NYWEA Spring Meeting 2025 - DRAFT PROGRAM

Monday, June 2nd, 2025

SESSION 1: Optimizing our Collection System Infrastructure – ROOM ASSIGN. TBD

MODERATORS: TBD

Water: **TBD** Wastewater: **TBD** Engineer: **TBD**

1:30 PM**: Submersible Pump Station Design**
This presentation will cover submersible pump station design recommendations. We will review and explain the 6 adverse hydraulic effects that result from poor station design. In addition, we will display and discuss Flygt's standard design recommendations for both Centrifugal and Axial flow stations.
Ian Belczyk, *Xylem* **ian.belczyk@xylem.com**

2:00 PM: **Keep on Pumping! How to Bring Life Back to Aging Pumping Stations**
Rehabilitating and improving existing pumping stations are an opportunity to transform an aging asset that may be an operational and maintenance burden into a robust and resilient component of the water system that can be relied upon to deliver safe and secure services. We will discuss what goes into evaluating the performance of pumps, including improving efficiency, reducing operating and maintenance costs and improving the reliability of performance, new code requirements and electrical upgrades.
Magdalena Gasior, *TYLin* magdalena.gasior@tylin.com

BREAK: 2:30 PM – 3:30 PM

3:30 PM: **Reducing Clogging and Increasing Centrifugal Pump's Mean Time Between Failure (MTBF)**
Current wastewater, with the prevalence of flushable wipes, is more and more challenging to keep centrifugal pumps, the most used machine in a wastewater collection and treatment systems, operational for long periods of time. The goal of this discussion is to provide operators of pumps and engineers designing pump applications with some generic industry information that will help them keep pumps operating with fewer clogs and increase the Mean Time Between Failure (MTBF).
Ed Dunn, *Trillium Pumps USA* **ed.dunn@trilliumflow.com**

4:00 PM: **A CFD Model for a Cascaded Vortex Drop Structure System in Two-Phase Combined Sewer Overflow**
Vortex drop structures facilitate flow management in combined storm and sewer systems, addressing significant elevation changes through energy dissipation, helical flow, and hydraulic jumps. A 3D CFD model using Flow-3D HYDRO was created to simulate a full-sized structure for a 70-foot drop conveying 200 cfs. This model successfully optimized air flow predictions for ventilation design, leading to the construction of two cascaded units along the Interstate 5 corridor in Portland, Oregon.
Ahintha Kandamby, *WSP* Ahintha.Kandamby@wsp.com

SESSION 2: Ethics – ROOM ASSIGN. TBD

MODERATORS: TBD

Water: **TBD** Wastewater: **TBD** Engineer: **TBD**

1:30 PM (1HR)**: Tornado Warning: Ethics for the Public Works Professional**
Public employees now more than ever are under the proverbial microscope. The public is watching, and they demand that public servants hold themselves to a high standard. This session will address many of the most frequently asked questions related to municipal ethics. Topics will include: Gifts; Family Members Working and Serving together in the Same Municipality; Use of Electronic Communications and Municipal Equipment.
John Mancini, *NYS Conference of Mayors (NYCOM)* **jmancini@nycom.org**

BREAK: 2:30 PM – 3:30 PM

3:30 PM (1HR): **MOBILE SESSION – TBD**

SESSION 3: A Programmatic Approach to Upgrades – ROOM ASSIGN. TBD

MODERATORS: TBD

Water: **TBD** Wastewater: **TBD** Engineer: **TBD**

1:30 PM**: Maximize ROI with WRRF Program Management**
In 2015, the Monroe County Department of Environmental Services (MCDES) recognized the need for a Capital Improvements Program at its Frank E. Van Lare WRRF (FEV) to improve compliance, flexibility, and resiliency. MCDES and Arcadis developed improvements to FEV's aeration system, secondary clarifiers, and electrical infrastructure, relying on bench-scale testing to optimize full-scale implementation. This presentation discusses how this approach-built confidence in full scale improvements, maximized MCDES' return on investment, and value for ratepayers.
Matt Czora, *Arcadis* **matt.czora@arcadis.com; Corky Kelsey,** *Monroe County DES* **kkelsey@monroecounty.gov**

