



NEWEA
WORKING FOR WATER QUALITY

**CONFERENCE
PRE-PROGRAM**



**WATER'S
WORTH IT
LET'S GO
ALL IN.**

New England Water Environment Association Presents:

**NEWEA 2019 Annual
Conference & Exhibit**

January 27–30 | Boston Marriott Copley Place | Boston, Massachusetts



Janine Burke-Wells
NEWEA President



Amy Anderson
NEWEA Program
Committee Chair

Table of Contents

Conference Events	2-4
Technical Sessions:	
Monday	5
Tuesday	12
Wednesday	18
Innovation Pavilion	24
Business Meeting	25
YP Summit	26
Hotel Information	27
Program Presenters	28
Exhibitors	34

Welcome to the 2019 NEWEA Annual Conference!

It's the Year of the Volunteer! This year's theme focused on how all of us, as members of NEWEA, can do more in spreading the word that Water's Worth It! Thank you to everyone who raised your hand. As an organization, we were very successful in "going all in" and we have several sessions at this year's Annual Conference to highlight these efforts.

This premier water quality event and exhibit features 34 technical sessions, two poster sessions that showcase the work of both student and water quality professionals, and two floors of exhibitors featuring the industry's latest products. In keeping with this year's theme, find out about how YOU can help spread the word—check out the Government Affairs session on Monday morning and see how we are conversing with federal, state and local legislators and decision makers, stop into the Public Education session and learn how you can share the message with the next generation, or inquire about joining one of NEWEA's many committees.

Monday is innovation day. We encourage you to visit the professional poster board session on the 4th floor on your way to and from the exhibit hall, attend any number of our technical sessions and roundtable discussions, or stop in at the Innovation Pavilion hosted by the NEWEA Innovation Task Force. The afternoon winds down with the first of two Exhibit Hall receptions.

Tuesday is the day we celebrate the operators—NEWEA Operator Day—including a full program of technical sessions geared towards operators, the Operator Ingenuity technical session on Tuesday morning, the Operator's Reception at noon and countless networking opportunities at the Exhibit Hall Reception in the afternoon.

The final day of the conference features a full day of technical sessions and exhibits, our lunch-time awards ceremony recognizing outstanding efforts in our industry and the passing of the gavel to the 2019 NEWEA President, Raymond "Sonny" Vermette, of the City of Dover, NH. The Awards Luncheon sells out annually, so don't miss out! We hope you take advantage of all the 2019 Annual Conference has to offer and use this occasion to catch up with old acquaintances and cultivate new ones.

We wish to recognize the significant efforts of the Meeting Management Council and members of the Program and Awards Committees who make this conference the place to be every January. Thanks to the members of all the committees who review abstracts, moderate sessions, and provide the technical and subject matter expertise we need to do our jobs better. And big thanks to the NEWEA Office Staff: Mary Barry, Janice Moran, Linda Austin and newest staffer Jordan Gosselin for their energy, professionalism, and patience in planning and coordinating this great event every year!

Janine Burke-Wells, NEWEA President
Amy Anderson, NEWEA Program Committee Chair



New England Water Environment
Association Presents:

Let's Go All In

NEWEA 2019 Annual Conference & Exhibit

January 27–30, 2019
Boston Marriott Copley Place, Boston, MA

Conference Events

Sunday, January 27

Registration (4th Floor).....	Noon–4:00 PM
Exhibit Hall Set-Up	Noon–6:00 PM
New Committee Chair Orientation	10:30–Noon
Young Professionals Summit	10:00 AM–3:00 PM
Executive Committee Meeting	12:30–3:00 PM

Monday, January 28

Registration (4th Floor).....	7:00 AM–6:00 PM
Speakers' Breakfast	7:30–8:30 AM
Coffee and Continental Breakfast (3rd Floor Atrium).....	7:30–9:00 AM
NEWEA Annual Business Meeting	8:00–8:30 AM
Welcome and Opening Remarks: Janine Burke-Wells, NEWEA President/Warwick Sewer Authority, Warwick, RI Presentation and vote on 2019 Slate of NEWEA Officers. <i>See description on page 24</i>	
Technical Sessions 1–6	8:30–10:30 AM
See descriptions beginning on page 6	
Exhibit Hall Grand Opening	10:30 AM
Paul P. Casey, Exhibits Committee Chair; Janine Burke-Wells, NEWEA President Grand Opening will take place at the main entrances of both the 3rd and 4th floor exhibit areas.	
Exhibits (3rd and 4th Floor Exhibit Areas).....	10:30 AM–6:30 PM
Please note that the 3rd and 4th floor exhibit areas are connected by a stairwell in the back of exhibit hall. See page 33 for list of exhibitors (as of 11/08/18).	

Monday, January 28 continued

Opening Session	11:00 AM
Professional Poster Board Displays/Session (4th Floor).....	8:30 AM–4:30 PM
Coordinator: Lauren Hertel, Woodard & Curran	
Session with authors.....	1:30–3:30 PM
Select Society of Sanitary Sludge Shovelers' Lunch	Noon–2:00 PM
by invitation – Charles Tyler, Influent Integrator	
Young Professionals Lounge	7:30–9:00 AM
The YP Committee will be hosting a Young Professionals Lounge Ben Stoddard, Kleinfelder	
Technical Sessions 7–12	2:00–4:30 PM
See descriptions beginning on page 9	
Exhibit Hall Break	3:00–3:30 PM
Exhibit Hall Reception (3rd Floor Exhibit Area).....	4:30–6:30 PM

Tuesday, January 29

Registration (4th Floor).....	7:00 AM–6:00 PM
Speakers' Breakfast	7:30–8:30 AM
NEWEA Presidents' Breakfast	8:00–9:00 AM
by invitation	
Exhibits	8:00 AM–6:00 PM
3rd and 4th Floor Exhibit Areas	
Technical Sessions 13–18	9:00–11:30 AM
See descriptions beginning on page 12	
College Student Poster Board Competition	9:00 AM–3:30 PM
Coordinator: Thomas Groves, NEIWPCC	
Session with authors.....	12:30–2:00 PM
Exhibit Hall Break	10:00–10:30 AM
Operator's Reception	Noon–1:30 PM
Sponsored by: Connecticut Water Pollution Abatement Association Connecticut Water Pollution Control Association Green Mountain Water Environment Association Maine Water Environment Association Massachusetts Water Pollution Control Association Narragansett Water Pollution Control Association New Hampshire Water Pollution Control Association	
Technical Sessions 19–23	1:30–4:00 PM
See descriptions beginning on page 15	
Student Networking Reception	2:30–4:00 PM
Exhibit Hall Break	2:30–3:00 PM
Exhibit Hall Reception (4th Floor Exhibit Area).....	4:00–6:00 PM

Wednesday, January 30

Registration – 4th Floor	7:30 AM–2:00 PM
Speakers' Breakfast	7:30–8:30 AM
Exhibits	8:00 AM–1:00 PM
3rd and 4th Floor Exhibit Areas	
Technical Sessions 24–29	8:30–11:00 AM
See descriptions beginning on page 18	
Exhibit Hall Break	9:30–10:00 AM
NEWEA Awards Ceremony and Lunch (ticket required)	11:00 AM–1:00 PM
Exhibit Area Brunch	11:00 AM–1:00 PM
The exhibit area brunch will be held in both the 3rd and 4th floor exhibit areas.	
Technical Sessions 30–34	1:00–3:00 PM
See descriptions beginning on page 21	
Adjourn	3:00 PM

Sessions 1–6
Monday
8:30–10:30 AM

Session 1

**Public Education:
Greening our
World: Community
Involvement in
Stormwater Quality
Improvements**

Moderators:

Allison McMordie,
Tighe & Bond
Danielle DiRuzza, MWRA

Session 2

**Utility Management 1:
Making Utilities
Resilient**

Moderators:

Jason Lavoie, Kleinfelder
Don Gallucci,
Weston & Sampson

Technical Sessions

**Real-Time, Continuous Monitoring of Green
Infrastructure at Boston's Middle Schools**

Genevieve Ho, OptiRTC
Tatjana Toeldte, OptiRTC

**Approaches for Using Youth Education to Increasing
Stormwater Awareness**

Paul Mathisen, Worcester Polytechnic Institute

**Think Blue Massachusetts—A Statewide Stormwater
Awareness Campaign**

Kerry Reed, City of Framingham, MA/Massachusetts
Statewide Municipal Stormwater Coalition
Robin Craver, Town of Charlton, MA/Massachusetts
Statewide Municipal Stormwater Coalition
Eric Eckl, Water Words That Work, LLC

