



# Meet our Presenters!

## Presenting at this year's Salt Symposium

### Tuesday, August 3<sup>rd</sup>

#### Keynote Speakers



**Emily Jones**  
**Madison Metropolitan Sewerage District**  
[Emilyj@madsewer.org](mailto:Emilyj@madsewer.org)

Emily Jones is a Pollution Prevention Specialist at Madison Metropolitan Sewerage District. Her work is focused on reducing pollutants to the sewer system through education, program development and administration, and work with community stakeholders. Her specific focus areas include chloride reduction, mercury minimization, and coordinating the District's tours program. She has a B.S. from UW-Madison with majors in biology and life sciences communication.



**Sydney Weiss**  
**Environmental Protection Agency**  
**Water Quality Standards Scientist**  
[weiss.sydney@epa.gov](mailto:weiss.sydney@epa.gov)

Sydney Weiss is a water quality standards scientist at EPA Region 5, located in Chicago, IL. She holds a bachelor's in environmental engineering and a master's in water resources science from Oregon State University. At night Sydney is pursuing her J.D. at Chicago-Kent College of Law, specifically focused on environmental and water law. At EPA, Sydney's work focuses on chloride mitigation and reduction initiatives including a collaboration with MPCA to host a national workgroup aimed at devising unique and cooperative solutions.



**Brooke Asleson**  
**Minnesota Pollution Control Agency**  
[brooke.asleson@state.mn.us](mailto:brooke.asleson@state.mn.us)

Brooke Asleson has worked at the Minnesota Pollution Control Agency since 2007 where she works collaboratively with federal, state, local partners, and research institutions to protect Minnesota's water resources. Since 2009 Brooke has been working on chloride and water quality issues at the MPCA. The core of that work has been developing partnerships with a wide variety of professionals to develop strategies that reduce chloride while maintaining public needs. Prior to working for the MPCA, she obtained her Master's degree in Water Resources Science from the University of Minnesota.

## August 3: New Directions in Chloride Morning Session



**Edward G. Stets**  
**U.S. Geological Survey**  
**Research Ecologist**  
[estets@usgs.gov](mailto:estets@usgs.gov)

Ted is a Research Ecologist with the US Geological Survey in Mounds View, Minnesota. He received his PhD from the University of Minnesota in 2007 and has been with the USGS ever since. His work focuses on water quality in rivers throughout the US. The work being presented today was conducted as part of USGS NAWQA. Ted is currently leading the Trend Assessment Project for the USGS Integrated Water Availability Assessments Program. Ted lives in Minneapolis with his wife and 3 kids and uses salt sparingly in the winter.



**Catherine Harris**  
**Madison Metropolitan Sewerage District**  
**Pollution Prevention Specialist**  
[catherineh@madsewer.org](mailto:catherineh@madsewer.org)

Catherine Harris has been a Pollution Prevention Specialist for the Madison Metropolitan Sewerage District since 2017. Her background in social science research (BS in Community & Environmental Sociology from UW Madison/CALS, and certificates from the Nelson Institute and Oxford's Saïid Business School) is put to work on the District's source reduction and public outreach/partnership efforts, including their Chloride Reduction Initiative. Work in this area is ever-evolving and takes many forms from partnership building and program development/administration to direct research and monitoring.



**Wayne Brabazon**  
**Region of Waterloo, Ontario**  
**Water Efficiency Technologist**  
[WBrabazon@regionofwaterloo.ca](mailto:WBrabazon@regionofwaterloo.ca)

Wayne has worked for The Region of Waterloo for 23 years in a range of water-services positions. Currently he is the Region's Water Efficiency Technologist and works extensively with commercial, institutional and industrial (CII) business-sector water users. This role involves convincing businesses to implement, and commit to, water-saving projects. CII water efficiency projects are varied and each project is treated on a case-by-case basis. Wayne's technical knowledge to support this water efficiency position is based on an educational background in the sciences, business understanding and computer systems expertise.



