

Abstracts & Bios for MWEA Outreach Program in Springfield, MO 2022

Abstract - Springfield Environmental Services Collection System Data Analysis and Planning

The 80/20 rule of Inflow and Infiltration (I&I) is a commonly held notion that 80% of the I&I volume is tied to defects encompassing 20% of the system. City of Springfield Environmental Services uses this rule to help determine focused areas of I&I rehab in the ongoing 15-year Overflow Control Plan and utilizes various data collection sources including near-time rain and flow monitoring, CCTV inspections, private sewer evaluations and smoke testing to prioritize and develop rehabilitation projects. Methods of data collection, rehab project delivery methods and analysis and dashboards will be discussed.

Bio – Julie Hawkins

Julie Hawkins is a Professional Engineer for the City of Springfield's Department of Environmental Services. She graduated with a double major in Civil and Architectural Engineering from Missouri University of Science and Technology in 2006. She has been with the City for over 6 years and has been working doing stormwater plan review for over 5 years. This past year she transitioned into a different roll with Environmental Services managing the rain and sewer flow monitoring group, private sewer repair program, work order group, while also providing project management to small capital improvement projects.

Bio – Brandon Freeman

Brandon Freeman is a Professional Engineer for the City of Springfield's Department of Environmental Services. He graduated with a BS in Civil Engineering from Missouri University of Science and Technology in 2008. He has been with the City for less than 1 year and has been working on projects including rain and flow monitoring, hydraulic modeling, capital improvement planning and data analysis.

Abstract – Safety Hazards Associated with Collection Systems

Maintaining wastewater collection infrastructure – pump stations, force mains, and sewers is an integral component of the proper management of a treatment system and critical to preventing illegal wastewater releases. Effective preventive maintenance programs have been shown to significantly reduce the frequency and volume of untreated sewage discharges, help communities plan for the future and save money on emergency response.

This session will address safety hazards and concerns that wastewater collection system workers and operators face on a daily basis. Wastewater workers face occupational risks daily such as:

- Fall Hazards
- Atmospheric
- Sewage, Stormwater

- Electrical issues with equipment
- Ergonomic
- Work zone or site environment
- Confined Space
- Engulfment
- Equipment

General best practices on top of regional or individual health and safety regulations can be an employee's best line of defense. Work-related afflictions vary from minor injuries like sprained ankles and pulled muscles to more serious ailments like lung infections, blindness, and even death. The consequences are too great to ignore, and this session will highlight safety risks as part of continuing to keep safety at the forefront.

Bio – Roxann Slater

Roxann Slater, *Project Manager*, for Omega Environmental Services. Roxann has been involved in Collection and Distribution system work for over 30 years. She has been involved with flow metering, water loss control and SSES projects across the country. Roxann has been involved in assisting communities to develop specifications for flow monitoring, leak detection and SSES projects to coordinating and performing field work to managing a project. Roxann has done many presentations in Kansas, Missouri, Nebraska and Iowa. She is a member of WEF, AWWA and the MWEA Collection System Committee. Roxann has received a Golden Manhole Award and 5S from KWEA and MWEA.

Abstract-A Look at Sewer Evaluation Techniques and Nomenclature

A look at all the codes mean during an evaluation and how to decipher those codes and explain what they mean to your system. PACP is a straight forward evaluation that is used by many utilities as well as contractors in today's market.

Bio – Barry Howell

Extensive experience in account management and new business development in the wastewater arena with over 16 years of experience. Award winning sales representative of construction products for the wastewater market. Mastery of written and verbal communications, technical writing, and presentations to technical groups.

ABSTRACT- USING AI FOR SEWER INSPECTIONS TO INCREASE EFFICIENCY AND ACCURACY

Closed-circuit television (CCTV) sewer inspections continue to be an important method of assessing small-diameter pipe conditions worldwide. While the sensor and crawler technology has evolved considerably, one aspect of the process - manual CCTV footage review and analysis – has remained practically unchanged in the last 30 years. This process is labor-intensive, expensive, and no one wants to spend hours on end looking at the inside of a sewer

pipe – but now with AI there is another newer, fresher, faster, and more accurate way to complete the same task.

Abstract-CIPP Basics

Presentation covers pipe rehabilitation options - Cured-In-Place-Pipe [“CIPP 101” basics], and sanitary system asset management

Bio – Brian McCrary

Kansas City Area Business Development Manager - Insituform Technologies. Responsible for the delivery of municipal water, storm and wastewater rehabilitation projects for the states of Kansas, Nebraska, and western Missouri. Brian has been with Insituform since May 1, 2008, working directly with local and regional municipalities in their efforts to rebuild aging sanitary sewers, water and storm water systems.