**Soak Up the Rain: NEWEA's 1st Community Service
Project**

Kate Roosa, Kleinfelder
Marc Weller, Pare Corporation
Sara Churgin, East Rhode Island Conservation District
Ben Stoddard, Kleinfelder

**Disaster Recovery: Response to a Major Fire at a
Water Resource Recovery Facility**

Tom Hazlett, Woodard & Curran
Jeff Kalmes, Town of Billerica, MA

**Smart City...Smart Water: How Newport News is
Leading Virginia's Smart Cities Efforts**

Jessica Hou, Gannett Fleming Engineers and
Architects, Inc
Will Walkup, Black & Veatch

**City of Framingham's Emergency Preparedness, Risk
Management, and Business Continuity Planning**

James Barsanti, City of Framingham, MA
Kate Novick, Gradient Planning
Blake Lukis, City of Framingham, MA
Ashley Dunn, City of Framingham, MA
Stephen Leone, City of Framingham, MA

**Town of Ayer, MA: Resilient Strategies in a Rural
Non-coastal Community**

Jennifer Lachmayr, Arcadis
Mark Wetzel, Town of Ayer, MA

Monday
8:30–10:30 AM

Technical Sessions 1–6

Session 3

Watershed Management: Solutions Without Borders—Data Collection and Modeling for Watershed Management

Moderators:

Jennifer Johnson,
Nitsch Engineering, Inc.
Sara Greenberg, GHD

Lowell Water’s Clean Stream Initiative for the Merrimack River

Greg Coyle, Lowell Regional Wastewater Utility
Tim Devine, Hazen and Sawyer
Steve Chapra, Tufts University

A Watershed Permit to Facilitate Nitrogen Management in Cape Cod’s Pleasant Bay

Michael Giggey, Wright-Pierce
Brian Dudley, MassDEP
Carole Ridley, Ridley Associates

Condensing the Water Budget to Guide Planning Efforts for Connecticut’s Water Management

Rebecca Guihan, CDM Smith
Kathryn Swanson, CDM Smith
Elaine Sistare, Town of Putnam, CT

Regress Me or Not Here AI Comes

Constantine Karos, CDM Smith
Joshua Registe, CDM Smith
Maryanne Taylor, CDM Smith
Ken Zegel, Suffolk County Department of Health Services

There are many challenges facing the six states that make up the New England region. The intention of the Roundtable Session is to allow for discussion of common issues/solutions and to facilitate the exchange of information.

Panelists:

Joseph Haberek, RI DEM
George Hicks, CT DEEP
Brian Kavanah, ME DEP
Susannah King, MassDEP
Shea Miller, VT DEC
Tracy Wood, NH DES

NPDES Permit Renewal—What to Expect and How to Prepare

Michael Schrader, Tighe & Bond
Janet Moonan, Tighe & Bond

Legislative Update: Massachusetts Bill Promoting Climate Change Adaptation, Environmental and Natural Resource Protection, and Investment in Recreational Assets and Opportunity

Steven Torres, West Group Law, PLLC
Jillian Jagling, West Group Law, PLLC
Teno West, West Group Law, PLLC

Session 4

Government Affairs

Moderators:

Robert Fischer, City of
South Burlington, VT
Raymond Willis,
Onsite Engineering

Monday
8:30–10:30 AM

Technical Sessions 1–6

Session 5

Stormwater 1: Not Knowing What You Don’t Know—Finding a Path to a Resilient Solution

Moderators:

Kate Edwards, Arcadis
Patrick Gordon, StormTrap

Evaluation of Street Flooding Solutions in a Highly Transited Urban Area using a Detailed Flow Dynamics 2D Model

Yovanni Catano, Stantec
David Bedoya, Stantec

An Integrated Approach to Resilience - Case Study in Bridgeport, Connecticut

Roni Deitz, Arcadis
Tyler Carson, Arcadis

Humble Hummocks: Designing a “Hedge” against Future Storm Surge

Francis McPartlan, Kleinfelder
David Kaplan, City of Cambridge, MA

City of Medford: 2D Inundation Model and Flood Mitigation Strategies

Kenneth Yu, Kleinfelder
Alicia Hunt, City of Medford, MA

Session 6

CSO/Wet Weather 1: Combined Sewer Overflow and Wet Weather Plannings

Moderators:

Rita Fordiani, Kleinfelder
David Gonclaves,
Mott MacDonald

Wet Weather Preparation the the Massachusetts Water Resources Authority

Stephen Cullen, Massachusetts Water Resources Authority
Charles Ryan, Massachusetts Water Resources Authority

What is in Your Data? Performing Data Analytics to Quantify Seven Years of Sewer Rehabilitation Projects for a Metro Boston Municipality

Ayman Halaseh, CDM Smith

Integrated Planning: Balancing What You are Required to do With What You Must Do

Joseph Laliberte, CDM Smith
Susan Negrelli, The Metropolitan District Commission

The West Lynn Sewer Separation Project

David VanHoven, Stantec
Anthony Marino, Lynn Water & Sewer Commission
Daniel O’Neill, Lynn Water & Sewer Commission

Sessions 7 – 12
Monday
2:00–4:30 PM

Technical Sessions

Session 7 Plant Operations 1: Pushing the Limit on Phosphorus Removal

Moderators:
Tom Hazlett,
Woodard & Curran
Nick Tooker,
Northeastern University

Leveraging Full-Scale Experience and Applied Research for Ultralow TP with Ballasted Sedimentation

Patrick Dunlap, Black & Veatch
Jim Fitzpatrick, Black & Veatch
Will Walkup, Black & Veatch
David Day, City of Danbury, CT

The Power of Partnering: Present and Future Generations of Engineers and Operators Collaborate on Hand-On State Point Clarifier Analysis Training

Susan Guswa, Woodard & Curran
Todd Brown, University of Hartford

Start-up and Optimization of a Tertiary Phosphorus Removal System at Clinton WWTP

Caitlin Hunt, Massachusetts Water Resources Authority
Ethan Wenger, Massachusetts Water Resources Authority

Chemical Precipitation as Primary, Polishing or Back-up Process for Phosphorus Removal

Jurek Patoczka, Mott MacDonald

Exhibit Hall Break
3:00–3:30 PM

Monday
2:00–4:30 PM

Session 8 Collection System 1: I/I Collection Systems

Moderators:
Peter Garvey, Dewberry
Anthony Maressa,
City of Fitchburg

Session 9 Asset Management 1: Optimize your Capital Cost Outputs—What Matters Most?

Moderator:
Dan Capano, Gannett
Fleming Engineers
Shelby Beauchemin,
Woodward & Curran

Exhibit Hall Break
3:00–3:30 PM

Technical Sessions 7–12

Use of LIDAR Scanning and Other Innovative Condition Assessment Strategies to Guide Targeted Rehabilitation of the North Metropolitan Sewer

Benjamin Agrawal, Hazen and Sawyer
Charles Wilson, Hazen and Sawyer
Patricia Mallett, Massachusetts Water Resources Authority
Kathleen McCue Cullen, Massachusetts Water Resources Authority

Private Work, Public Benefit—How Installing Sump Pumps Relieved Neighborhood Sewer Backups

Katelyn Biedron, CDM Smith
Jason Waterbury, The Metropolitan District Commission
Chris Coyle, CDM Smith

Inflow and Infiltration Removal: Three communities, three approaches

Chris Henry, Mott MacDonald

Innovative, Real-Time Data Sharing Methods Create Efficiencies in Sewer Assessments on Nantucket

Daniel Kramer, Hazen and Sawyer
David Gray, Town of Nantucket, MA
Deborah Mahoney, Hazen and Sawyer
Charles Wilson, Hazen and Sawyer

Service Levels and Performance Management—Step 1 in the Asset Management Cycle

Kevin Campanella, Burgess & Niple, Inc.

