



RESIDUALS AND BIOSOLIDS CONFERENCE

March 31- April 3 | Exhibits: April 1-2
The Minneapolis Convention Center
Minneapolis, Minnesota

REGISTER TODAY!
www.wef.org/ResidualsBiosolids



This conference is organized by the Water Environment Federation in cooperation with the Central States Water Environment Association and the Water Research Foundation.

#ResBio20

2020

Residuals and Biosolids leaders, researchers, and practitioners will gather to hear the latest developments in all aspects of biosolids treatment and management from research and technology advancements through regulations, land application, and product marketing.

WEF Residuals and Biosolids 2020 is the leading biosolids conference, and will bring together water quality professionals from all around the world. Join us in Minneapolis, Minnesota to gain insight on how the industry is driving change towards resource recovery through innovative strategies and techniques.

REGISTER BY FEBRUARY 21st, 2020 TO SAVE: www.wef.org

#ResBio20

SCHEDULE-AT-A-GLANCE

Pre-Conference Workshops*

Tuesday, March 31

Registration Open: 7:30 am – 5:00 pm

8:30 am – 5:00 pm	Workshop A: Dewatering Optimization Workshop - Practical Ways to Improve Performance
	Workshop B: Seeking the Skinny on Sludge: MOP-8 Stabilization Fundamentals
	Workshop C: Fundamentals of Digestion using Process Simulators
8:30 am – 12:00 pm	Workshop D: Communicating about Emerging Contaminants in Biosolids
1:30 pm – 5:00 pm	Workshop E: Greenhouse Gas Accounting for Wastewater Utilities

Wednesday, April 1

Registration Open: 7:30 am – 5:00 pm

8:30 am – 11:45 am	Opening General Session
11:45 am – 1:30 pm	Lunch in the Exhibit Hall
1:30 pm – 4:45 pm	Session 01: The Science of PFAS
	Session 02: Biosolids Management Success Stories
	Session 03: Intensification and Advanced Topics in Anaerobic Digestion
1:30 pm – 3:00 pm	Session 04: Thermal Processes
3:45 pm – 4:45 pm	Session 05: Recuperative Thickening
4:45 pm – 6:15 pm	Networking Reception

*There is an additional fee for workshops. Please see the Registration Fees section for details.

For detailed workshop and session descriptions
please visit: www.wef.org/ResidualsBiosolids

Thursday, April 2

Registration Open: 8:00 am – 5:00 pm

8:30 am – 11:45 am	Session 06: Optimizing Biosolids Processes
	Session 07: Energy Production - Making it Work - Economics, Regulations, Equipment, Gas Quality
	Session 08: Codigestion of Food Waste and Sludge
	Session 09: Dewatering - Developing a Deeper Understanding
11:45 am – 1:30 pm	Lunch in the Exhibit Hall
1:00 pm – 4:30 pm	Tour A: Ensuring Sustainable and Reliable Solids Management for the Future at MCES
1:30 pm – 4:45 pm	Session 10: Nutrient Recovery
	Session 11: Energy Recovery & Production - Innovation and Success
1:30 pm – 3:00 pm	Session 12: Innovations in Anaerobic Digestion
	Session 13: Biosolids Master Planning with the End in Mind
3:45 pm – 4:45 pm	Session 14: Identifying and Generating Advances Through Research
	Session 15: Regulatory Strategies

Friday, April 3

Registration Open: 8:00 am – 12:00 pm

8:30 am – 10:00 am	Session 16: Thermal Drying of Biosolids – Alternatives, Technology, and Operations
8:30 am – 11:15 am	Session 17: Biosolids Treatment and Use Innovations
	Session 18: Economic Drivers for Digestion
8:30 am – 10:00 am	Session 19: Dewatering - Obtaining the Pretreatment, Equipment and Polymer Needed to Make it Happen
10:15 am – 11:15 am	Session 20: Side Stream Management
	Session 21: Odors
12:00 pm – 4:00 pm	Tour B: What's Beer Got to Do With It - St. Cloud's Nutrient, Energy & Water Recovery Facility

PRE-CONFERENCE WORKSHOPS

TUESDAY, MARCH 31

Workshop A: Dewatering Optimization Workshop - Practical Ways to Improve Performance 8:30 am – 5:00 pm

The Dewatering Optimization – Practical Ways to Improve Performance workshop will focus on practical solutions to increase dewatering performance including drier cake solids, better solids capture, reduced polymer consumption, and reduced O&M costs for dewatering processes.