Insituform Technologies is recognized as the worldwide leader and pioneer of cured-in-place pipe (CIPP) technology for storm, sanitary/wastewater and water pipe rehabilitation. Insituform offers a trenchless solution for infrastructure rehabilitation [sanitary sewer - storm culverts - pressure pipe applications], making it a faster, less disruptive, cost effective alternative to dig and replace. Insituform has installed OVER 30,000 miles of CIPP worldwide.

Education:

B S in Civil Engineering from Kansas State University in 1984; completed course work requirements for an M. S. in Civil Engineering from the University of Missouri with an emphasis in Structural Engineering and Construction Management.

Licensed Professional Engineer in the State of Missouri

BIO – Ron Moore

Ronald Moore retired in 2017 from the industry and started Synergy Construction Group; this company specializes in sewer pipeline rehabilitation & installation, bio-retention for stormwater, and Artificial Intelligence for sewer pipeline evaluation. Synergy's revenue has grown each year.

Mr. Moore has 35 years of experience in heavy construction, wastewater, and sewer construction; he has worked for Lock 26 Constructors at Lock and Dam 26 and the Metropolitan Sewer District (MSD). His experience includes heavy dam construction, infrastructure repair, and rehabilitation, including combined sanitary and stormwater collection systems. As a project manager with MSD, I have designed and managed over \$100 million of sewer and rehabilitation projects!

Mr. Moore has 20 years of military service with the Missouri Army National Guard as an enlisted soldier and officer.

Achievements:

- Army Commendation Medal
- U.S. Army Air Assault Badge (Helicopter)
- Missouri Army National Guard Commendation Award
- Congressional Proclamation July 2005
- U.S. Army National Guard Overseas Ribbon
- National Defense Ribbon
- Yes, I Can Awardee, Sentinel Newspaper

Activities:

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- ASTM voting Committee Member F-17 Plastic Piping Systems
- Board Member Manufacturing Training Alliance (MTA).
- Board Member Portfolio Art Gallery
- Salvation Army - Board Member (Real-estate and Property Committee)
- Member of Alpha Phi Alpha Fraternity, Inc
- Member of the Missouri National Guard Association
- Project Youth Director –NSBE Pre-College STEM Initiative Florissant Valley Community College

Abstract - Mainline Televising & Lining Specifications and Contracts; What to Know

You've put a job out to bid and now need to build the contract. Understanding the specifications that were a part of your contract are vital to ensure things are done properly, as you requested as part of the bid. This presentation will talk about the importance of knowing the specifications and certain things to look for while your project is being constructed.

Bio – Ryan Poertner

General Manager of Ace Pipe Cleaning, Inc. and lives in St. Louis, MO. Ryan manages the St. Louis office, as well as the Cured-In-Place-Pipe division within APC. Ryan is directly responsible for the safety and quality, of work for these divisions. Ryan's main focus is on the growing market involving lateral rehabilitation. APC is a leader in the industry providing all types of rehabilitation solutions for municipalities in need. Ryan has spent his 20+ years working in the water and wastewater rehabilitation fields. Prior to the 10+ years currently with APC Ryan spent 8 years working for Insituform Technologies, Inc. in roles as Engineer, Trainer, Estimator, and Project Manager. Ryan is an active member of NASTT, NASSCO, WEF and local engineering organizations.

ABSTRACT- A Tale of Two Overflows

It's an average Tuesday and you are enjoying a typical day in the life of City FOG Inspector. Your phone rings... it's the Sewer Maintenance Crew Leader. There has been a massive SSO just down the street from the restaurant that your FOG Program just inspected and passed with flying colors. Where do you look when the grease interceptor is functioning and well

maintained yet the restaurant has been discovered to be the source of a major grease blockage in the sanitary sewer? This presentation will document the mystery investigation of FOG discharged from a restaurant that has every appearance of being in compliance with your FOG Program. From the SSO, to diagnosing the grease source, identifying unauthorized and creative plumbing, to... finally... the facility coming into compliance. But, just when you thought you were safe...it happens again. Is this grease dilemma happening in your city? Will your next FOG related SSO be caused by an obstacle like this that you don't expect?

BIO- Sarah Limb, City of Springfield, MO

Sarah Limb is a Senior Environmental Compliance Specialist and the FOG program manager for the City of Springfield's Department of Water Quality and Management. She graduated from Drury University with a Bachelor of Science degrees in Biology and Environmental Science. She has 18 years of experience in public health investigation: disease surveillance, monitoring public/private drinking water, restaurant inspections, code enforcement, and most recently private/commercial plumbing and public sewer inspections. Sarah lives in Springfield with her husband Spencer and her dogs Ellie, Gypsy, Peaches, Walter, and Bowie.