

# **AWWA-IA 2018 Annual Conference Program Descriptions**

**Wednesday, October 17, 2018**

## **Distribution Concurrent Sessions**

### **Practical Solutions to External Corrosion Problems on Buried Water Mains**

**Jeff Schramuk with CP Solutions**

Corrosion of municipal water transmission and distribution piping is a serious problem. Properly designed, installed, and maintained cathodic protection systems can add years of additional service life to both life to both new and existing water transmission and distribution piping.

### **Fire Hydrants for Dummies/ Fire Hydrants from a Dummy**

**Andy Kohler with Clow Valve**

Fire hydrant installation, operation, and maintenance.

### **Using GIS to map your utility, model your hydraulics and design and build improvements**

**Mike Liska with HR Green**

This presentation will demonstrate the benefits of using GIS for all aspects of water system analysis, design, and construction.

### **Reduce Non-Revenue Water with Cost Effective Leak and pressure data**

**Tom Bohrer with Nighthawk**

Learn how to cut non-revenue water and save money with pressure and leak detection. Are there effective strategies?

### **Thrust Blocks and Joint Restraint**

**John Gade with FOX Engineering**

Why, where, and types of joint restraint on water mains. Common problems with solutions regarding thrust blocks and joint restraint systems.

### **Metering Systems**

**Ben Eischeid with Core & Main**

Some of the latest technologies available for water metering and meter education

## **Management Concurrent Sessions**

### **Water Quality: Building Trust one Customer at a time**

**Denise Blakeley Ihrig with City of Dubuque**

A look into our customer water quality issues and how we are responding

### **Uproot Team Dysfunction and Cultivating Employee Engagement**

**Sue Sager with City of Cedar Rapids**

Do you find your team in a perpetual spin cycle of unproductive employee behaviors, miscommunication and rumor mill? In this session we will provide a brief overview of Patick Lencioni's organizational health model including the 5 Dysfunctions of a Team and The Ideal Team Player. Key

concepts of developing trust, growing employee engagement and promoting accountability will be shared. We will discuss strategies such as leadership buy-in and cascading messages that have been employed at the City of Cedar Rapids. You will walk away with specific action steps to begin your journey to a healthier organization, increased employee engagement and greater team collaboration.

### **Using a Groundwater flow model to support decision making for agriculture and the environment in central Wisconsin**

#### **Ken Bradbury with Wisconsin Geological and Natural History Survey**

Balancing the water needs of the environment with those of an important agricultural industry is critical for the environmental and economic sustainability of central Wisconsin. Concerns about increasing use of groundwater for irrigation and declines in stream flows and lake levels in Wisconsin's central sand plain have motivated the development of modeling tools to help inform local water-management decisions. The Little Plover River is surrounded by irrigated fields and has a long history of groundwater/surface water interaction studies, making it ideal for an updated study using modern techniques. Declines in the river flow and subsequent establishment of public rights flows motivated a modeling project using state-of-the-practice groundwater science to explore water management and sustainability options for the Little Plover River watershed. The resulting models and analyses might serve as a prototype for addressing similar issues in wider areas of the state.

### **What we can learn from Partnerships**

#### **Panel of Mark Moeller with Iowa DNR; John Dunn with Ames Water and Pollution Control; Denise Blakeley with City of Dubuque; Chad Coburn with Poweshiek Water Association; Matt Tapken with Poweshiek Water Association**

Partnering with other Water Systems can lead to great benefits

### **Utility Management Standards to Optimize Utility Operations**

#### **Chi Ho Sham with Eastern Research Group, Inc.**

Water utilities strive to have a well-run water system that protects public health. With the ever-increasing complexity of drinking water systems, utilities can use AWWA Utility Management Standards and the associated Operational Guides to assess system limitations, optimize operations, and identify needed change. The AWWA Utility Management Standards have been developed to help utilities to foster excellence through continuous improvement and evaluation, and by providing a framework for self-assessment, counsel, and assistance.

### **Ames New Water Treatment Plant: From Concept to Reality**

#### **John Dunn with City of Ames Water and Pollution Control; Lance Aldrich and Dale Watson with FOX Engineering**

The program will present a case study in the conceptualization, design, and construction of a new 15 million gallon per day water treatment plant.

