Educational Sessions: Wednesday, October 27

• N. Iowa Section					ons: Wednesday, Gotober 2
		CEUs	Distribution	Management	Treatment
:00 AM -	8:00 AM			Breakfast	
::00 AM -	8:30 AM	0.050	Antennas and Water Tower Rehabilitation Tim Wilson – Project Manager at DIXON Engineering, Inc. How should antennas and communications equipment play into your water tower rehabilitation project? Join this discussion of pros, cons, and things to plan for.	Ethics in the Water Industry 2021 Class of the Iowa Water Industry Leadership Institute	Filter Media Replacement Considerations Julie Sievers – Senior Water Solutions Specialist at ISG Filter media replacement is a common maintenance activity for water systems. A number of factors should be considered prior to, during, and after replacing the media. This presentation will discuss those plus the impact of replacing filter media on biological removal. Many water systems are achieving biological ammonia, iron and/or manganese removal without realizing it. What to look for, tools to use, and a case study will be included.
3:30 AM -	9:00 AM	0.050	Water Tower Painting and Rehabilitation Lance Aldrich - Project Manager at Fox Engineering This session will review experiences and expectations when painting existing water towers.	Ethics Topics: Operator Ethics Pledge; Low Bid" for Professional Services 2021 Class of the Iowa Water Industry Leadership Institute	Assessing Chloride Limits in Your Community Seth Lamb PE - Water/Wastewater Engineer at ISG Join us for a survey of issues with chlorides in the environment, ideas to look community wide—including the water treatment plant—to find sources of chloride, and case studies of communities with chloride compliance schedules.
9:00 AM -	9:45 AM	0.075	Reduce Non Revenue Water with Effective Pressure Management Steve Bruskiewicz - Field Service Engineer at Nighthawk Control-iHydrant Learn how to monitor and react to hydraulic events in the distribution system that contribute to Non Revenue Water.	Ethics Topics: Water Use Prioritization; Employee Data Falsification 2021 Class of the Iowa Water Industry Leadership Institute	Aquifer Storage and Recovery: Concept, Design, and Operation Taylor Hopper - Project Manager at FOX Engineering Explore the concept of aquifer storage and recovery (ASR) and considerations for design, construction, and operation of ASR facilities. ASR wells are used to store treated drinking water in an underground aquifer until it can be returned to distribution system for use.

9:45 AM - 10:15 AM		Exhibit & Networking Break					
10:15 AM - 11:00 AM	0.075	Fire Hydrant Operation and Maintenance Andy Kohler – District Sales Manager at Clow Valve Fire Hydrants are a key component to your distribution system. Keeping them in good working condition is important to your water quality and municipality safety.	Help Wanted Craig Hennager – Lead Instructor at DMACC Dennis White – Industry Ambassador at PeopleService Inc. A look at the future workforce needs of the Water/Wastewater Industry and some of the challenges it will be facing over the next decade.	Battle of Operational Flexibility vs. Electrical Complexity Andy Venzke - Senior Engineer at HR Green, Inc. Heath Picken - Senior Project Manager at HR Green, Inc. Operational flexibility is most always desirable and beneficial. A common method of increasing operational flexibility is to add variable frequency drives (VFDs). However, this is often not as easy and simple as adding a VFD. The battle between operational flexibility and electrical complexity under many different scenarios will be explored to see if the benefits outweigh the ramifications.			
11:00 AM - 11:45 AM	0.075	Trenchless Pressure Pipe Technologies Jason Bordewyk – Regional Sales Manager at Underground Solutions Trenchless construction technologies, both established and emerging, will be reviewed for pressure pipe applications. When should trenchless construction be considered for water and force main applications? Which technology would	Community Water Fluoridation Update Dr. Bobby Russell, DDS, MPH, MPA, CPM - Dental Director & Bureau Chief, Oral & Health Delivery System Bureau, Division of Health Promotion and Chronic Disease Prevention at Iowa Department of Public Health Ed Moreno - Special Projects Manager at Gentle Family Dentists	Beyond SCADA Joe Finn – SCADA Practice Lead at Wonderware Midwest This session will take a look at the current state of SCADA systems and the possibilities beyond SCADA. Have you thought about what SCADA will look like in 3-5 years? (Things are moving fast!) We will cover a vast array of topics to consider as we look into SCADA and			

Sarah Petersen – Community Water

Fluoridation Coordinator at Iowa

Department of Public Health

beyond.