Pairing Wastewater & Roadway Risk-Based Assessments to Prioritize South Portland, ME's Infrastructure Investments

Rachel Osborn, Woodard & Curran
Peter Lyons, Woodard & Curran
Brad Weeks, City of South Portland, ME

Assessing the Long-Term Financial Sustainability of Water Mains Using Monte-Carlo Simulation

Cris Perez, Kleinfelder

Use of an Asset Management Plan to Meet State Fiscal Sustainability Plan Requirements

Len Sekuler, Arcadis
Jason Waterbury, The Metropolitan District Commission

Monday
2:00–4:30 PM

Technical Sessions 7–12

Session 10

**Young Professionals:
Addressing Technical
and Staffing Changes**

Moderators:

Rachel Watson, Stantec
Vanessa Borkowski,
Stantec

**Improving the Fort Point Channel—A Challenging
IDDE Project in Boston, MA**

Jonnas Jacques, Kleinfelder
Amy Schofield, Boston Water & Sewer Commission
Charlie Jewell, Boston Water and Sewer Commission
David Peterson, Kleinfelder

Infusing Youth in the Water and Wastewater field

Landon Kendricks, Woodard & Curran

Phosphorus Removal at an SBR Plant

Paul Moran, Tighe & Bond
Kellie Rotunno, R2O Consulting

Hydraulic Capacity Assessment in City of Fitchburg

Eliza Morrison, Wright-Pierce
Matthew Corbin, Wright-Pierce

Session 11

**Sustainability 1:
Mitigating the Risk and
Adaptively Responding
to Changing
Conditions—Climates,
Regulations and
Beyond**

Moderators:

Courtney Eaton, Kleinfelder
Wayne Bates, Tighe & Bond

Climate Resilience Guidelines for the City of Boston

Julie Eaton, Weston & Sampson
Steven Roy, Weston & Sampson

**Resilience Strategies for South Boston—Mitigating
Risk through Partnerships**

Kathryn Edwards, Arcadis
Mia Mansfield, City of Boston, MA

**Massachusetts Water Resources Authority's Climate
Change Strategy: A Commitment to Sustainability,
Sea Level Rise Adaptation, and Energy Efficiency**

Hillary Monahan, Massachusetts Water Resources
Authority

**Traditional Engineering Solutions Become the
Cornerstone of Adaptive Management Strategy—
Falmouth Case Study**

Sandra Tripp, GHD
Amy Lowell, Town of Falmouth, MA

Exhibit Hall Break

3:00–3:30 PM

Monday
2:00–4:30 PM

Technical Sessions 7–12

Session 12

**Energy: Tried and True
Projects that will Save
Your Facility Energy
and Money**

Moderators:

Cynthia Castellon,
Tighe & Bond
Tracy Chouinard,
Brown and Caldwell

**Sustainable Wastewater Facilities—A Creative
Approach to Energy Management and Cost Control**

Carina Hart, JK Muir, LLC
David Newman, The ECG Group
Jen Muir, JK Muir, LLC
Kendra McQuilton, The ECG Group
Denis Cuevas, City of Waterbury, CT

**Mixer Upgrades at the South Essex Sewerage
District—A Successful Energy Reduction Project**

David Michelsen, South Essex Sewerage District
Peter Pommersheim, South Essex Sewerage District

The Largest Cost Savings You Don't Know About

Alexandra Rozen, JK Muir, LLC
Chelsea Conlon, JK Muir, LLC

**P3s and the Water-Energy Nexus—Opportunities for
Water Sector Energy Projects**

Bruce Tobey, Pannone Lopes Devereaux & O'Gara LLC
Sean McGinniss, The Horinko Group

Exhibit Hall Break

3:00–3:30 PM

Sessions 13–18
Tuesday
9:00–11:30 AM

Session 13

Asset Management 2: Condition Assessment, A Key to Sound Cost, Level of Service, Risk, Investment, Funding and Asset Decisions

Moderators:

John Jackman, Hoyle, Tanner & Associates
Gary Arthur, Fiberglass Institute

Session 14

Plant Operations 2: WRRF Upgrade and Case Studies

Moderators:

John Adie, New Hampshire DES
Benjamin Levin, Hazen and Sawyer

Exhibit Hall Break
10:00–10:30 AM

Technical Sessions

PANEL 1—GOING FROM CONDITION TO RISK: Predictive and Condition Assessment using Smart Technology
Rob Jordan, Hayes Pump

Collection System Condition and Risk using Asset Management Software and PACP
Ken Conaty, Town of Merrimack, NH

Capital Prediction based on Asset Management
Rod Lovely, Assetic

Q&A with speaker panel

PANEL 2—PUTTING INSPECTION PRACTICES TO WORK:

Inspecting Fiberglass Assets and Emerging Regulations
Gary Arthur, Fiberglass Institute

Case Histories for Fiberglass Odor Control Assets
Dick Pope, Hazen and Sawyer

Case Histories for Other Fiberglass Assets
Randy Nixon, Corrosion Probe

Q&A with speaker panel

Morris Cove Pump Station VFD Rehabilitation
Paul Ketchum, Arcadis
Greg Bazydola, Arcadis
Brian Robinson, Flow Tech, Inc.

From Odors to Ocean Breezes—Tackling Odor Control Through Operational and Capital Improvements
Eric Kelley, Environmental Partners Group, Inc.
Christopher Pratt, City of Newburyport, MA
Robert Rafferty, Environmental Partners Group

WWTP Primary Clarifier/Thickener Upgrade
Frederick McNeill, City of Manchester, NH
Robert Robinson, City of Manchester, NH
David Mercier, Underwood Engineers, Inc.

Hydraulic Improvements and Lessons Learned with Upgrades to Two 75 ft Squiracle Secondary Clarifiers in Chicopee, MA
Jacob Weinrich, Tighe & Bond
Mike Williams, SUEZ

Tuesday
9:00–11:30 AM

Session 15

Utility Management 2: Effective Program Management

Moderators:

Tim Vadney, Wright-Pierce
Scott Firmin, Portland Water District

Session 16

Operator Ingenuity: Wastewater Treatment Facilities throughout New England—A Virtual Tour from an Operator's Perspective

Moderators:

Helen Gordon, Environmental Partners Group
Elena Proakis Ellis, City of Melrose, MA

Exhibit Hall Break
10:00–10:30 AM

Technical Sessions 13–18

Alternative Project Delivery for Water/Wastewater Facility Projects

Hillary Holmes, Stantec
Denise Descheneau, Upper Blackstone WPAD

Evolution of a CMOM Program in Waterbury, CT
Julie Silva, Woodard & Curran

Public Utility Management A.S. and B.S. Degree Programs

Wesley Winterbottom, Gateway Community College
Janet Hayes, Gateway Community College

Program Management at DC Water—Value Added for Successful CIP Implementation

John Wujek, Mott MacDonald

Take a virtual tour of wastewater treatment facilities in all six New England states. Hear from the perspectives of operators across New England as they describe their facilities, provide insight on their operational successes and challenges, and share their experiences amongst other fellow operators:

Kevin Cini, City of Groton, CT
Dana DiScuillo, Town of Narragansett, RI
Robert Fischer, City of South Burlington, VT
Daniel Munsey, Brunswick Sewer District
David St. Armand, City of Manchester, NH
Scott Urban, SUEZ

Tuesday
9:00–11:30 AM

Technical Sessions 13–18

Session 17

**Residuals:
Advances in Biosolids
Planning and
Treatments**

Moderators:
Natalie Sierra,
Brown and Caldwell
Christopher Muller,
Brown and Caldwell

Integrating Sustainability into Biosolids Master Planning

Tracy Chouinard, Brown and Caldwell
Natalie Sierra, Brown and Caldwell
John Willis, Brown and Caldwell

Operations of a Thermal Hydrolysis and Digestion System

Peter Loomis, CDM Smith

Pyrolysis as an Innovative Technology for Microconstituent Removal from Biosolids

John Ross, Brown and Caldwell

New Bedford 3-City Organics to Energy Facility—P3 Planning and Development

Eric Spargimino, CDM Smith
Jamie Ponte, City of New Bedford, MA
Shawn Syde, CDM Smith

Session 18

**Safety:
The Top 10 of Safety
and Security**

Moderators:
David Wright,
Weston & Sampson
David Horowitz,
Tighe & Bond

OSHA Top Ten and How They May Impact Wastewater Treatment Facilities

David Horowitz, Tighe & Bond
Alan Stratton, Tighe & Bond

Bringing Better Security Practices to the Water Sector for a New Normal

Corinne Ketchum, Arcadis
Ryan Joyce, Arcadis

Most Common Fatalities

David Wright, Weston & Sampson

The Top 10!

