis, Tighe & Bond
	As an entry-level female staff engineer, leaning on and learning from fellow coworkers and contractors can
	be essential for a seamless transition into engineering and construction work. This presentation will highlight
	personal experiences from a new engineer learning field work through a variety of construction observation
	assignments and finding support from the engineers, contractors and clients.
11:30 am	Boxed lunch will be provided.

### Exhibitors Floor Plan, Saratoga Springs City Center



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	http://www.maltzsales.com
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G ACTUATION	www.metrovalve.com
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Automation Intelligence	https://ai.motion.com/
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http://www.rightergroup.com
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6:00 am-9:00 am 9:00 am-10:00 am 10:00 am-11:00 am 11:00 am-4:00 pm

7:30 am-9:00 am 8:30 am-4:00 pm 4:30 pm-6:00 pm

### NYWEA-NEWEA Operations Challenge

Wednesday, June 7, 2023

Equipment Set-up *(City Center)/*Breakfast Team and Judges Meeting *(City Center)* Process Control Event Lab Event

### Thursday, June 8, 2023

Continental Breakfast Operations Challenge Competition Operations Challenge Awards Reception and 5S Reception

oin in the excitement! Operators from NYWEA and NEWEA will compete for the right to be champions and go on to compete in the National Competition at WEFTEC in Chicago in October. The first event kicks off Wednesday at 10:00 am. Awards will be presented at the Awards ceremony Thursday evening. Come and see the best wastewater collection and treatment personnel display their skills!



NEWEA's Mass Chaos at WEFTEC



NYWEA's Brown Tide Team in action!

### COLLECTION SYSTEMS

Teams will cut out a section of 8" PVC sewer pipe with water flowing through it. A 4" saddle connection with gaskets will be installed on a pre-drilled piece of pipe on a separate stand. Teams will cut the 8" PVC replacement section with the saddle and install the section with flexible repair couplings. The team will also program a Hach AS950 sampler.

### LAB EVENT

Teams will analyze samples representing a normal treatment process for Total Suspended Solids and Conductivity/Total Dissolved Solids. They will also calculate a solids mass balance across the treatment system to evaluate the removal efficiency of various treatment trains and other data related to solids.

### **PROCESS CONTROL EVENT**

The event will consist of two separate activities: A written test similar to what has been used in the past, and operation of treatment plant simulation software provided by Hydromantis.

### PUMP MAINTENANCE

A pump station team has received high level alarms via telemetry in the problematic service district. The high-level alarms have been cleared and acknowledged several times. The SCADA trends show that the pumps are cycling as programmed but continue to hit the high-level set-point alarm (level sensor activated). It is also confirmed that the station has yet to receive the high, high level back-up float so visual and audible alarms were not activated. The early morning plan was to not only mitigate the alarming issue but perform a full service of the station and it control panel. All the results from the service would then be documented in CMMS.

Upon arrival to the pumping station, it was determined that there was an abnormal amount of build-up just below the level sensor in the neutral corner of the wet well. The wet well pumps and conditioning pump appeared to be operating well but adjustment/direction of the conditioning pump was going to be required. Since a full service was going to be performed anyway as a preventive measure, the impeller, corroded hardware, and pump nozzle were to be replaced along with the pump re-positioning.

### SAFETY EVENT SCENARIO

While a facility crew is working, one of the workers collapses inside a manhole. The coworker is found at the bottom of a (confined space) lift station unconscious. It is suspected that he/she has been overcome with an unknown gas or lack of oxygen due to a worn 4" check valve gasket in the station. The in-plant rescue/repair team is immediately called to the scene. Two members of the team will enter the confined space, rescue the downed worker and repair the check valve.