11:45 AM - 1:15 PM Lunch in the Exhibit Hall

technologies will be explained, including

help my water project succeed?

Available trenchless pressure pipe

a discussion on selecting the right

technology for a project.

1:15 PM - 2:00 PM

0.075

Advanced Water System Modeling

Chad Katzenberger – Senior Water Engineer at SEH, Inc.

Dive into the real-world applications of water model use. Water system models can become very helpful system planning and operational tools when used in the right application. We will explore the basics of system modeling and discuss what is needed to develop an accurate and reliable model. Furthermore, we will review various model applications through case study examples including standard pressure and flow modeling, operational troubleshooting, flushing program development, system operations simulations, water distribution quality modeling, and system surge analysis.

Alternative Delivery and Creative Financing: Working Together for Project Success

Eric Berggren – Water Treatment Business Class Director at HDR

Aging infrastructure, emerging contaminants, and population growth place pressure on Iowa Utilities to provide timely upgrades for their customers that meet water quality and quantity objectives within the constraints of ever tightening budgets. Alternative Project Delivery methods, such as Construction Management At Risk (CMAR) or Progressive Design Build can provide Owners with unique advantages. Regardless of the delivery model, financing the project is no less complicated with rising material and labor costs as the country gets back to work in a post-COVID era. Owners who understand the changing landscape of delivery methods and financing have options to complete projects. This presentation will explore the various alternative delivery models and will include an overview of the Water Infrastructure Finance and Innovation Act (WIFIA) funding program.

System Upgrades to Improve Water Quality at the Jewell WTP

Angela Romero – Senior Environmental Engineer at Stanley Consultants, Inc.

This presentation will cover the \$1.5 million construction project at the Jewell Water Treatment Plant that spanned two years. The improvements included replacement of the horizontal pressure filter with vertical pressure filters; replacement of the ion exchange softening system; addition of an ion exchange ammonia removal process; and improvements to the chlorination system. The goals for the project were to improve water quality and update and automate the filtration process. Working within the existing building footprint and keeping the water treatment plant in operation during construction were challenges that the project team worked together to address. Beginning with evaluation and conceptual planning, then following the project through design, permitting, financing, construction, startup, and into operation - this presentation provides an overview of the project process and challenges associated with a major project for a small water system.

2:00 PM - 2:45 PM

0.075 Lead Service Line Inventory and **Case Study**

Angie Kolz, PE – Water/Wastewater Practice Area Lead at WHKS & Co.

Learn how to start a program to meet the EPA's mandated lead service line inventories due in 2023.

Effective Media Relations for the Water Industry

Brian Gongol - VP at DJ Gongol & Associates, Inc.

Water issues shouldn't only make the news when something terrible happens. This is a crash course in how to ensure that the public is well-informed about water and wastewater issues, with perspective and advice from a media veteran with more than 25 years of insider experience. Pitfalls to avoid, best practices to put to work, and ideas for putting an extraordinary light on your ordinary work.

Ammonia Treatment Technology Improves WTP Financials

Scott Pallwitz - Product Manager at WesTech Engineering, LLC

This presentation will discuss ammonia treatment and its effect on overall plant costs.

2:45 PM - 3:15 PM

3:15 PM - 4:00 PM

0.075

Creation of a \$100M Transmission System

Kjrsten Bobb, PE - Client Service Manager at Stanley Consultants Michael Colby - Engineer at Stanley **Consultants**

This presentation will cover the breadth of work required to design and construct a brand new 12.7 MGD water transmission system in the Chicago metropolitan area, including two pump stations, more than nine miles of transmission main, and a 100-foot-tall concrete standpipe. Beginning with conceptual planning then following the project through design, permitting, financing, construction, and startup, this presentation encompasses a comprehensive overview of the requirements and challenges to successfully take a \$100 million project from a pipe dream to punch list in three short years.

Exhibit & Networking Break

Benefits of Solar Energy at a Treatment Facility

Adib Amini, Ph.D., PE - Engineer at FOX **Engineering**

Solar energy has the potential to provide enormous cost savings and environmental benefits to cities. Solar energy systems continue to drop in cost and improve in design and efficiency. Solar can be particularly useful at Water and Wastewater facilities, which have high energy demands. This presentation will discuss the practical advantages/disadvantages of solar and explore a case study of designing solar for facilities in Centerville, Iowa.