This workshop will provide municipal attendees the knowledge and resources to better perform their jobs with lower O&M costs; consultants to provide more informative and better dewatering equipment advice; and manufacturers to provide better and more optimum machine performance at lower O&M costs.

Workshop B: Seeking the Skinny on Sludge: MOP-8 Stabilization Fundamentals 8:30 am – 5:00 pm

This workshop features authors of the MOP-8 chapter on stabilization and will provide a base of knowledge around fundamentals of stabilization processes (such as design, operation, and construction) so that attendees can incorporate principals learned into their mission in the workplace.

Topics covered in the workshop:

- Comparison of stabilization methods
- Process objectives
- Process fundamentals such as microbiology

- Design fundamentals such as common design parameters and sizing criteria
- O&M considerations such as equipment and instrumentation and controls
- Construction considerations

Workshop C: Fundamentals of Digestion using Process Simulators 8:30 am – 5:00 pm

As the current utility workforce ages, new training techniques are needed for the next generation of O&M professionals. This workshop will present hands-on operator training incorporating the fundamentals of anaerobic and aerobic digester process operation and troubleshooting augmented with participants using process simulators to demonstrate responses to system loading and operational changes. Each lecture module in the program will be accompanied by participants being led through a series of simulations that will provide examples of system performance including troubleshooting. The simulator platform used does not require any prior experience with modeling software.

Workshop D: Communicating about Emerging Contaminants in Biosolids 8:30 am – 12:00 pm

This workshop, led by national experts in risk, crisis, and biosolids communications, will provide the practical tactics needed to engage on the urgent communications needs around emerging contaminants,

with a focus on PFAS. Participants will learn about the fundamentals and techniques of public health risk communications and crisis communications, and how to apply them in the water sector. Additionally, the workshop will provide a window into the responses to recent biosolids concerns around the country, such as in Maine, and share valuable lessons learned. Participants will be presented with a toolkit of resources that can be used to conduct communications on biosolids and emerging contaminants, including for the media, digital, advocacy, and public engagement.

Workshop E: Greenhouse Gas Accounting for Wastewater Utilities 1:30 pm – 5:00 pm

Participants in the GHG Accounting workshop will learn how to calculate GHG emissions and offsets for water resource recovery facilities (WRRFs), and gain insight into the best ways to optimize their WRRFs to reduce their carbon footprint. The workshop will be split into two main sections: 1) participants will learn about the latest policies and research relevant to GHG accounting, and 2) participants will engage on hands-on GHG accounting exercises.

FACILITY TOURS

THURSDAY, APRIL 2 & FRIDAY, APRIL 3

Tour A: Ensuring Sustainable and Reliable Solids Management for the Future at MCES

April 2 | 1:00 pm – 4:30 pm

MCES's Metropolitan Wastewater Treatment Plant in Saint Paul is the largest wastewater treatment facility in Minnesota, receiving ~170 mgd (26,800 m³/hr) of influent flow and processing ~240 dtpd (9,070 kg/hr) of biosolids in 2018. The plant has been incinerating wastewater solids for 80 years and has one of the most advanced and highest-performing air pollution control systems in the country. Now, MCES is planning for the future, with plans to spend \$180 million to add a fourth incinerator and renew its existing solids treatment facilities to ensure operational reliability and continued minimal impact on the surrounding community and the environment. The presentation and tour will discuss our customized project

communications tools and will highlight MCES' objectives including: Maintaining Exceptional Air Quality, Recovering Energy, Ensuring Cost Effectiveness, Keeping Greenhouse Gas Emissions Low, and Ensuring Overall Low Impact.

Tour B: What's Beer Got to Do With It - St. Cloud's Nutrient, Energy & Water Recovery Facility

April 3 | 12:00 pm – 4:00 pm

Come see what St. Cloud Minnesota is doing to recover nutrients, energy and water. Stations will be set up around the facility sharing information related to solar impacts, energy management, phosphorus recovery, biosolids reuse, energy recovery, high strength waste program, energy efficiency, innovative financing and water quality improvements.