David Wright, Weston & Sampson

Exhibit Hall Break
10:00–10:30 AM

Sessions 19 – 23
Tuesday
1:30–4:00 PM

Technical Sessions

Session 19

**Plant Operations 3:
WRRF Optimization
Upgrades**

Moderators:
Pamela Westgate,
Kleinfelder
Travis Peaslee,
Lewiston-Auburn WPCA

Effects of Food to Microorganism (F/M) Ratio and Feast-Famine Condition on NO₂ Accumulation During Denitrification

Mehran Andalib, Stantec
Art Umble, Stantec
Amanda Ford, Hazen and Sawyer

Don't Stop Me Now: Implementing MBR Upgrades Without Interrupting Operations

Joshua Jondro, Woodard & Curran
Brent Sutter, Woodard & Curran

Sludge Settleability Improvements at the East End WWTF

Benjamin Levin, Hazen and Sawyer
Deborah Mahoney, Hazen and Sawyer
Paul Rodriguez, Portland Water District

Optimizing Pumping Operations—Maintaining your Pumps will Help, but your Control System Can do Much Better

Frederick Mueller, Tighe & Bond

Session 20

**Collection System 2:
Pumping Resilience**

Moderators:
Kara Johnston, CDM Smith
John Murphy, Stantec

Retrofitting a Pump Station for Improved Performance, O&M, Aesthetics and Odor Control

Erik Osborn, Woodard & Curran
Sean Tarbox, Woodard & Curran

Approaches to Address Resiliency and Reduce Risk at Pump Stations

Amy Sowitcky, Tighe & Bond
Daniel Roop, Tighe & Bond

Westport's Pump Station No. 2 Force Main Replacement Project using HDD: A Case Study

Bryan Thompson, Town of Westport, CT
Abhinav Huli, Haley & Aldrich
Lori Carriero, Tighe & Bond

Improving Pump Station Resilience, City of Warwick, RI

Peter Calderazzo, Dewberry
Earl Bond, Warwick Sewer Authority

Exhibit Hall Break
2:30–3:00 PM

Tuesday
1:30–4:00 PM

Session 21

**Industrial Wastewater:
-- Resurgence of
Industrial Wastewater
Treatment and
Regulatory
Opportunities in 2018**

Moderators:
Sarah White, UniFirst Corp.
Darrell Interest, LabCe

Session 22

**Water Reuse:
Water Reuse—Across
the Country and in your
Own Back Yard**

Moderators:
Nick Ellis,
Hazen and Sawyer
Meredith Zona, Stantec

Exhibit Hall Break
2:30–3:00 PM

Technical Sessions 19–23

**Maybe We Can Do This!! Beneficial Re-Use of a
Nutrient-rich Wastewater**

Michael Curtis, Quantum Biopower

Lessons Learned from Warwick's First Craft Brewery

BettyAnne Rogers, Warwick Sewer Authority
Debbie Hoyes, Arcadis

**Regulations Playing Catchup on Sustainable
Industrial Water Reuse**

Edward Sharood, Woodard & Curran

**An Innovative Approach to Brewery Waste
Treatment at the Alchemist Brewery**

Michael Smith, Weston & Sampson
Chandler Johnson, World Water Works
Robert Trzepacz, Tech Sales Associates
Steve Miller, Alchemist Brewing, LLC

**Coast to Coast: Creative Water Reuse Options
in the USA**

Robert Little, Woodard & Curran

**Save Water, Save Money—The Water Kaizen
Blitz Process**

Hope Matis, Arcadis
Evangelina Belia, Primodal Inc.

**Acing the Aquifer: Field Methods to Help Keep
the Budget Under-Par**

Kathryn Swanson, CDM Smith
Karilyn Heisen, CDM Smith
Robert Schreiber, CDM Smith

**Direct Water Reuse in New England—
Today and Tomorrow**

Bruce Douglas, NSU Water

Tuesday
1:30–4:00 PM

Session 23

**Stormwater 2:
Shades of Green &
Gray (and Beyond)—
Promoting GI & LID in
Design**

Moderators:
Marc Gabriel,
Nitsch Engineering, Inc.
Natalie Pommersheim,
Environmental Partners
Group

Exhibit Hall Break
9:30–10:00 AM

Technical Sessions 19–23

**Massachusetts Watershed-based Tool for Statewide
Watershed Planning**

David Roman, Geosyntec Consultants
Andrea Braga, Geosyntec Consultants
Julia Keay, Geosyntec Consultants
Malcolm Harper, MassDEP

**Underground Stormwater Detention and Rainwater
Harvesting System for Northbrook Park District**

Brett Holmes, StormTrap
Paul Siegfried, Baxter & Woodman Consulting
Engineers

**Greening Springfield: Springfield's Green
Infrastructure Technical Guide**

Lori Kennedy, VHB
Matthew Sokop, City of Springfield, MA
Corrin Meise-Munns, Pioneer Valley Planning
Commission

**Improving Resiliency in an Urban Industrial
and Commercial Area Through Green and Grey
Stormwater Infrastructure Planning and Assessment**

Andrew Walker, Weston & Sampson
Steven Roy, Weston & Sampson

Sessions 24 – 29
Wednesday
8:30–11:00 AM

Technical Sessions

Session 24 **Small Community: Coastal Solutions and Outreach Approaches**

Moderators:

Chris Hayward,
Orenco Systems
Ian Catlow,
Tighe & Bond

Engaging the Public on the Importance of Maintaining Municipal Infrastructure for a Small Community—A Public Outreach Success Story in Funding a Major Wastewater Infrastructure Upgrade

Marc Drainville, GHD
Benn Sherman, Town of Uxbridge, MA

Critical Success Factors to Locating Acceptable Effluent Recharge Sites

Karilyn Heisen, CDM Smith
Michaela Bogosh, CDM Smith
Jeff Colby, Town of Yarmouth, MA

Beginning Anew—A Collection System, Effluent Treatment Facility, and Effluent Disposal System Design from Scratch for a Small Cape Town

Thomas Parece, AECOM
Tess Laffer, AECOM

Fighting Floatables in Small Town Pump Stations

Rachel Schnabel, Fuss & O'Neill

Session 25 **Asset Management 3: Big Data—How to Efficiently Capture Data and Use it Effectively**

Moderators:

Demetrios Vidalis, Boston
Water & Sewer Commission
John Rogers,
City of Framingham, MA

Applying GIS & Business Intelligence Technology and Leveraging Big Data to Support More Effective Utility Management

Jayson Brennen, CDM Smith
Harry Finklea, West Virginia University

Sewer System Asset Data Collection with ESRI Mobile Apps

Peralie Burbank, City of Bangor, ME
Patrick Cowan, City of Bangor, ME

Quantified Efficiency and Enhancements of Day-to-Day Operations Utilizing an Enterprise Geographic Information System—“A Regional Authority’s Perspective”

Ricardo Ceballos, Greater New Haven WPCA
Tony Yates, Langan
Brett Milburn, Langan

Tips and Tricks for Establishing a Thrifty Culvert Asset Management Program

Janet Moonan, Tighe & Bond
Eric Ohanian, Tighe & Bond
Daniel Nason, Town of Sudbury, MA
William O'Rourke, Town of Sudbury, MA

Exhibit Hall Break
9:30–10:00 AM

Wednesday
8:30–11:00 AM

Technical Sessions 24–29

Session 26 **Microconstituents: Assessment and Treatment of Contaminants of Emerging Concern**

Moderators:

Ned Beecher, NEBRA
Laurel Schaidler,
Silent Spring

Assessment of Micro Plastics in Wastewater and Drinking Water

Dounia Elkhatib, University of Rhode Island
Vinka Oyanedel-Craver, University of Rhode Island

First Time Use of Ozofractionation to Treat AFFF Release and Validation by TOP Assay