### Each event will be timed separately and all team members will be required to perform one task.

### 2023 NYWEA/NEWEA 36th Annual Operations Challenge Third Regional Competition

### New York WEA

CHAPTER Brown Tide Jake Miller, Cpt. Nick Barresi Hector Soto Kyle Barresi Rob Jentz

### **Digested Dragons**

Kevin Peterson, Cpt. lan Downing Joseph Halik Victor Estrella Maaz Hafeji Joseph Cappetti, Coach

### New York WEA GENESEE CHAPTER

Genesee Valley Water Recyclers Angelo DiNottia, Cpt. Jeff Wallace Will Monier Rafael Santiago Tyler Richardson Taylor Listowski

### New York WEA

MET CHAPTER Coney Island Sludge Hustlers Robert Ferland Ettore (Ray) Antenucci Robert Ortiz Nicholas Sullivan Michael Orloff

Bowery Bay Coyotes Chris Reyes, Cpt. Anthony Quadrino Michael Prats Paraminder Mander Michael Leone, Alt.

### New York WEA CENTRAL CHAPTER

Watertown Water Bears Seth Foster, Cpt. JR (Richard) Lacey Jay Slate Angel French Bruce Eliopoulos

### New Jersey WEA

Cake Breakers Keith Wagner, Cpt. Kevin Barstow Adam Scheick Matt Priest Jim Knox

### NEWEA

### **RHODE ISLAND**

**Rising Sludg**e Dave Bruno, Cpt.

Shaun Collum Rob Norton Max Maher Courtney Lawa-Savage, Alt. Eddie Davies, Coach

### NEWEA MAINE

Force Maine Rob Pontau, Cpt. Jeff Warden Dan Munsey Matt Szuter Darren Lauletta

### NEWEA MASSACHUSETS

Mass Chaos Scott Urban, Cpt. Roel Figueroa Kelly Olanyk Josh Figueroa Paul Russell

### NEWEA CONNECTICUT

Storm Surge Nick Stevens, Cpt. Kevin Mauricin John McGarty Bradford Vasseur John Kaminski

> Many thanks to Carolyn Steinhauer for her assistance and coordination with these events!

	2023 Operations Challenge Judge List					
EVENT	LAB	COLLECTION	PUMP	SAFETY	PROCESS CONTROL	
Coordinators	Michelle Hess	Joseph Atkins	Kevin McCormick	Steve Reiter	Bill Sedutto	
	Nora Lough	Mike Armes	Alex King	Rick Hartenstein	Bob Wither	
					Alex Buechner	
Judge	Bill Sedutto	Howard Robinson	Dale Grudier	Tony Coppola	Paul Dombrowski	
Judge	John Fortin	Dan O'Sullivan	Larry Brincat	Mike Burkett	Claudia Buchard	
Judge	Chris Mulford	Pat Chesebrough	Chris Mulford	Scott Goodinson	Udayarka Karra	
Judge	Gary Brown	Evan Karsberg	Dan Laflamme	Mike Burke	Alex Buechner	
Judge	Marylee Santoro	Wayne LaVair	Vivian Matkivich	Kim Sandbach		
Judge	Dennis Palumbo	Jody lan	Ryan Harrold	Diana Mendez		
Judge	Jason Nenninger	Erik Albano	Rich Fiedler	Joseph Massaro		
Judge	Nicole LaBoy	Bruce Decker	Eugene Buckley	George Sullivan		
Judge			Erik Coddington	Walter Westhoff		

Overall NYWEA Operations Challenge 2023 Coordinators Overall Coordinators: Bill Grandner and Jason Swain Score Keeping Judges: John Fortin, Bill Sedutto and Joseph Massaro

### **NYWEA-NEWEA Special Events**

### Thursday & Friday

6:15 am	Fun Walk/Run – Village of Saratoga Springs
FREE	No RSVP needed.
	Meet in Lobby near Registration.
	(Questions, contact David Railsback at drailsback@schnabel-eng.com)
7:00 pm-10:00 pm	Retirement Celebration
1	Join us to celebrate Patricia Cerro-Reehil's 36 years of service and dedication to NYWEA!
	The Walt and Whitman Brewing Company, 20 Lake Ave., Saratoga Springs, NY Cash bar and light fare.
	Friday, June 9, 2023
12:00 pm-1:00 pm	Saratoga Spa State Park Tour
	Brook trout habitat restoration tour of Geyser Creek with a focus on stormwater BMPs in the park. See the
	trout habitat/stabilization projects taking place with Trout Unlimited.
	Meet in Hotel Lobby by Registration Desk at 11:45 pm. Sign up at Registration Desk.
12:00 pm-1:00 pm	Skidmore Green Infrastructure Tour
	Tour of Green Infrastructure practices at Skidmore.
	Meet in Hotel Lobby by Registration Desk at 11:45 pm. Sign up at Registration Desk.