2:00 PM: **Optimizing Clarifiers: A Tale of Three Cities**
It's well-known that clarifiers are often the weakest link in the wastewater treatment process. These "Three Cities" either had clarifiers that were left over from the good old days …. or had problems with some "new ideas" …. that didn't work for them. This paper will discuss the design limitations that each of them faced …. and what has been done to overcome these shortcomings.
John Esler, *Clarifier Performance Evaluations, Inc.* **eslercpe@aol.com;**
Stacy Passaro, *Passaro Engineering* **SPassaro@PassaroEngineering.com;**
Corky Kelsey, *Monroe County DES* **kkelsey@monroecounty.gov**

BREAK: 2:30 PM – 3:30 PM

3:30 PM: **Enhancing Aeration at a WWTP: Process Modeling and System Redesign**
This project focuses on enhancing aeration in four tanks at a wastewater facility through the installation of new air piping and diffusers. The process begins with dewatering and cleaning the tanks, followed by the demolition of existing equipment. Dynamic biological process modeling informs the design, ensuring optimal airflow and efficiency. A comprehensive bypass pumping strategy permits uninterrupted operations during installation, demonstrating effective approaches that can be applied to other similar facilities undergoing infrastructure upgrades.
Jessica Ping, *TYLin* **jing.ping@tylin.com**

4:00 PM: **CCSD Consolidation Program - Innovative and Collaborative Program Management**
The Chemung County Sewer District is in the process of consolidating treatment plants to address strict SPDES effluent limits, aging infrastructure, and stormwater capture. The new Regional Treatment Facility will use innovative side stream tertiary treatment for nitrogen removal. The $275 million program, funded through grants and low/zero-interest loans, incorporates value engineering to ensure affordability for its hardship community while protecting the watershed and improving infrastructure efficiency.
Andrew Kuzio, *Arcadis* **andrew.kuzio@arcadis.com;**
Ali Rennie, *Chemung County Sewer Districts* **abrennie@chemungcountyny.gov**

Tuesday, June 3rd, 2025

SESSION 4: PFAS – ROOM ASSIGN. TBD

MODERATORS: TBD

Water: **TBD** Wastewater: **TBD** Engineer: **TBD**

9:00 AM**: Bio-Scru Dryer Optimizes Dryer Capacity And Performance For PFAS Pretreatment Prior to Pyrolysis/Gasification Or Volume Reduction**
Incorporating dryers into biosolids processing operations at wastewater-treatment facilities, for Class A & Volume reduction or Pretreatment to Pyrolysis or Gasification for PFAS destruction, must consider the coordination between existing operating schedules and processing rates as well as the balance between capacity and capital cost. The use of Gasification generates the heat energy for Drying while destroying microcontaminants including PFAS/PFOS, micro plastics and pharma compounds while qualifying for Carbon Credits, State and Federal Grants.
Rick Treleven, *BCR Environmental* **rtreleven@bcrinc.com**

9:30 AM**: Lessons Learned from the First Full-Scale PFAS Air Testing and Tracking in a Gasification Facility**
The work for this presentation focuses on terminal destruction or removal of PFAS from municipal solids through advanced thermal processes (e.g., gasification followed by thermal oxidation).
Even with implementing PFAS industrial pretreatment programs (IPPs), PFAS can still be present in the biosolids with PFOS or PFOA concentration up to 50 ppb or more. Although PFAS regulations do not exist

for practicing biosolids beneficial use (e.g., land application), EPA has recently published Draft Sewage Sludge Risk Assessment indicating 1 ppb for either PFOS or PFOA could cause human health risk. Thus, methods for further removal or destruction of PFAS in biosolids may be needed. Research by Minnesota Pollution Control Agency (May 2023) and EPA in their Draft Risk Assessment Fact Sheet identified two approaches for such removal/destruction including supercritical water oxidation and pyrolysis/gasification followed by thermal oxidation.
Mohammad Abu-Orf, *Hazen and Sawyer* **mabuorf@hazenandsawyer.com**

BREAK: 10:00 AM – 11:00 AM

11:00 AM**: NYS DEC Update on Wastewater PFAS Monitoring**
The presentation will focus on NYS DEC Division of Water's emerging contaminants policies and the recently released draft Technical and Operational Guidance Series (TOGS) 1.3.14: "Publicly Owned Treatment Works (POTWs) Permitting Strategy for Implementing Guidance Values for PFOA, PFOS, and 1,4-Dioxane." The technical component of the presentation will focus on monitoring and source control of per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane at POTWs.
Evan Walters, *NYS DEC* **evan.walters@dec.ny.gov**