**Steve Yessie**  
**City of Guelph, Ontario**  
**Water Conservation Program Coordinator**  
[steve.yessie@guelph.ca](mailto:steve.yessie@guelph.ca)

Steve Yessie has worked in the sustainability field for the past 8 years. In 2018 he joined the Environmental Services' Compliance and Performance team with the City of Guelph. In his role at the City Steve coordinates the Multi-Residential Water Audit and Water Sub-Meter Rebate programs. In addition to these programs he focuses much of his time toward community education. This finds Steve leading tours of the local Water Services facility and in front of classrooms at schools across the City, discussing source protection, conservation, efficiency and best practices related to water.



**Dr. Sara Heger**  
**University of Minnesota**  
**Adjunct Assistant Professor and Researcher**  
[sheger@umn.edu](mailto:sheger@umn.edu)

Dr. Sara Heger is a researcher and instructor at the University of Minnesota in the Onsite Sewage Treatment Program in the Water Resources Center and is an Adjunct Assistant Professor in the Bioproducts and Biosystems Engineering Department. For over 20 years, she has been conducting research and providing education and technical assistance to homeowners, small communities, onsite professionals, and local units of government regarding decentralized onsite wastewater treatment. The research program at the U of MN is focusing on evaluating issues related to decentralized wastewater, chlorides, and milk house process water. She has presented in over 30 different states and provinces in North America regarding the science of wastewater treatment including design, installation, and management. Sara is the president of the National Onsite Wastewater Recycling Association, serves on the NSF International Committee on Wastewater Treatment Systems and chairs Minnesota's SSTS Advisory Committee. She has a BS in Biosystems & Agricultural Engineering and a MS and PhD in Water Resource Science.

## August 3: New Directions in Chloride

### Afternoon Session



**Carl Rosen, Ph. D.**  
**University of Minnesota**  
**Professor and Department Head of Soil, Water & Climate**  
[crosen@umn.edu](mailto:crosen@umn.edu)

Carl Rosen is a Professor and Extension Soil Scientist in the Department of Soil, Water, & Climate at the University of Minnesota and currently serves as Department Head. He received his MS degree in horticulture from Penn State University and a Ph.D. degree in Soil Science from UC Davis. His research and extension programs in Minnesota have focused on optimizing nutrient management for a variety of crops with particular emphasis on irrigated cropping systems. Efforts in recent years have also focused on water quality issues related to fertilizer use and use of municipal and industrial by-products as amendments for agricultural soils. He has authored or coauthored numerous publications and extension bulletins on the subjects of nutrient management, soil fertility, plant nutrition, and beneficial use of by-products for crop production.



**Dr. David Franzen**  
**North Dakota State University**  
**Professor and Soil Specialist**  
[david.franzen@ndsu.edu](mailto:david.franzen@ndsu.edu)

Dave Franzen is Professor of Soil Science and one of two NDSU Extension Soil Specialist, with emphasis on soil fertility of crops. He received his BS ('75), MS ('76) and PhD ('93) from the University of Illinois. He worked for about 18 years as agronomist/manager for a retail fertilizer/ag-supply chain in Illinois before coming to NDSU June, 1994. His work has focused on site-specific nutrient management, resulting in the currently used zone sampling method employed by most variable-rate nutrient application in ND, and recently on the use of active-optical sensors to direct in-season N application for several crops. He also directed recent work in reformulating potassium (K) recommendations based on soil clay chemistry and developed a K calculator for corn as a phone app. He is a Fellow of the American Society of Agronomy and has received awards for his work in site-specific nutrient management and service to commodity and agricultural groups in ND.



**Maggie Reiter**  
**University of Minnesota Extension**  
**Assistant Professor**  
[reit0215@umn.edu](mailto:reit0215@umn.edu)

Maggie Reiter is the Assistant Extension Professor for Turfgrass with University of Minnesota Extension. Maggie works to implement urban turfgrass management programs that conserve water, nutrients, and energy. She works with turfgrass managers to integrate new technologies and enhance ecosystem services like biodiversity and stormwater retention. Ultimately, this work protects Minnesota's natural resources and builds a climate-ready urban landscape. Maggie has previously led turfgrass programs at the University of California.