Allan Horneman, Arcadis
Jeff McDonough, Arcadis
Yousof Aly, Arcadis
Ian Ross, Arcadis

Regulatory, Technical and Communication Challenges for Licensed Environmental Remediation Professionals

Theodoros Toskos, Woodard & Curran

Lessons Learned in PFAS Water and Wastewater Treatment from Half Way Around the World

Marc Drainville, GHD
Anastasia Rudenko, GHD
Ali Farhat, GHD
Chris Hertle, GHD

Session 27 **Stormwater 3: MS4 Compliance— Panel Discussion from all New England Communities**

Moderators:

Zach Henderson,
Woodard & Curran
Kerry Reed, City of
Framingham, M

This two-hour session will include a description of stormwater compliance program innovations from across the New England region. The session will be broken into two consecutive moderated panel discussions with each of the presenters providing insights on needs, challenges, and opportunities during stormwater compliance program delivery associated with their MS4 General Permit. The panel will be moderated with the intention of engaging the audience in active dialogue on innovations and opportunities. Topics and panelists include:

Working Together to Get More for Less

Tom DiPietro – South Burlington, VT’s cooperative efforts with a neighboring Town
Jami Fitch, Town of Scarborough, ME – Building Multi-Town Community Support
Michael Dietz/David Dickson, UCONN – Building Tools for CT communities
Kerry Reed – Statewide Collaboration in MA

Overcoming Challenges in Construction and Post-construction Programs

Angela Blanchette, Scarborough, ME – Lessons Learned (LL) from ME
Kara Falise, Cambridge, MA – LL from MA
Jamie Houle, UNH Stormwater Center– LL from NH
David Wheeler, South Burlington, VT – LL from VT

Exhibit Hall Break
9:30–10:00 AM

Wednesday
8:30–11:00 AM

Session 28

**Sustainability 2:
Considering Innovative
Strategies to Achieve
Improved Efficiency
and Sustainability**

Moderator:

Meredith Zona, Stantec
Robert Montenegro,
Grundfos

Session 29

**Collection System 3:
Rehabilitation Issues**

Moderators:

Scott Lander, Retain-It
David Pavlik,
Town of Lexington, MA

Exhibit Hall Break

9:30–10:00 AM

Technical Sessions 24–29

**Aiming for Envision Platinum in Advanced
Wastewater Treatment Plant Design -- Upper York
Sewage Servicing (UYSS) Water Reclamation Centre
Case Study**

Anastasia Rudenko, GHD
Dianna Senior, GHD
Adam Lachmann, Region Municipality of York

**Achieving Revenue Enhancement and Sustainability
Gains through Utility Efficiency**

Jay Sheehan, Woodard & Curran

**Beat Ultra-Low Phosphorus Targets with Reactive
Filtration: How Marlborough, MA Efficiently Meets
0.07 mg/L**

Nick Janous, Nexom

**Case Study of Blended Blower Technologies
for Optimum Aeration Efficiency**

Paul Petersen, Atlas Copco
Laurel Schaich, CDM Smith

A Penny (Road) Saved is a Lesson (L)earned

Ryan Henley, Weston & Sampson
Scott Dixon, City of Melrose, MA
Elena Proakis Ellis, City of Melrose, MA
John Potts, Weston & Sampson

**Narragansett Bay Commission Rehabilitation
of Large Diameter Brick Sewer with GeoSpray
Geopolymer Mortar**

Scott Naiva, Milliken Infrastructure
Meg Goulet, Narragansett Bay Commission
James Fleming, National Water Main Cleaning

**Beware of Cross Bores!—New NASSCO Guidelines
for Prevention and Detection**

Laurie Perkins, Wright-Pierce

**21st Century Solutions for 19th Century
Sewer Systems**

Tom Perry, Multi Utilities Ventures

Sessions 30 – 34

Wednesday
1:00–3:00 PM

Session 30

**Energy/Residuals:
Resource Recovery—
Maximizing Energy
Generation**

Moderators:

Tom Schwartz,
Woodard & Curran
Eric Spargimino, CDM Smith

Session 31

**CSO/Wet Weather 2:
Green Wet Weather
Solutions**

Moderators:

Steve Perdios, Dewberry
Jason Kreil,
Woodard & Curran

Technical Sessions

**GLSD's Co-Digestion of Food Waste and its Path to
Net Zero Energy Use**

Richard Weare, Greater Lawrence Sanitary District
Ben Mosher, CDM Smith **Next Generation Resource
Recovery: Co-Digestion to Renewable Natural Gas
(RNG) Pipeline Injection at the Des Moines WRF**

Dustin Craig, CDM Smith
Peter Loomis, CDM Smith
Laurel Schaich, CDM Smith

Getting the Most Value from Digester Gas

Jay Kemp, Black & Veatch

FOG to Biodiesel Pilot Facility

Justin Motta, Stantec
Richard Parnas, University of Connecticut

**The Solution to This Pollution is Bioswales—
Greater New Haven's Innovative Approach to CSO
Abatement**

Douglas Brisee, Fuss & O'Neill, Inc.
Erik Mas, Fuss & O'Neill

Green Stormwater Infrastructure for CSO Control

Bernadette Callahan, Stantec

**Analysis of the Implementation of City-Wide Green
Infrastructure Solutions to Address Combined Sewer
Overflow. Case Studies: New York City, Philadelphia,
and Cleveland**

Kathryn DePippo, Mott MacDonald
John Scheri, Mott MacDonald
Kellie Rotunno, R2O Consulting

**Flood Mitigation in the Birthplace of America: The
Cohocksink Storm Flood Relief Project**

Gary Snyder, Mott MacDonald

Wednesday
1:00–3:00 PM

Technical Sessions 30–34

Session 32

**Stormwater 4:
MS4 Compliance—
Building on Progress
Made as We Start a
New Chapter**

Moderators:

Virginia Roach, CDM Smith
Angela Blanchette,
Town of Scarborough, ME

Session 33

**Water For People:
Global Solutions for
Increasing Access to
Safe Water**

Moderators:

Renie Jesanis,
Massachusetts Water
Resources Authority
Tenzin Lama, MassDEP

**Heads or Tails—Where to Start Looking for Sewage
in Your Storm Drains**

Garrett Bergey, SDE, Inc.

RIDOT's Stormwater Program—Tracking Progress

Lauren Caputo, VHB

**Lessons from the Chesapeake Bay—Leveraging
Ecosystem Restoration TMDL Reduction Practices
for Comprehensive Resilient Solutions**

Glenn Muckley, Stantec

Doug Beisch, Stantec

**Boston's IDDE Program—Lessons Learned from 20
Years of Experience**

Amy Schofield, Boston Water and Sewer Commission
Garrett Bergey, SDE, Inc.

**Sustainable Engineering Solutions to Alleviate Water
Scarcity in Saviefe-Deme, Ghana**

Samantha LeValley, University of Massachusetts/
Amherst

Victoria Hennon, University of Massachusetts/Amherst

Michael Andrick, University of Massachusetts/Amherst

Wayne Bates, Tighe & Bond

**Increasing the Water Security of the Island Republic
of Kiribati Through a Multi-Prong Approach**

Anastasia Rudenko, GHD

Phoebe Mack, GHD

Audrey Degnan, GHD

**Ovoid Ceramic Filters Evaluated for Improved Water
Purification in Developing Communities**

Zachary Shepard, University of Rhode Island

Elizabeth Lux, University of Rhode Island

Vinka Oyanedel-Craver, University of Rhode Island

Why are They all So Happy . . . It's in the Water

Rachel Watson, Stantec

Wednesday
1:00–3:00 PM

Technical Sessions 30–34

Session 34

**Collection System 4:
Tidal Issues**

Moderators:

Ryan Wingard,
Wright-Pierce

Kara Keleher,
Weston & Sampson

**Roxbury Canal Sewer Separation—The Boston Water
and Sewer Commission's Continued Commitment
to Environmental Stewardship and Infrastructure
Reliability.**

Michael Carroll, Stantec

Irene McSweeney, Boston Water & Sewer Commission

Daniel Kucharski, Stantec

**Not on My Watch—Using CIPP to Ensure Disaster
Doesn't Strike**

Justin deMello, Woodard & Curran

Paul Costello, City of Quincy, MA

**Identification and Removal of Tidal Intrusion Sources
in Manchester-by-the-Sea's Wastewater Collection
System**

Allison Shivers, Tata & Howard, Inc.