11:30 AM**: A Statewide Crisis: Wastewater Sludge Management in Massachusetts**
Massachusetts DEP's PFAS and Residuals Technology and Management Study analyzes the current and near-term sludge management landscape in Massachusetts, including diminishing landfill capacity, regional incinerator outages, and biosolids land application site restrictions. A greenhouse gas emission analysis highlights the impact of various sludge management technologies. A risk analysis considers implications of future regulatory changes and market dynamics on sludge management. The study provides a foundation for informed decision-making and policy development amidst evolving regulatory landscapes..
Christopher Bone, *Tighe & Bond, Inc.* **ccbone@tighebond.com;**
Bill Brower, *Brown and Caldwell* **BBrower@BrwnCald.com**

SESSION 5: Watersheds and Stormwater – ROOM ASSIGN. TBD

MODERATORS: TBD

Water: **TBD** Wastewater: **TBD** Engineer: **TBD**

9:00 AM**: Overview of Total Maximum Daily Loads (TMDLs) and the Intersection with SPDES Permits**
Evaluating monitoring data against water quality standards is the basis by which managers determine if best uses are supported. Those waters that do not meet their best use for a particular pollutant may be listed as impaired and require the development of a total maximum daily load (TMDL). TMDLs are regulatory pollution budgets that specify the necessary reductions in point source and nonpoint sources to meet the TMDL water quality targets. EPA approved TMDLs impact many sectors in water management. This presentation will provide an overview of the TMDL development process, TMDL structure and the intersection with State Pollution Discharge Elimination System (SPDES) permits.
Karen Stainbrook, *NYS DEC* **karen.stainbrook@dec.ny.gov;**
Anthony Prestigiacomo, *NYS DEC* **anthony.prestigiacomo@dec.ny.gov**

9:30 AM**: Culvert Conundrum: How Hydrological and Hydraulic Analyses Help Prevent Pushing the Risk of Flooding Downstream**

Culverts are critical pieces of the stormwater infrastructure puzzle. If a repair or replacement is needed, it is critical to examine the broader picture and not create unintended consequences downstream. This presentation will showcase one community's comprehensive approach through hydrological and hydraulic analyses, ensuring a culvert replacement did not force flooding scenarios downstream.
Ross Tsantoulis, *Woodard & Curran* **rtsantoulis@woodardcurran.com**

BREAK: 10:00 AM – 11:00 AM

11:00 AM**: How NYCDEP Advances Green Infrastructure with the South Jamaica Houses**
NYCDEP introduced the GI program for reduction of combined sewer overflows, but with the recent floodings in NYC caused by climate change, green infrastructure is being piloted to manage stormwater for larger storm events, especially those that occur with greater intensity during a short space of time known as cloudburst events.
Kimilya Spaulding, *NYC DEP* **kspaulding@dep.nyc.gov;**
Andres F. Garcia, *NYC DEP* **afgarcia@dep.nyc.gov**

11:30 AM**: Retrofitting Existing Stormwater Infrastructure to Meet Modern Standards for Watershed Management**
When communities are tasked with stormwater management to improve the quality of a large watershed, such as that of the Charles River, it can be fiscally advantageous to retrofit existing infrastructure to modern environmental standards. This presentation will focus on a project in the town of Franklin, Massachusetts, in which the community converted an existing detention pond into a higher-efficiency infiltration system.
Carly Quinn, *Woodard & Curran* **cnquinn@woodardcurran.com**

SESSION 6: Applying Technology at the Plant – ROOM ASSIGN. TBD

MODERATORS: TBD

Water: **TBD** Wastewater: **TBD** Engineer: **TBD**

9:00 AM**: IWS CE Presentation: Wastewater & Water Technologies Partner**
Integrated Water Services (IWS), founded in 2003, customizes cost-effective wastewater solutions across North America using in-house controls and a Texas facility. We lead in Membrane Bioreactor (MBR) technology, enabling developers, plants, and municipalities to meet strict permit standards. Benefits include reuse-ready effluent, smaller footprints than CAS/SBR, and retrofits boosting capacity 4x. This presentation highlights MBR advantages, system specification tips, and projects where MBRs excel.
Todd Brunetti, *Integrated Water Services* **tbrunetti@integratedwaterservices.com;**
Sofia Franciscus, *Integrated Water Services* **sfranciscus@integratedwaterservices.com**