**Daniel Kaiser**  
**University of Minnesota, Department of Soil, Water, and Climate**  
**Associate Professor and Extension Specialist**  
[dekaiser@umn.edu](mailto:dekaiser@umn.edu)

Daniel Kaiser grew up on a grain and livestock farm in Northeast Iowa. He attended Iowa State University where he received his Masters and Ph.D. degree in soil fertility researching phosphorus and potassium placement for corn and soybean and phosphorus management using poultry litter. Currently he is an associate professor and extension specialist in the Department of Soil, Water, and Climate at the University of Minnesota where he has a broad research program related to nutrient management for commodity crops in the state of Minnesota. His current research focuses on the use of soil testing and plant analysis for corn, soybean, and spring wheat, sulfur management in crop rotations, starter fertilizer use in corn, and the use and development of GIS based technologies for managing crop nutrients.



**Laura M. Babcock, Ph.D**  
**Minnesota Technical Assistance Program Director**  
[lbabcock@umn.edu](mailto:lbabcock@umn.edu)

Laura M. Babcock joined MnTAP as the director in 2011, bringing leadership and technical expertise to the program. She is responsible for developing sustainable programs to meet business' needs, pursuing funding opportunities for program activities, collaborating with multiple in-state and national partner organizations, managing staff, and providing technical assistance to businesses in Minnesota. Laura has also explored opportunities to improve corporate sustainability through studies on strategies for enhanced asset exchange and material cycling through work at the NorthStar Initiative for Sustainable Enterprise, a program of the Institute on the Environment at the University of Minnesota. Prior to joining the University, Laura worked extensively in the chemical industry in a variety of roles including materials for electronic applications, adhesive applications and polymer additives in addition to a focus on green chemistry and sustainable technology. Laura's areas of technical expertise include improving production quality and lowering process costs of manufacturing operations as well as contributing to the discovery of various polymer technologies. She has co-authored numerous patents and publications in these areas. Laura received a Ph.D. in Chemistry from the University of Illinois and a B.S. in Chemistry from Rensselaer Polytechnic Institute.

# Wednesday, August 4<sup>th</sup>

## Keynote Speakers



**Steven R. Corsi**  
**U.S. Geological Survey**  
**Research Hydrologist**  
[srcorsi@usgs.gov](mailto:srcorsi@usgs.gov)

Steve Corsi is a Research Hydrologist with the U.S. Geological Survey in Middleton, Wisconsin. He has been with the USGS for 33 years working on water quality investigations of surface water with a focus on biological relevance of contaminants to aquatic life. Steve focuses on the potential impacts to aquatic life from road salt runoff as well as biological relevance of the presence of various classes of legacy and emerging contaminants.



**Dr. Xianming Shi, P.E.**  
**Washington State University**  
**Professor**  
[xianming.shi@wsu.edu](mailto:xianming.shi@wsu.edu)

Dr. Xianming Shi, P.E. is a Professor at Washington State University and a Fellow of ASCE. He is the Founding Director of the National Center for Transportation Infrastructure Durability & Life-Extension and serves as the Editor-in-Chief for the Journal of Infrastructure Preservation & Resilience. He has served as the Principal Investigator for dozens of winter maintenance operations related research projects sponsored by more than 20 state DOTs and their consortia and by NCHRP, ACRP, FHWA, etc. over the last 18 years. He was the lead editor of the Book: Sustainable Winter Road Operations (2018). Two of his projects won the AASHTO High Value Research Project award in the last five years. Dr. Shi holds his Ph.D. in Chemistry and a 2nd M.S. in Industrial & Management Engineering.