Nantucket Sewers—Our Island Story

Laurie Toscano, Weston & Sampson

David Gray, Town of Nantucket, MA

Andrew Patnode, Weston & Sampson

Tuesday
8:00 AM – 4:00 PM

3rd Floor Atrium



NEWEA/NEWIN Innovation Pavilion

The Water Innovation Pavilion is presented in partnership between New England Water Environment Association (NEWEA) and the New England Water Innovation Network (NEWIN).

Throughout the United States, there are a number of cities that identify themselves as Water-Clusters. Our area of the Northeastern U.S. is more than one city and NEWIN exists to highlight our water-innovation. They represent a water-innovation super-cluster with over 298 companies in the community and throughout New England.

The NEWEA & NEWIN Pavilion is created to drive local innovation in our region, and we are pleased to highlight the leading water-innovators and innovations across multiple segments of the water-sector. This year we are highlighting two areas: Energy and Water Quality (which includes Nutrients and Emerging Contaminants).

NEWEA & NEWIN is working to gather and promote the amazing products and services of the region's leading water-innovations. Come visit the Innovation Pavilion to meet with the innovators and learn about their innovation. Members of The Massachusetts Clean Energy Center (MassCEC), EPA Region 1 and the Water Environment and Research Foundation (WE&RF) will also be in attendance.

MONDAY, JANUARY 28
8:00–8:30 AM

Respectfully Submitted
by the NEWEA
Nominating Committee:
Matt Formica, Chair
Ray Willis
Jim Barsanti
Priscilla Bloomfield
Meg Tabacsko
All nominees have
indicated their
willingness to serve.

Annual Business Meeting

2019 Officer Nominations

By vote of the Nominating Committee, I submit the following nominations in accordance with Article 9.3.1 of the NEWEA Constitution and Bylaws to the Executive Committee, for approval to place the state of officers before the membership at the NEWEA Annual Business Meeting on January 28, 2019:

- Vice President – Virgil Lloyd
- Treasurer – Clayton “Mac” Richardson
- Council Director – Meeting Management – Katelyn Biedron
- Council Director – Treatment, Sys Operations, and Management – Philip Forzley
- WEF Delegate – James Barsanti
- Maine Director – Jeffrey McBurnie
- New Hampshire Director – Steve Clifton

In accordance with the provisions of Article 9.3.2 of the NEWEA Constitution & Bylaws, these Officers will advance to the following positions:

- President – Raymond Vermette
- President-Elect – Jennifer Lachmayr
- Past President – Janine Burke-Wells

The remaining incumbents are fulfilling unexpired terms:

- WEF Delegate – Fred McNeill (through WEFTEC 2019)
- WEF Delegate – Matthew Formica (through WEFTEC 2020)
- WEF Delegate – Susan Guswa (through WEFTEC 2021)
- Council Director – Collections Systems and Water Resources – John Digiacomio (3rd year)
- Council Director – Communication – Meg Tabacsko (2nd year)
- Council Director – Outreach – Justin Skelly (2nd year)
- Massachusetts Director – Justin deMello (3rd year)
- Rhode Island State Director – Scott Goodinson (2nd year)
- Vermont State Director – Christopher Robinson (2nd year)

Treasurer Report—2018 Balance Sheet

Adjourn—Janine-Burke Wells, NEWEA President

Young Professionals Summit

SUNDAY, JANUARY 27
10:00 AM–3:00 PM

*This event is intended for professionals who have less than five years of experience in the industry and are younger than 35 years old

NEWEA and NEWWA are teaming up to host the annual Young Professionals (YP) Summit*. The YP Summit will bring together Young Professionals in the water and wastewater industry to learn from industry leaders and network with peers from across New England. The program will focus on advanced leadership and technical skills that will help YPs develop into industry leaders.

Program Highlights

- 80+ Young Professionals in the water and wastewater industries from all over New England
- Advanced leadership, career and technical skills
- Panel Discussion with Elected Government Officials
- Networking with fellow Young Professionals, mid-level “career expert” guests, and NEWEA and NEWWA executives
- Food and beverages included

For more information or questions contact:
Michaela Bogosh, Chair, Young Professionals Summit Committee, email: bogoshml@cdmsmith.com

Hotel Information

Hotel and Room Reservation Information

Boston Marriott Copley Place Hotel
110 Huntington Avenue
Boston, MA 02116
617-236-5800

Accommodations and Rates:
SINGLE—\$204 DOUBLE—\$224

For Reservations, call the Marriott at 617-236-5800 or 1-877-901-2079 (worldwide reservations). Please refer to the New England Water Environment Association to receive the group rate.

Reservations may also be made online at:
<https://aws.passkey.com/e/49596901>

Registration Deadline is Friday, December 28.

Check-out time is Noon
Guest rooms will be available after 4:00 PM.

All rooms subject to 9.7% tax (subject to change).

Reservations must be made before **Friday, December 28** to ensure availability of accommodations and the special group rate.



Presenters

PRESENTER	AFFILIATION	SESSION NO.
Benjamin Agrawal	Hazen and Sawyer	8
Yousof Aly	Arcadis	26
Mehran Andalib	Stantec	19, 33
Michael Andrick	University of Massachusetts/Amherst	33
Gary Arthur	Fiberglass Institute	13
James Barsanti	Framingham Public Works	2
Wayne Bates	Tighe & Bond	33
Greg Bazydola	Arcadis	14
David Bedoya	Stantec	5
Doug Beisch	Stantec	32
Evangelina Belia	Primodal Inc.	22
Garrett Bergey	SDE, Inc.	32
Katelyn Biedron	CDM Smith	8
Angela Blanchette	Town of Scarborough, ME	27
Michaela Bogosh	CDM Smith	24
Earl Bond	Warwick Sewer Authority	20
Andrea Braga	Geosyntec Consultants	23
Jayson Brennen	CDM Smith	25
Douglas Brisee	Fuss & O'Neill, Inc.	31
Todd Brown	University of Hartford	7
Peralie Burbank	City of Bangor, ME	25
Peter Calderazzo	Dewberry	20
Bernadette Callahan	Stantec	31
Kevin Campanella	Burgess & Niple, Inc.	9
Lauren Caputo	VHB	32
Lori Carriero	Tighe & Bond	20
Michael Carroll	Stantec	34
Tyler Carson	Arcadis	5
Cynthia Castellon	Tighe & Bond	12
Yovanni Catano	Stantec	5
Ricardo Ceballos	Greater New Haven WPCA	25
Steve Chapra	Tufts University	3
Tracy Chouinard	Brown and Caldwell	12, 17
Sara Churgin	East Rhode Island Conservation District	1
Kevin Cini	City of Groton, CT	16
Jeff Colby	Town of Yarmouth, MA	24
Ken Conaty	Town of Merrimack, NH	13
Chelsea Conlon	JKMuir, LLC	12
Matthew Corbin	Wright-Pierce	10
Paul Costello	City of Quincy, MA	34
Patrick Cowan	City of Bangor, ME	25
Chris Coyle	CDM Smith	8
Greg Coyle	Lowell Regional Wastewater Utility	3
Dustin Craig	CDM Smith	30