9:30 AM**: Odor Identification and Treatment Technologies for Wastewater Collection Systems and Treatment Plants**
This presentation will provide the audience with knowledge of various odor removal technologies and their applications, the underlying scientific principles, the history of how upgraded materials came about, a comparison of odor control technologies, and examples of odor control systems.
Dean Parker, *Biorem Environmental, Inc.* **dparker@biorem.biz**

BREAK: 10:00 AM – 11:00 AM

11:00 AM**: Advanced Grit Management: Concepts & Technology**
This training session will discuss grit removal from an academic point of view, starting with analysis of existing endemic grit, common misconceptions proven out through lab analysis, failures of conventional grit removal equipment and advanced grit management design solutions.
Matt Bodwell, *Hydro International* **mbodwell@hydro-int.com**

11:30 AM**: Taron - Activated Sludge Filter**
An activated sludge dynamic filter replaces clarifiers & tertiary filters in wastewater plants. A pilot test in Pennsylvania proved that an activated sludge dynamic filter can reduce footprint by operating at higher MLSS concentrations, while maintaining tertiary treatment quality effluent necessary to meet stringent BNR requirements.
Timothy Brett, *Xylem* **timothy.brett@xylem.com**

SESSION 7: Asset Management – ROOM ASSIGN. TBD

MODERATORS: TBD

Water: **TBD** Wastewater: **TBD** Engineer: **TBD**

9:00 AM**: Beyond Hype – How Organizing and Integrating Data Provides Utility Efficiency and Future AI Readiness**
Utilities have been investing in various digital systems and assets such as SCADA, GIS, and CMMS. However, these systems are often deployed in ways that do not allow data to be utilized across teams. This creates operational challenges with each solution requiring separate interfaces, and not always being deployed across various workflows. This presentation will discuss ways to efficiently integrate information and the outcomes possible.
Richard Loeffler, *Xylem* **richard.loeffler@xylem.com**

9:30 AM**: Putting the PRO in Proactive - Utilizing Innovative Solutions to Create Proactive Utility**
In this presentation I will highlight new technologies that utilities can utilize for collection systems. It is too common of a conversation of our utilities having to "put out fires" instead of being proactive with their collection systems. I will discuss how utilizing new technologies allow you to begin being proactive in your efforts.
Mackenzie App-Furcinito, *M.E. Simpson Co., Inc.* **mackenzie@mesimpson.com**

BREAK: 10:00 AM – 11:00 AM

11:00 AM**: O&M-Centered Digital Support Tools**
This presentation will provide attendees with insight into the key elements of this approach, adoption of

the technology, and how it can support their O&M program.
Zachary Monge, *Jacobs* **zachary.monge@jacobs.com**

11:30 AM**: Leveraging Screening Level Assessments (SLA) to Prioritize & Justify Next Steps of Action**
This presentation will offer an alternative Screening Level Assessment (SLA) method approach which can cost-effectively screen long sections of large diameter sewer which eases the burden on already resource limited municipalities while more importantly providing critical data needed to prioritize and deprioritize piping segments.
Ben Rukavina, *ADS Environmental Services* **brukavina@idexcorp.com**

SESSION 8: Small Systems, Big Impact – ROOM ASSIGN. TBD

MODERATORS: TBD

Water: **TBD** Wastewater: **TBD** Engineer: **TBD**

1:00 PM**: From PFAS to UVt: Navigating Leachate Pretreatment Challenges at the Village of Malone WWTP**
With PFAS regulations tightening, many facilities across NYS will face challenges in leachate pretreatment. This presentation will highlight an alternatives analysis for leachate pretreatment to address PFAS removal prior to discharge at the Malone WWTP while also providing a solution for the WWTP's UV disinfection. Emerging regulations, engineering design, impacts to operations, and WWTP integration will be explored. The presentation will conclude with the selected alternative and an update on the ongoing pilot study.
Amy Weils, *Barton & Loguidice* **aweils@bartonandloguidice.com;**
Dylan Curran, *Barton & Loguidice* **dcurran@bartonandloguidice.com**