## August 4: Snow and Ice Management Morning Session



**Andi Bill**  
**University of Wisconsin – Madison**  
**Research Program Manager and Program Director**  
[bill@wisc.edu](mailto:bill@wisc.edu)

Ms. Andrea Bill is currently the Traffic Safety Engineering Research Program Manager with the Traffic Operations and Safety Laboratory and Program Director with Engineering Professional Development at the University of Wisconsin-Madison. Her current research incorporates aspects from traffic operations and traffic safety, with a specific emphasis on discovering new and innovative ways to address traffic crashes.



**Tracey Bramble**  
**Iowa Departments of Transportation**  
**Information Specialist**  
[Tracey.Bramble@iowadot.us](mailto:Tracey.Bramble@iowadot.us)

Tracey Bramble is currently the Iowa DOT's social media content manager, providing daily input into the agency's Facebook and Twitter, as well as multiple blogs, strategically positioning messages to work together on various platforms to reach the intended audiences. Bramble, a 30-year veteran of public affairs and marketing, holds a Bachelor of Science degree in journalism and mass communication from Iowa State University and has completed the Certified Public Manager program at Drake University.



**Robert Roszell**  
**Volunteer and Chair of 10,000 Trees**  
[Robert@tufftechbags.com](mailto:Robert@tufftechbags.com)

Robert Roszell has been a volunteer ever since his two boys could hit a baseball. He has been involved in a wide variety of programs from sports to wilderness canoe trips. For over 30 years, planting trees has been a passion for him. Five years ago, Robert became the chair for 10,000 Trees. His next goal is a public awareness program on the toxicity of chlorides. Robert has been in the snow industry for over 30 years. He was instrumental in installing the first smart controllers on the Ontario fleet of sanders and researching anti-ice and prewetting throughout the province. He was also the chair for the research committee for the University of Waterloo studying chloride impact on parking lots, which was then coming up with best practices for winter maintenance in parking lots.



**Laura Fay**  
**Western Transportation Institute at Montana State**  
**Research Scientist and Program Manager**  
[laura.fay1@montana.edu](mailto:laura.fay1@montana.edu)

Laura Fay is a Research Scientist and Program Manager for Cold Climates Operations & Systems research group at the Western Transportation Institute (WTI) at Montana State University (MSU). She has conducted and led research in the fields of winter maintenance operations and low volume roads since 2006. Laura has dedicated her career to supporting state, federal, and local transportation agencies in the identification and implementation of best practices through applied research. This has been demonstrated in her publication record, and volunteer efforts serving on the Transportation Research Board (TRB) Winter Maintenance Committee (AKR40) and currently serves as committee chair for the TRB Low Volume Roads Committee (AKD30). Laura's technical background was developed from gaining an M.S. in *Environmental Science and Health* from the University of Nevada, Reno, and a B.S. in *Earth Sciences* from the University of California, Santa Cruz.

## **August 4: Snow and Ice Management**

### **Afternoon Session**



**Kakan Dey, PhD., P.E.**  
**West Virginia University**  
**Assistant Professor**  
[kakan.dey@mail.wvu.edu](mailto:kakan.dey@mail.wvu.edu)

Dr. Dey is an Assistant Professor in the Department of Civil and Environmental Engineering at West Virginia University. Dr. Dey received his Ph.D. in Civil Engineering with Transportation Systems in 2014 from Clemson University in South Carolina. He was a Postdoctoral Fellow in Intelligent Transportation Systems Laboratory at Clemson University and was the recipient of the Clemson University 2016 Distinguished Postdoc Award. Dr. Dey's primary research interest includes Intelligent Transportation Systems (ITS), Connected and Autonomous Vehicle Technology, Data Analytics, Winter Maintenance Operations, and Artificial Intelligence Applications. He published more than 40 peer-reviewed research papers on different transportation engineering topics. Dr. Dey is a Standing Committee Member of the Transportation Research Board (TRB) Truck Size and Weight Committee, and the TRB Artificial Intelligence and Advanced Computing Applications. He is also a member of ASCE Freight and Logistics Committee. He is the editor of Elsevier textbook on "Data Analytics for Intelligent Transportation Systems," published in April 2017.