PRESENTER	AFFILIATION	SESSION NO.
Robin Craver	Town of Charlton, MA/Massachusetts Statewide Municipal Stormwater Coalition	1
Denis Cuevas	City of Waterbury, CT	12
Stephen Cullen	Massachusetts Water Resources Authority	6
Michael Curtis	Quantum Biopower	21
David Day	City of Danbury, CT	7
Audrey Degnan	GHD	33
Roni Deitz	Arcadis	5
Justin deMello	Woodard & Curran	34
Kathryn DePippo	Mott MacDonald	31
Denise Descheneau	Upper Blackstone WPAD	15
Tim Devine	Hazen and Sawyer	3
David Dickson	University of Connecticut	27
Michael Dietz	University of Connecticut	27
Tom DiPietro	City of South Burlington, VT	27
Dana DiScullo	Town of Narragansett, RI	16
Scott Dixon	City of Melrose, MA	29
Bruce Douglas	Natural Systems Utilities	22
Marc Drainville	GHD	24, 26
Brian Dudley	MassDEP	3
Patrick Dunlap	Black & Veatch	7
Ashley Dunn	City of Framingham, MA	2
Julie Eaton	Weston & Sampson	11
Eric Eckl	Water Words That Work, LLC	1
Kathryn Edwards	Arcadis	11
Dounia Elkhatib	University of Rhode Island	26
Kara Falise	City of Cambridge, MA	27
Ali Farhat	GHD	26
Harry Finklea	West Virginia University	25
Scott Firmin	Portland Water District	19
Robert Fischer	City of South Burlington, VT	16
Jami Fitch	Town of Scarborough, ME	27
Jim Fitzpatrick	Black & Veatch	7
James Fleming	National Water Main Cleaning	29
Amanda Ford	Hazen and Sawyer	19
Michael Giggey	Wright-Pierce	3
Meg Goulet	Narragansett Bay Commission	29
David Gray	Town of Nantucket, MA	8, 34
Rebecca Guihan	CDM Smith	3
Susan Guswa	Woodard & Curran	7
Ayman Halaseh	CDM Smith	6
Joseph Haberek	RI DEM	4
Malcolm Harper	MassDEP	23
Carina Hart	JKMuir, LLC	12
Janet Hayes	Gateway Community College	15
Tom Hazlett	Woodard & Curran	2
Karilyn Heisen	CDM Smith	24
Ryan Henley	Weston & Sampson	29

PRESENTER	AFFILIATION	SESSION NO.
Victoria Hennon.....	University of Massachusetts/Amherst.....	33
Chris Henry.....	Mott MacDonald.....	8
Chris Hertle.....	GHD.....	26
George Hicks.....	CT DEEP.....	4
Genevieve Ho.....	OptiRTC.....	1
Brett Holmes.....	StormTrap.....	23
Hillary Holmes.....	Stantec.....	15
Allan Horneman.....	Arcadis.....	26
David Horowitz.....	Tighe & Bond.....	18
Jessica Hou.....	Gannett Fleming Engineers and Architects, Inc.....	2
Jamie Houle.....	University of New Hampshire Stormwater Center.....	27
Debbie Hoyes.....	Arcadis.....	21
Abhinav Huli.....	Haley & Aldrich.....	20
Alicia Hunt.....	City of Medford, MA.....	5
Caitlin Hunt.....	Massachusetts Water Resources Authority.....	7
Jonnas Jacques.....	Kleinfelder.....	10
Jillian Jagling.....	West Group Law, PLLC.....	4
Nick Janous.....	Nexom.....	28
Charlie Jewell.....	Boston Water and Sewer Commission.....	10
Chandler Johnson.....	World Water Works.....	21
Joshua Jondro.....	Woodard & Curran.....	19
Rob Jordan.....	Hayes Pump.....	13
Ryan Joyce.....	Arcadis.....	18
Jeff Kalmes.....	Town of Billerica, MA.....	2
David Kaplan.....	City of Cambridge, MA.....	5
Constantine Karos.....	CDM Smith.....	3
Brian Kavanah.....	ME DEP.....	4
Julia Keay.....	Geosyntec Consultants.....	23
Eric Kelley.....	Environmental Partners Group.....	14
Jay Kemp.....	Black & Veatch.....	30
Landon Kendricks.....	Woodard & Curran.....	10
Lori Kennedy.....	VHB.....	23
Corinne Ketchum.....	Arcadis.....	18
Paul Ketchum.....	Arcadis.....	14
Susannah King.....	MassDEP.....	4
Daniel Kramer.....	Hazen and Sawyer.....	8
Daniel Kucharski.....	Stantec.....	34
Adam Lachmann.....	Region Municipality of York.....	28
Jennifer Lachmayr.....	Arcadis.....	2
Tess Laffer.....	AECOM.....	24
Joseph Laliberte.....	CDM Smith.....	6
Stephen Leone.....	City of Framingham, MA.....	2
Samantha LeValley.....	University of Massachusetts/Amherst.....	33
Benjamin Levin.....	Hazen and Sawyer.....	19
Robert Little.....	Woodard & Curran.....	22
Peter Loomis.....	CDM Smith.....	17, 30
Rod Lovely.....	Assetic.....	13
Amy Lowell.....	Town of Falmouth, MA.....	11

PRESENTER	AFFILIATION	SESSION NO.
Blake Lukis.....	City of Framingham, MA.....	2
Elizabeth Lux.....	University of Rhode Island.....	33
Peter Lyons.....	Woodard & Curran.....	9
Phoebe Mack.....	GHD.....	33
Deborah Mahoney.....	Hazen and Sawyer.....	8, 19
Patricia Mallett.....	Massachusetts Water Resources Authority.....	8
Mia Mansfield.....	City of Boston, MA.....	11
Anthony Marino.....	Lynn Water & Sewer Commission.....	6
Erik Mas.....	Fuss & O'Neill.....	31
Paul Mathisen.....	Worcester Polytechnic Institute.....	1
Hope Matis.....	Arcadis.....	22
Jeff McDonough.....	Arcadis.....	26
Sean McGinniss.....	The Horinko Group.....	12
Frederick McNeill.....	City of Manchester, NH.....	14
Francis McPartlan.....	Kleinfelder.....	5
Kendra McQuilton.....	The ECG Group.....	12
Irene McSweeney.....	Boston Water and Sewer Commission.....	34
Kathleen McCue Cullen.....	Massachusetts Water Resources Authority.....	8
Corrin Meise-Munns.....	Pioneer Valley Planning Commissio.....	23
David Mercier.....	Underwood Engineers, Inc.....	14
David Michelsen.....	South Essex Sewerage District.....	12
Brett Milburn.....	Langan.....	25
Shea Miller.....	VT DEC.....	4
Steve Miller.....	Alchemist Brewing, LLC.....	21
Hillary Monahan.....	Massachusetts Water Resources Authority.....	11
Janet Moonan.....	Tighe & Bond.....	4, 25
Paul Moran.....	Tighe & Bond.....	10
Eliza Morrison.....	Wright-Pierce.....	10
Ben Mosher.....	CDM Smith.....	30
Justin Motta.....	Stantec.....	30
Glenn Muckley.....	Stantec.....	32
Frederick Mueller.....	Tighe & Bond.....	19
Jen Muir.....	JKMuir, LLC.....	12
Daniel Munsey.....	Brunswick Sewer District.....	16
Scott Naiva.....	Milliken Infrastructure.....	29
Daniel Nason.....	Town of Sudbury, MA.....	25
Susan Negrelli.....	The Metropolitan District Commission.....	6
David Newman.....	The ECG Group.....	12
Randy Nixon.....	Corrosion Probe.....	13
Kate Novick.....	Gradient Planning.....	2
Germana Nunes.....	Black & Veatch Canada.....	28
Daniel O'Neill.....	Lynn Water & Sewer Commission.....	6
William O'Rourke.....	Town of Sudbury, MA.....	25
Eric Ohanian.....	Tighe & Bond.....	25
Erik Osborn.....	Woodard & Curran.....	20
Rachel Osborn.....	Woodard & Curran.....	9
Vinka Oyanedel-Craver.....	University of Rhode Island.....	26, 33
Thomas Parece.....	AECOM.....	24