1:30 PM**: Town of Bolton Woodchip Bioreactor**
The Woodchip Bioreactor at the Town of Bolton WWTP is the first real time, in-situ application of this passive “green technology” for a small wastewater treatment plant within the country.
Kathleen Suozzo, *Suozzo, Doty, & Associates* **contact@sdapllc.com;**
Matthew Coon, *Town of Bolton WWTP* **blwwtp@town.bolton.ny.us**

BREAK: 2:00 PM – 3:00 PM

3:00 PM**: From Retail to Community Resource: Adaptive Reuse and Infrastructure Innovation at Smith Haven Mall**
The transformation of the former Sears facility at Smith Haven Mall into a modern medical office space required substantial infrastructure upgrades, including a new pump station, wastewater treatment plant enhancements, and navigating complex ownership dynamics between the client and a third-party plant owner, culminating in a new sewer agency agreement.
Lawrence Loesch, *H2M Architects + Engineers* **lloesch@h2m.com**

3:30 PM**: Solids Handling Considerations for Small Community Systems**
Solids handling can be one of the most challenging tasks for a wastewater facility, often being the source of odor complaints, under budgeted labor and increasing contractual costs. Small systems have two potential approaches: solids conveying versus retaining systems. Septic tank effluent pump systems

utilize septic tanks for primary clarification and solids management, while grinder pump and traditional gravity systems convey solids to a centralized location. This presentation will compare systems using actual community evaluations.
Erin Moore, *Tighe & Bond Inc.* **ekmoore@tighebond.com**

SESSION 9: Revitalization & Resiliency – ROOM ASSIGN. TBD

MODERATORS: TBD

Water: **TBD** Wastewater: **TBD** Engineer: **TBD**

1:00 PM (1HR)**: Canals' Path to Revitalization**
The Erie Canal has now reached 200 years of operation. Since its expansion to the Barge Canal in the 20th century, it has not seen a major capital improvement program. This presentation will discuss the projected delivery strategy for the Canal and how that strategy will be utilized to take the most efficient and effective program possible, reaching the gold standard for asset management and increasing the resiliency of New York State's assets.
Adam Jacoby, *New York Power Authority* **asjacoby@gmail.com;**
Aaron Mattoon, *New York State Canal Corporation* **aaron.mattoon@canals.ny.gov**

BREAK: 2:00 PM – 3:00 PM

3:00 PM**: Mitigating the Effects of Climate Change on Municipal Infrastructure**
This presentation will discuss the applications for underground utility network access that may require materials other than cast iron, due to the specifics of that application. A better solution for such applications is access assemblies made of composite materials, manufactured with traffic loading, durability, and fatigue considerations addressed in the design, manufacturing, and testing of those materials.
Craig Coggins, *EJ USA, Inc.* **craig.coggins@ejco.com**

3:30 PM**: Planning for Coastal Resilience of Wastewater Infrastructure in Flood-Prone Areas of Fairfield, CT**
The Town of Fairfield is located in the southern portion of Connecticut and like many New England coastal communities, is susceptible to flooding. This can result in loss of property and disruption to the Town's wastewater infrastructure during these critical storm events. The Town is actively working on taking steps to protect its wastewater infrastructure and protect its assets. This includes a flood wall around the treatment plant and elevating structures.
Prashanth Emmanuel, *Tighe & Bond Inc.* **pemmanuel@tighebond.com**

SESSION 10: Leadership in the Water Sector – ROOM ASSIGN. TBD

MODERATORS: TBD

Water: **TBD** Wastewater: **TBD** Engineer: **TBD**

1:00 PM (1HR)**: YPs/Jean Malafronte**

BREAK: 2:00 PM – 3:00 PM

3:00 PM(1HR)**: YPs/Jean Malafronte**

SESSION 11: Affordability, Public Outreach & Policy – ROOM ASSIGN. TBD

MODERATORS: TBD

Water: **TBD** Wastewater: **TBD** Engineer: **TBD**

1:00 PM**: Affordability Estimation of Municipal Wastewater Infrastructure Projects**
NYSEFC provides financing and grants to municipalities for water quality projects. In determining the reasonableness of project costs, information is requested in engineering reports related to the number of EDUs in the wastewater system. This information is used to estimate the cost of the project to residents as a percentage of the Median Household Income.
William Brizzell, *NYS EFC* **william.brizzell@efc.ny.gov;**