REGISTRATION FEES

Registration Category	By 2/21/2020 (Super Saver)		After 2/21/2020	
	Member	Nonmember	Member	Nonmember
Full Conference	\$690	\$995	\$890	\$1295
One-Day Conference	\$400	\$520	\$535	\$660
Student	\$0	\$225	\$0	\$290
Expo Only	\$130	\$160	\$130	\$160
Optional Events				
Workshop: A, B, or C	\$179	\$209	\$199	\$229
Workshop: D or E	\$100	\$129	\$120	\$150
Tour: 1 or 2	\$40	\$45	\$40	\$45

Note: Cancellations must be received by Friday, March 20, 2020, to be eligible for a refund.

CONTINUING EDUCATION CREDITS

.6 CEUs | 12.0 PDHs | 9.5 GCHs

Attendee may earn Continuing Education Units (CEUs) for participation in workshops, Professional Development Hours (PDHs), and General Contact Hours (GCHs) for the Opening General Session and technical sessions.

Please note: Credit totals are subject to change.

Conference participants are responsible for exploring their state requirements to confirm these educational credits are recognized.

**NOT A MEMBER?
JOIN TODAY!**

WEF Membership:
www.wef.org/JoinWEF

HOTEL ACCOMMODATIONS

Hilton Minneapolis

1001 Marquette Avenue South,
Minneapolis, Minnesota, 55403

Phone: 612-376-1000

Group Rate: \$199/night

Cut-off Date: March 9, 2020

Reservation Phone Number:

1-800-445-8667

Book Your Room Here:

[https://book.passkey.com/go/
WEF2020](https://book.passkey.com/go/WEF2020)

Reservations are available on a first-come, first-served basis and may sell-out before the cut-off date, so don't delay in booking your room!

EXHIBITION OPPORTUNITIES

MEET NEW CLIENTS, NEW CUSTOMERS AND NEW PARTNERS - BECOME AN EXHIBITOR TODAY!

Contact Sarah Evans Moretti
smoretti@wef.org
1-703-684-2466

Reach attendees with proven interest in your equipment, products, and services. Every year, exhibitors find Residuals and Biosolids successful in terms of both quality and quantity of the sales leads they acquire as a result of their exhibit.

Exhibition:

Wednesday, April 1 | 10am - 6:15pm

Thursday, April 2 | 10am – 3:45pm

Exhibit Space Rates: 10' x 10' Booth

WEF Exhibitor Member: \$2,400, plus \$75 per corner

Non-Member: \$3,000, plus \$75 per corner

Please note: The Federation has various types of memberships. Only Exhibitor Members are eligible for the discount on exhibit space.

SPACE RATES INCLUDE:

- Complimentary booth personnel badge(s), two per 100 sq ft contracted
- Listing in onsite conference program exhibitor directory and floor plan page
- Listing on conference floor plan link
- Mobile app listing, including description, categories, and PDF upload capability
- Primary booth contact access to registrant data download in Excel once space is fully paid. Non-exhibiting companies may not purchase the use of this data
- Primary booth contact access to conference proceedings

Over 95% of registrants spent up to 3+ hours in the exhibit hall both days.

77% of registrants made a connection with an exhibitor.

69% of registrants influence the buying decision for related products/services displayed.

SPONSOR OPPORTUNITIES

Sponsoring the Residuals and Biosolids conference will enhance your company's visibility and provide greater awareness of your branding, products, and services to attendees. Choose from conference-wide packages; registration giveaways; mobile app opportunities; exposure at the opening general session and networking events; hotel and onsite advertising; and digital media. Opportunities provide multiple branding exposures, from pre-show through onsite, at price points designed for any marketing plan.

68% of overall sponsoring companies were recognized and accurately identified by 2019 Residuals and Biosolids registrants.

Sign-up to be a sponsor today!

www.wef.org/ResBio-howto-exhibit-sponsor

Networking opportunities are among the top 3 reasons for attending ResBio. Consider sponsoring one of the conference's onsite events to get your company in front of attendees.

Our long-term partnership with WEF and active involvement in your conferences supports our corporate mission—to provide vision, value and service to support clean water worldwide. From sponsorship concepts to fulfillment, your staff always goes above and beyond to create unique opportunities to help us reach our clients and partners!

– **Debra Hempel** Water-Marketing/Communications Lead, HDR

Thank you to
our current
sponsor for
their support:

HDR Bronze
Elite
Sponsor