## **Treatment Concurrent Sessions**

### **Well Re-Casing: It's a Mess**

#### **Matt Hawes with FOX Engineering**

This presentation will discuss recasing of wells including the process for determining when recasing is needed, the benefits of recasing, how recasing is performed and issues that can come up during the recasing process.

### **WT/WD/ WW SCADA Systems**

#### **Dustin Elin with City of Cedar Rapids**

Overview of all the aspects of SCADA systems and how they have progressed in the last decade. Will discuss the basics of PLCs, motor control, Level/Pressure sensing, and how this makes it to graphics. Provide basic overview of SCADA networking and the different communication technologies that are the most prominent and why it may be important to be aware of their advantages and disadvantages. This presentation is directed towards the smallest water production facilities to the largest.

### **Unearthing and Rehabilitating a 4 MG Clearwell**

#### **Heath Picken with HR Green, Inc.**

Faced with signs of cracking in the buried clearwell roof, the need to add baffling, and aging and non-functional high service pump discharge piping and valves, the City of Pella decided to fully rehabilitate their existing 4 million gallon buried clearwell. The presentation will cover the design challenges and features of rehabilitating the buried clearwell to bring it up to current standards.

### **Case Studies of Zebra Mussel Control at Raw Water Intakes**

#### **Mark Hardie with HR Green, Inc.**

The City of Spirit Lake and Milford Municipal Utilities desired improvements to its raw water system to increase capacity to meet current and future demands. In addition, zebra mussels had been discovered in adjacent lakes across the Iowa Great Lakes Region and these utilities desired to install a means to protect the intakes from being clogged by mussels. The third case study involves the Iowa DNR fish hatchery in Spirit Lake. The fish hatchery utilizes raw water from Big Spirit Lake and they desired a means to prevent mussels from entering the hatchery and eliminating the potential of spreading the mussels to other lakes as the young fish are stocked into various Iowa lakes.

### **Applying Pumping Equipment Correctly**

#### **Pete MacPherson with Iowa Pumpworks**

Considerations in properly selecting and maintaining pumps

### **Different way to measure organic content- which is right for my plant?**

#### **Carlos Williams with Hach**

There are a number of analytical techniques that can be used to measure organics. This program will discuss different techniques to measure organics with pros and cons, and will also discuss lab vs. process.

**Thursday, October 18, 2018**

### **Joint Sessions**

### **U.S. Department of Homeland Security- Priority Telecommunications Services**

#### **Dale Moushon with Department of Homeland Security- Office of Emergency Communications**

Learn how to enhance emergency communications capability at no cost with Priority Telecommunications Services available through the U.S. Department of Homeland Security, Office of Emergency Communications. Emergency response organizations communicate by cellular or landline

networks shared with the public. Should those networks become overloaded due to high call volumes or other impairment (weather, civil unrest, terrorism, etc.) government personnel and locations may not be able to communicate at a critical moment.

### **Water Fluoridation in Iowa: The Who, What, and Where**

#### **Sara Carimichael- Stanley with Iowa Department of Public Health**

Community Water Fluoridation (CWF) has been named one of the ten great public health achievements of the 20<sup>th</sup> century by the Centers of Disease Control and Prevention. Even with over 70 years of scientific research and support for CWF, there is still confusion around the topic and an anti-fluoride movement is happening throughout the United States and world. Currently, 63.6% of Iowans served by a community water systems have access to optimal fluoridated water. This session will explain the importance of CWF, review Iowa's fluoridation status, and describe the role of the Iowa Department of Public Health as a partner and resource. Participants will also learn how to determine the fluoridation status of their communities, where to find accurate information and resources, and how local water operators can receive funds to update, replace, or install fluoridation equipment.

### **Farm Bill and what's going on in Washington?**

#### **Adam T. Carpenter with AWWA**

This talk will discuss AWWA's ongoing legislative and other policy efforts around the farm bill. AWWA has focused for several years on bringing additional attention to source water protection as a specific goal of farm conservation programs, and on bringing additional utilities into partnerships to address source water issues. This talk will summarize both efforts to date and anticipated actions, and will also discuss other timely policy activities out of Congress, EPA and other relevant agencies and AWWA's efforts to address them.