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### WEDNESDAY OPENING SESSION & LUNCH

Arcadis Barton & Loguidice Brierley Associates Camden Group Inc. D&B Engineers & Architects EDR GA Fleet Hazen and Sawyer Jacobs Koester Associates Tighe & Bond Victaulic Company, Inc. Woodard & Curran Wright-Pierce

### WELCOME PRESIDENTS' RECEPTION

Brierley Associates D&B Engineers & Architects EDR GA Fleet GHD GP Jager Inc. Greeley and Hansen Koester Associates Larsen Engineers Tighe & Bond USP Technologies Victaulic Company, Inc. Woodard & Curran Wright-Pierce Vaughan Company, Inc

### EXHIBIT HALL COFFEE BREAK

Barton & Loguidice C.T. Male Associates GHD GP Jager Inc. Hazen and Sawyer Koester Associates USP Technologies Vaughan Company, Inc

### THURSDAY

### EXHIBIT HALL COFFEE BREAK

Brierley Associates C.T. Male Associates D&B Engineers & Architects EDR GA FLEET GHD GP Jager Inc. Hazen and Sawyer Industrial Furnace Company Koester Associates USP Technologies Vaughan Company, Inc

### EXHIBIT HALL LUNCH

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### OPERATIONS CHALLENGE & 5S AWARDS

Arcadis Barton & Loguidice CDM Smith D&B Engineers & Architects GA FLEET GHD GP Jager Inc. Jacobs Koester Associates Tighe & Bond USP Technologies Vaughan Company, Inc Victaulic Company, Inc. Woodard & Curran Wright-Pierce

### **FRIDAY**

STORMWATER TOUR EDR Victaulic Company, Inc.

### LANYARDS

AECOM GA Fleet Associates Koester Associates

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		SESSION KEY: OS = Opening Session KI = Keyr	ata Lunchaan

SESSION KEY: OS = Opening Session KL = Keynote Luncheon

# NYWEA & NEWEA Celebrating 85 Years of History Together



There's some history on our "teaming up together" to hold successful joint meetings between NEWEA and NYWEA. Over the years our joint meetings provide for enhanced educational opportunities and more occasions to discuss regional watershed environmental issues.





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Conference Arrangements Comm	ittee Ronald Tiberi
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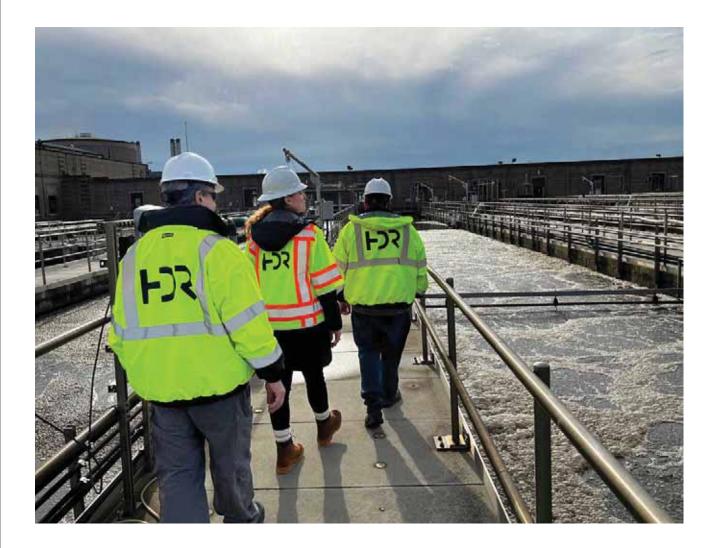
Innovation Council Director	Michael Murphy
I/A OWTS Task Force	Bruce Walton

### Office

Program Director Janice Moran
Communications/PR Coordinator Jordan Gosselin
Office Administrator Heather Howard



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The HDR team extends our best wishes to Patricia. We thank you for your dedicated service to NYWEA and wish you a wonderful retirement!