PRESENTER	AFFILIATION	SESSION NO.
Richard Parnas	University of Connecticut	30
Andrew Patnode	Weston & Sampson	34
Jurek Patoczka	Mott MacDonald	7
Cris Perez	Kleinfelder	9
Tom Perry	Multi Utilities Venture	29
Laurie Perkins	Wright-Pierce	29
Paul Petersen	Atlas Copco	28
David Peterson	Kleinfelder	10
Peter Pommersheim	South Essex Sewerage District	12
Jamie Ponte	City of New Bedford, MA	17
Dick Pope	Hazen and Sawyer	13
John Potts	Weston & Sampson	29
Christopher Pratt	City of Newburyport, MA	14
Elena Proakis Ellis	City of Melrose, MA	29
Robert Rafferty	Environmental Partners Group	14
Kerry Reed	City of Framingham, MA/Massachusetts Statewide Municipal Stormwater Coalition	1, 27
Joshua Registe	CDM Smith	3
Carole Ridley	Ridley Associates	3
Brian Robinson	Flow Tech, Inc.	14
Robert Robinson	City of Manchester, NH	14
Paul Rodriguez	Portland Water District	19
BettyAnne Rogers	Warwick Sewer Authority	21
David Roman	Geosyntec Consultants	23
Daniel Roop	Tighe & Bond	20
Kate Roosa	Kleinfelder	1
Ian Ross	Arcadis	26
John Ross	Brown and Caldwell	17
Kellie Rotunno	R2O Consulting	10, 31
Steven Roy	Weston & Sampson	11, 23
Alexandra Rozen	JKMuir, LLC	12
Anastasia Rudenko	GHD	26, 28, 33
Charles Ryan	Massachusetts Water Resources Authority	6
Laurel Schaich	CDM Smith	28, 30
John Scheri	Mott MacDonald	31
Amy Schofield	Boston Water and Sewer Commission	10, 32
Rachel Schnabel	Fuss & O'Neill	24
Michael Schrader	Tighe & Bond	4
Robert Schreiber	CDM Smith	22
Len Sekuler	Arcadis	9
Dianna Senior	GHD	28
Edward Sharood	Woodard & Curran	21
Jay Sheehan	Woodard & Curran	28
Zachary Shepard	University of Rhode Island	33
Benn Sherman	Town of Uxbridge, MA	24
Allison Shivers	Tata & Howard, Inc.	34
Paul Siegfried	Baxter & Woodman Consulting Engineers	23
Natalie Sierra	Brown and Caldwell	17

PRESENTER	AFFILIATION	SESSION NO.
Julie Silva	Woodard & Curran	15
Elaine Sistare	Town of Putnam, CT	3
Michael Smith	Weston & Sampson	21
Gary Snyder	Mott MacDonald	31
Matthew Sokop	City of Springfield, MA	23
Amy Sowitcky	Tighe & Bond	20
Eric Spargimino	CDM Smith	17
David St. Armand	City of Manchester, NH	16
Ben Stoddard	Kleinfelder	1
Alan Stratton	Tighe & Bond	18
Brent Sutter	Woodard & Curran	19
Kathryn Swanton	CDM Smith	3, 22
Shawn Syde	CDM Smith	17
Sean Tarbox	Woodard & Curran	20
Maryanne Taylor	CDM Smith	3
Bryan Thompson	Town of Westport, CT	20
Bruce Tobey	Pannone Lopes Devereaux & O'Gara LLC	12
Tatjana Toeldte	OptiRTC	1
Steven Torres	West Group Law, PLLC	4
Laurie Toscano	Weston & Sampson	34
Theodoros Toskos	Woodard & Curran	26
Sandra Tripp	GHD	11
Robert Trzepacz	Tech Sales Associates	21
Art Umble	Stantec	19
Scott Urban	SUEZ	16
David VanHoven	Stantec	6
Andrew Walker	Weston & Sampson	23
Will Walkup	Black & Veatch	2, 7
Jason Waterbury	The Metropolitan District Commission	8, 9
Rachel Watson	Stantec	33
Richard Weare	Greater Lawrence Sanitary District	30
Brad Weeks	City of South Portland, ME	9
Jacob Weinrich	Tighe & Bond	14
Marc Weller	Pare Corporation	1
Ethan Wenger	Massachusetts Water Resources Authority	7
Teno West	West Group Law, PLLC	4
Mark Wetzel	Town of Ayer, MA	2
David Wheeler	City of South Burlington, VT	27
Mike Williams	SUEZ	14
John Willis	Brown and Caldwell	17
Charles Wilson	Hazen and Sawyer	8
Wesley Winterbottom	Gateway Community College	15
Tracy Wood	NH DES	4
David Wright	Weston & Sampson	18
John Wujek	Mott MacDonald	15
Tony Yates	Langan	25
Kenneth Yu	Kleinfelder	5
Ken Zegel	Suffolk County Department of Health Services	3

Exhibitors

ABBA Pump Parts & Service
ABEL Pumps
ADS Environmental Services
Advanced Drainage Systems, Inc.
Airvac - a brand of Aqseptence Group
AP/M CentriPipe
Aqua Solutions, Inc.
Aries Industries Inc
Asahi/America, Inc.
Associated Electro-Mechanics, Inc.
Atlantic Fluid Technologies, Inc.
BAU Hopkins
BDP Industries
Biowaste Pyrolysis Solutions, LLC
Blake Equipment Co.
BMC Corp.
BNC Insurance Agency
Boyson and Associates, Inc.
Carl Lueders & Company
Carlsen Systems
Casella Organics
CN Wood
Coyne Chemical Environmental Services
Cretex Specialty Products
CSI Controls
CSL Services
CUES, Inc.
David F Sullivan & Assoc., Inc
Denali Water Solutions
Diversified Infrastructure Services, Inc.
DN Tanks
Duke's Root Control
Duperon Corp.
Eastern Pipe Service LLC
ElectroScan, Inc / Nivelco, USA / Blue
Ribbon Corporation
EMS New England

EOSI
EST Associates
Evoqua Water Technologies
F. R. Mahony & Associates, Inc.
F.W. WEBB Co. - Commercial & Ind
Pump Div.
F.W. WEBB Co. - Process Controls
Division
Flottweg Separation Technology
Flow Assessment Services LLC
FLOW TECH INC
FlowWorks, Inc.
Ford Hall Company
G&G Enterprises
G.A. Fleet
Gabriel Novac & Associates
Glasco uv / Hidrogeron
Green Mountain Pipeline Services
Grignard Company LLC
Groth
Grundfos Water Utility, Inc
Hach Company
HammerHead Trenchless Equipment
Hayes Pump, Inc.
Hazen and Sawyer
Hiller Separation & Process /
Netzsch
Hobas Pipe USA
Holland Company, Inc.
IDEXX Water
Innovyze
ITpipes
J&R Sales and Service, Inc.
J.F. McDermott Corporation
JWB Company / Hach Flow Group
Kemira
Kubota
LandTech Consultants Inc.

LG Sonic
LLumin, Inc
LMK Technologies
Lystek International, Inc.
Maltz Sales Company
Mechanical Solutions Inc.
Milliken Infrastructure Solutions
Motor Protection Electronics / Opti
Float/Cox Research / Toshiba Magnetic
Flowmeters
National Filter Media
National Water Main Cleaning Co.
New England Environmental Equipment
NEWEA
Novozymes
Oakson, Inc.
Ober-Read & Associates
Orenco Systems Inc.A97
P&H Senesac, Inc.
Performance Chemicals, LLC
Philadelphia Mixers / Verder
POND Technical
Primex Controls
Pump Systems, Inc.
Pure Technologies U.S. Inc.
QED Environmental Systems, Inc.
R.H. White Construction Co., Inc.
RACO Manufacturing & Engineering Co /
Pribusin Inc. / Autrol America
Rain for Rent
RCAP Solutions, Inc.
REA resource recovery systems.
Rezatec
Rockwell Automation
Russell Resources, Inc.
Saf-T-Flo / Schreiber
Scavin Equipment Co. LLC
Seepex Inc.

Shea Concrete
SmartCover Systems
SNF Polydyne
Spencer Turbine Co.
Spire Metering Technology
Sprayroq, Inc.
Stacey DePasquale Engineering, Inc.
StormTank
StormTrap
SUEZ
Sullivan Associates/RITEC
Synagro Northeast, LLC
Technology Sales Associates, Inc.
Ted Berry Company
The MAHER Corporation
Thermal Process Systems
Titus Industrial Group Inc
TruGrit Traction Inc.
Trumbull Industries, Inc.
Underground Inspection
Technologies
Unison Solutions
United Concrete Products, Inc.
United Rentals Fluid Solutions
USABUEBOOK
USP Technologies
VersaFlex/Raven
Walker Wellington LLC
Wescor Associates, Inc.
WESTECH
WhiteWater, Inc.
Williamson Pump & Motor
Worcester Polytechnic Institute
Xylem Dewatering Solutions Inc -
Flygt Pumps
Xylem Dewatering Solutions Inc -
Godwin Pumps
ZCL | Xerxes