Council Bluffs Water Works Council Point Water Treatment Plant Expansion

Teresa Konda - Project Manager at HDR Engineering

This presentation will discuss the design considerations and challenges associated with the full build-out of the Council Point Water Treatment Plant and will present operated data collected from the expanded plant.

4:00 PM - 4:30 PM 0.050 **Johnston Pressure Zone Changes -Simplifying Operations and**

Increasing System Performance

Josh Scanlon - Project Manager at HR Green, Inc.

Shane Kinsey - Water/Sewer Analyst at City of Johnston

City of Johnston historically operated its distribution system with 4 pressure zones, including various storage tanks and pump stations. Additional supply capacity was needed to meet the growing demand in its far zone to keep up with overall growth in the community. In addition, one of the pressure zones operated in a closed system with a bleed-off valve to a lower pressure zone for pump control, which resulted in inefficient operation of the system. This project included a modeling study to combine two of the four pressure zones and construction of a new pump station to simplify operations and improve capacity and redundancy in the City's system.

Water Equation: What, Why, How?

Tim Wilson - Project Manager at DIXON Engineering, Inc.

An update on the Water Equation, what it does, why it does it, and how you can get involved at the Section level.

Reverse Osmosis Troubleshooting

Steve Troyer - President at FOX **Engineering**

This presentation will review common operational issues experienced with RO systemshow to identify causes and take corrective action. We will also discuss proactive design and operational steps that can be taken to minimize potential problems.

4:30 PM - 6:15 PM	Reception in the Exhibit Hall
6:15 PM - 8:00 PM	Annual Awards Banquet
8:00 PM	Young Professional and Friends Social Hour



			Canaral Cassian
		CEUs	General Session
7:00 AM -			Breakfast
8:00 AM -	8:45 AM	0.075	Cybersecurity Assessment Completed, Now What?
			David Brearley – Operational Technology Cybersecurity Director at HDR
			This presentation is focused on the SCADA and cybersecurity portion of the 2018 AWIA and is designed to assist Water and Wastewater Plant Managers and Engineers in planning for risk reduction wisely. This requires establishing short- and long-term risk reduction goals in a phased approach aligned to financial capability. The key is in understanding the ranked business ROI of the needed mitigation and documentation deliverables that "actually" reduce risk.
8:45 AM -	9:30 AM	0.075	AWWA & Water For People
			David LaFrance – Executive Director at American Water Works Association
			Georgia David – Community
			Engagement Manager at Water For People
9:30 AM -	10:00 AM	0.050	Business Meeting
			Iowa Section Leadership
10:00 AM -	10:15 AM		Networking Break
10:15 AM -	11:00 AM	0.075	Iowa DNR Update
			Mark Moeller – Water Supply Engineering Supervisor at Iowa DNR
			Roger Bruner – Supervisor at Iowa DNR
			A general overview of current drinking water topics, upcoming rules that are of current interest to water operators, EPA announcement, and an update on DNR's PFAS Action Plan.

Educational Sessions: Thursday, October 28

11:00 AM - 11:45 AM 0.075

Iowa Farmers' Attitudes Towards the Iowa Nutrient Reduction Strategy and Impacts on Future Conservation Adoption

Laurie Nowatzke – Measurement Coordinator for the Iowa Nutrient Reduction Strategy at Iowa State University Extension & Outreach

An Iowa Nutrient Reduction Strategy Farmer Survey was conducted annually from 2015 to 2019 with 6.000 lowa row crop farmers to understand farmers' attitudes toward water quality efforts and on-farm nutrient reduction practices. This presentation will present findings from this survey, focusing on the attitudes of and barriers faced by farmers who have not yet adopted nutrient reduction practices. It will also describe patterns in farmers' reported information sources, watershed project engagement, and cost-share program participation. Recommendations for engaging with farmers and conducting outreach will be provided, based on this survey's findings and other recent sociological research.

11:45 AM - 12:00 PM

Networking Break

12:00 PM - 1:00 PM

0.100

Watershed Protection Efforts: A Multi-Utility Perspective

Ashley Geesman – Environmental Engineer at City of Ames Water & Pollution Control

Jennifer Terry – External Affairs Manager at Des Moines Water Works Association

Marty Braster – Support Services Officer at Rathbun Regional Water Association

Mary Beth Stevenson – Watersheds and Source Water Coordinator at City of Cedar Rapids

A panel discussion on watershed protection efforts undertaken and envisioned by Rathbun Regional Water Association, Cedar Rapids Water, Ames Water, and Des Moines Water Works.