

Wednesday, October 4, 2023

Ballroom

1:00 – 2:00 pm Lincoln’s Water 2.0 Project – Developing a Second Water Source

This presentation will share the process the City of Lincoln is undertaking to develop a second source of drinking water. Additional water supply is necessary to support Lincoln’s growing population and to provide reliable water supply for the future.

Steve Owens is the Superintendent of Water Production and Treatment at the Lincoln Water System. He has previously worked as the Water Distribution Manager and the Water Production Manager. Previous to working in the Water Division, Steve managed the City of Lincoln's Solid Waste Operations. Steve is a licensed civil engineer and a State of Nebraska Grade 1 water operator.

2:00 – 3:00 pm Urban Water and Wastewater Infrastructure: Prospects and Challenges

After a century and a half of massive urban development and population growth, it is time to rethink how infrastructure systems are planned, designed, and operated. Infrastructure is built by humans and for humans. Yet, most cannot provide safely, reliable, and sustainably the basic services they were created to provide. In this talk, we will review existing planning, design, and operating trends of seven types of infrastructure systems: water, wastewater, transport, electricity, gas, solid waste, and telecommunications. We will then focus on water and wastewater infrastructure specifically and examine their prospects and challenges. In particular, we will identify some of their biggest flaws and try to think of novel strategies to remediate them. This is particularly important for water infrastructure. Transportation, electricity, and wastewater infrastructure have been undergoing a revolution in the past decade and a half. It is about time we rethink how drinking water is collected and distributed. What is certain is that urban water and wastewater infrastructure will not be the same by the end of the century. Now is the time to discuss what some of these changes should be.

Sybil Derrible is a Professor in Urban Engineering and the Director of the Complex and Sustainable Urban Networks (CSUN) Laboratory at the University of Illinois Chicago. His research is at the nexus of civil engineering, urban metabolism, and data and complexity science to help design smart, sustainable, and resilient cities. He is the author of the textbook Urban Engineering for Sustainability published by MIT Press in 2019. He received a U.S. NSF CAREER Award for his work and the Huber Research Prize from the American Society of Civil Engineers (ASCE). He is an Associate Editor for the ASCE Journal of Infrastructure Systems and for Scientific Reports.

3:30 – 5:00 pm Closing Keynote Panel – The Future of Water Management in Urban Nebraska

This panel will continue the discussion of some of the key issues in planning for the future of urban spaces: growth, recreation and safe drinking water supply

Amanda Grint, Water Resources Engineer at Papio-Missouri River NRD

Senator McDonnell

Mike Beringer, EPA Region 7