1:30 PM**: Understanding New York's Infrastructure Needs: A Review of the EPA Clean Watersheds Needs Survey Results and Challenges**
In 2022, NYSEFC documented over $50 billion in wastewater and water quality needs in New York State as part of the EPA Clean Watersheds Needs Survey. This presentation will break down the identified needs throughout the State, discuss the unique challenges NYSEFC faced working on such a large survey, and identify how municipalities and consultants can prepare for the upcoming survey in 2027.
Liz Ricci, *NYS EFC* **elizabeth.ricci@efc.ny.gov;**

BREAK: 2:00 PM – 3:00 PM

3:00 PM**: Enhancing East Delavan: Sewer Improvements, Environmental Review, and Community Engagement**
Buffalo Sewer owns and operates the combined sewage system in Buffalo, directing wastewater to Bird Island WWTF. As part of the Queen City Clean Waters Program, this project proposes a 1.5-million-gallon OLS facility at East Delavan Avenue to reduce Combined Sewer Overflows (CSOs) into Scajaquada Creek. The presentation covers two design options, public engagement activities, community betterment initiatives, and the integration of NYS Commissioner Policy 29 to address environmental justice concerns in the SEQR process.
Rebecca Carmine-Shaw, *Hazen and Sawyer* **rcarmineshaw@hazenandsawyer.com**
Regina Harris, *Buffalo Sewer Authority* **rharris@buffalosewer.org**

3:30 PM**: SPDES Permitting and Engineering Reviews: Put the PER in Perfect**
NYS regulations require DEC to review and approve the planning and design documents for SPDES permitted facilities undertaking certain construction projects including but not limited to construction of a new facility, facility expansion, or treatment changes. This presentation will cover the most common

engineering submittals for SPDES permitted facilities, when those submittals are needed, references for use during submittal preparation, the standards DEC reviews the submittals against, and the overall schedule of the review process.
Monica Moss, *NYS DEC* monica.moss@dec.ny.gov
Taylor Shanley, *NYS DEC* taylor.shanley@dec.ny.gov

Wednesday, June 4th, 2025

SESSION 12:
First Hour: "Supporting Development Through Collection System Infrastructure"
Second Hour "Collaboration to Manage Challenges at SCSD #1"– ROOM ASSIGN. TBD

MODERATORS: TBD

Water: **TBD** Wastewater: **TBD** Engineer: **TBD**

9:00 AM**: Navigating the Complexity of Connecting a Private Development to a Sewer Forcemain System- Consultant and Developer's POV**
This presentation includes a discussion of the complexity of navigating a private development project connecting to an existing sanitary forcemain from the consultant and developer's point of view. The work to connect this private development to the Saratoga County Sewer District No. 1 system involved coordination with multiple reviewing agencies, significant studies on the capacity, while including options for additional private developments to connect that were in the planning process in the same Town.
Melissa Currier, *C.T. Male Associates* **m.currier@ctmale.com**

9:30 AM**: Sewer Extension Drives Economic Development in North Andover, MA**
When Amazon Services LLC chose North Andover as the site for a large distribution facility, the community knew it would need to expand its wastewater collection system. The project was funded collaboratively by Amazon, the MassWorks Infrastructure Program, and North Andover, and added approximately 11,000 feet of collection system and a new pump station. This presentation will discuss the planning, design, and construction of the project and offer lessons learned from all phases.
Michael Camadeco, *Woodard & Curran* **mcamadeco@woodardandcurran.com;**

BREAK: 10:00 AM – 10:30 AM

10:30 AM (1HR)**: DEC/B&L/Rourke**

SESSION 13: Improving Plant Performance: Resource Recovery & Biosolids – ROOM ASSIGN. TBD