**Andy Erickson, Ph.D., PE.**  
**University of Minnesota, St. Falls Laboratory**  
**Research Associate**  
[eric0706@umn.edu](mailto:eric0706@umn.edu)

Andy Erickson, PhD, PE, is a Research Associate at St. Anthony Falls Laboratory and the University of Minnesota and registered professional engineer in Minnesota. Dr. Erickson's research pursues an understanding of water quality in urban and agricultural watersheds, assessment and maintenance of stormwater treatment practices, and developing new stormwater treatment technologies such as the Iron-Enhanced Sand Filter which removes dissolved and particulate phosphorus from urban and agricultural rain-driven runoff. Dr. Erickson is lead author for the book, "Optimizing Stormwater Treatment Practices: A Handbook of Assessment and Maintenance," and the editor of the University of Minnesota stormwater newsletter, UPDATES. Andy is also the coordinator and moderator for the Minnesota Stormwater Seminar Series which engages approximately 170 stormwater practitioners and interested parties per month in an online presentation and panel discussion. Dr. Erickson is the Vice Chair of the ASTM international E64 Committee on Stormwater Control Measures and serves the University of Minnesota as a member of the Water Council, the Environment and Energy in Transportation Research Council, and the Water Resources Science Graduate Program.



**Dr. Halil Ceylan**  
**Iowa State University**  
**Director of Program for Sustainable Pavement Engineering and Research**  
[hceylan@iastate.edu](mailto:hceylan@iastate.edu)

Dr. Halil Ceylan is a Professor of Civil Engineering and the founding Director of the Program for Sustainable Pavement Engineering and Research within the Institute for Transportation at Iowa State University. Dr. Ceylan has been teaching and conducting research as a faculty member since receiving his PhD in Civil Engineering from the University of Illinois. Dr. Ceylan has extensive experience in pavement field investigation. Over the course of his career, Dr. Ceylan has been involved with over 115 research projects related to transportation infrastructure systems and pavement/geo/engineering materials. He has been honored with 20 awards including the ASCE's prestigious 2021 James Laurie Prize for significantly advancing transportation engineering with his career contributions in smart, sustainable and resilient transportation infrastructure systems.



**Elexius (Lexi) Passante**  
**University of Wisconsin-Milwaukee School of Freshwater Sciences**  
**Graduate Research Assistant**  
[passante@uwm.edu](mailto:passante@uwm.edu)

Lexi is a Graduate Research Assistant in the McLellan Lab at the University of Wisconsin-Milwaukee School of Freshwater Sciences researching environmental degradation by road salt from a bottom-up perspective using salt-loving bacteria. She also contributes to a project tracking the COVID-19 virus in wastewater in the McLellan Lab. Before graduate school, Lexi worked many different environmental-related jobs such as the U.S. Geological Survey (USGS) on Asian Carp research on the Mississippi River. She then moved to the Twin Cities, MN, and worked for the Minnesota Pollution Control Agency (MPCA) as a compliance and enforcement person implementing wastewater and industrial stormwater permits.



**Dr. Monika Bleszynski**  
**University of Denver**  
**Research Scientist and Adjunct Professor**  
[monika.bleszynski@du.edu](mailto:monika.bleszynski@du.edu)

Dr. Monika Bleszynski is a Research Scientist and Adjunct Professor at the University of Denver, where she received her Ph.D. in Materials Science in 2018 focusing on polymeric materials and molecular modeling. She studies the development of new polymeric materials for extreme environments, materials aging, recyclable materials, and the effects of plastics on the environment. Her current project, funded by the state of Colorado (OEDIT), focuses on developing a polymer alternative to road salt.

With the permission of each presenter, presentations will be posted on the Fortin Consulting webpage following the Salt Symposium: <https://fortinconsulting.com/salt-symposium-presentations-2021>

## Thank you to the 2021 Salt Symposium

### Steering Committee:

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