**F**SS

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### Upcoming Events – Mark Your Calendar! NYWEA 2023 Events

### JUNE

- **Emergency Preparedness & Crisis** 20 Management (In person, 6 hours) The Grill at the Dome 175 Brompton Rd., Tonawanda, NY
- **Climate Change Specialty Conference** 27 The Delta Hotel, Utica, NY
- 29 Mathematics for Water & Wastewater Operators (In person, 6 hours) Saratoga County Fire Training Center 6010 County Farm Rd., Ballston Spa, NY
- Biohazards of Water/Wastewater 29 Work (In person, 6 hours) Wallkill Golf Club, 40 Sands Rd., Middletown, NY

### JULY

- 25 **Fundamentals of Occupational** Chemical Exposure Webinar, Part 1 Virtual
- 27 Fundamentals of Occupational Chemical Exposure Webinar, Part 2 Virtual

### AUGUST

Mathematics for Water & Wastewater 10 Operators (In person, 6 hours) New Rochelle WRRF, 1 LeFevres Lane, New Rochelle, NY

### **SEPTEMBER**

- 13 NYC Watershed Science & Technical Conference Bear Mountain Inn & Conference Center, Tomkins Cove, NY
- 21 Removal, & State of Chemical Industry (In person, 6 hours) Binghamton/Johnson City Joint WWTP 4480 Vestal Rd., Vestal, NY

### **OCTOBER**

- Mathematics for Water & Wastewater 19 Operators (In person, 6 hours) Bergen Point WWTP, West Babylon, NY
- Strategic Energy Management 26 TBD

### **NOVEMBER**

**Chlorine Disinfection Soup to Nuts** 14 TBD

### DECEMBER

ciation

- The Importance of Upfront Project 5 Planning; Leading with Intentional Design Webinar Virtual
- 12 **Biosolids Management Webinar** Virtual

### **FEBRUARY 2024**

96th Annual Meeting Technical 5-7 **Conference & Exhibition** Marriott Marquis, NYC

### **NEWEA 2023 Events**

### ILINE

**NEWEA/RCAP Small Communities** 14 Wastewater Training Conference (6 TCHs) Upper Blackstone Clean Water Millbury, MA

### JULY

Source Water Brewing Competition 26 Mayflower Brewing Company Plymouth, MA

### **SEPTEMBER**

- 13 **CEC/Plant Operations Conference** The Publick House Sturbridge, MA
- **NEWEA Small Communities** 26 Conference Location TBD
- 29 **NEWEA Golf Classic** Derryfield Country Club Manchester, NH

### **OCTOBER**

**NE-NYWEA Risk & Resiliency** 24-25 **Conference & Exhibit** The Stamford Hotel Stamford, CT

### **NOVEMBER**

1-2 NorthEast Residuals & Biosolids Conference, Exhibit and Tour The Venue at Portwalk Place Portsmouth, NH

### JANUARY

21-24 Annual Conference & Exhibit Boston Marriott Copley Place Hotel Boston, MA





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### **NEWEA 2024 Annual Conference & Exhibit** One Water: All for One and One for Water

January 21–24, 2024 Boston Marriott Copley Place Boston, Massachusetts

# Call for Presentations and Papers

### Visit annualconference.newea.org/

abstracts to complete the online abstract submittal form.

Abstract submission deadline June 16, 2023





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- · Low-level radioactive waste;
- Industrial/special wastes;
- Municipal solid waste;
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- Industrial general commodities;
  - ISO tank containers; and
  - Drilling waste (cuttings and water).

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