MODERATORS: TBD

Water: **TBD** Wastewater: **TBD** Engineer: **TBD**

9:00 AM**: Unlocking the Circular Economy Potential in Wastewater Treatment**
To provide an overview of innovative resource recovery technologies in wastewater treatment, demonstrating how nutrient reclamation, energy generation, and water reuse can transform WWTPs into sustainable resource recovery hubs. The presentation aims to discuss the state of the practice, highlight real-world applications, and explore future opportunities and challenges in achieving circular economy goals.
Karthik Manchala, *GHD* **karthik.manchala@ghd.com**

9:30 AM**: Polymers and Their Challenges**
Solids management can rank among a wastewater treatment plants (WWTP) biggest expenses. It is critical to use the correct polymer for a given wastewater process. This presentation will explain the different ways of preparing polymer along with their pros and cons.
Clementine Justier, *Orège SA* **TBD EMAIL**

BREAK: 10:00 AM – 10:30 AM

10:30 AM**: Evolving Technologies for Biosolids Dewatering**
A full review of the current and past dewatering technologies with details on market presence, pros and cons of each type of equipment along with where the designs are going in response to the ever-changing dewatering marketplace and biosolids conditions and regulations.
Christopher Boyd, *Charter Machine Co.* **chrisb@chartermachine.com**

11:00 AM**: Thickening & Dewatering in a Clean and Quiet Room**
In addition to the performance and efficiency of dewatering and thickening equipment, recent focus has shifted to how clean and quiet the equipment can operate. Certain technologies have built-in advantages for containment and low-noise generation. This presentation will cover major design changes and additions to traditional thickening and dewatering equipment that have significantly improved the operating space.
Dan Fronhofer, *BDP Industries* **dan@bdpindustries.com;**
Luke Fronhofer, *BDP Industries* **luke@bdpindustries.com**

SESSION 14: Advanced Treatment – ROOM ASSIGN. TBD

MODERATORS: TBD

Water: **TBD** Wastewater: **TBD** Engineer: **TBD**

9:00 AM**: Planning for Future Effluent Phosphorus Limits: Choosing Your Phosphorus Removal Strategy**
This presentation will review strategies for phosphorus removal in water resource reclamation facilities, and key factors that impact what strategy is most applicable at a given facility. The basics of biological (bioP) and chemical (chemP) strategies will be reviewed. Factors impacting choosing a strategy will be discussed along with available tools and references and case studies demonstrating how other utilities have approached meeting effluent phosphorus limits across the county.
Jacob Metch, *HDR* **jacob.metch@hdrinc.com;**
Mahsa Mehrdad, *HDR* **Mahsa.Mehrdad@hdrinc.com**

9:30 AM**: Introducing a New Yet Simple Biofilm Technology for Biological Nutrients Removal**
This presentation will introduce to the audience a brand-new biofilm technology that utilizes a renewable biomass by-product as the biofilm support material. It offers engineers and utilities a more sustainable, energy efficient and powerful technology that can achieve biological total nitrogen and phosphorus removal in a simpler configuration and/or smaller footprint than other technologies. Both pilot and full-scale data will be presented to highlight the technology's system configuration, performance, and benefits.
Larry Li, *Veolia* **larry.li@veolia.com**
Victoria Bates, *Veolia* **victoria.bates@veolia.com**

BREAK: 10:00 AM – 10:30 AM

10:30 AM**: No More Nitrite**
The Village of Richfield Springs WWTP faces a unique challenge in meeting an exceptionally stringent nitrite discharge limit under its revised SPDES permit. This presentation examines the regulatory updates, necessary plant upgrades, and the evaluation of advanced nitrite treatment methods. It will provide an in-depth analysis of engineering considerations, operational impacts, and the selected approach to ensure compliance while modernizing infrastructure at this small upstate New York facility.
Amy Weils, *Barton & Loguidice* **aweils@bartonandloguidice.com;**
Garrett Paquette, *Barton & Loguidice* **gpaquette@bartonandloguidice.com**

11:00 AM**: Optimizing Nitrogen Removal and Reducing Energy Using Low Do Operation**
This presentation will demonstrate actual applications employing Low Dissolved Oxygen operation for several years of operation. Using a technology that seamlessly switches from Mixing to Aeration modes. Without the use of complicated equipment or complex Control strategies. From highly accurate setpoints of 0.2mg/L DO to simpler applications of 0.5mg/L DO.
Patrick O'Donnell, *INVENT Environmental Technologies, Inc.* **patodonnell68@aol.com**