



Collection Systems Conference 2020

Technical Program

(Updated December 18, 2019)

June 2 – 5, 2020

El Paso Convention Center

El Paso, Texas

This conference is being held by the Water Environment Federation (WEF) in cooperation with the Water Environment Association of Texas (WEAT) and the Water Research Foundation (WRF).

Pre-conference Workshops

(Additional fees apply)

Workshop A: Wet Weather Storage Solutions: From CIP Planning and Capacity Management to Construction, Operations and Maintenance

Tuesday, June 2

8:30 AM – 5:00 PM

This workshop will focus on the conceptualization and implementation of wet weather storage projects for collection systems including tanks, pipelines and tunnels. Emphasis will be placed on data analysis needed to site and properly size a wet weather storage facility. Comparisons will be made between wet weather storage and traditional conveyance and treatment alternatives, in a collection system, big or small. The workshop will also include hands-on exercises to give all attendees an opportunity to explore the benefits of wet weather storage solutions or refine their understanding of such facilities. Lastly, we will address planning and design considerations, including the fundamentals of storage tank and storage tunnel construction, operation, and maintenance using real project case studies.

Carlos Toro-Escobar, Andy Lukas, Bryan Rogne, Brown and Caldwell; Chris Stephan, HRSD; Bently Chan, Henrico County Public Utilities; Roger Cronin; Christine Heinrich-Josties, Bureau of Sanitation; Kyle Leininger, DN Tanks; Rosa Castro-Krawiec, JCK Underground, Inc.

Workshop B: Advancements in Flow Monitoring and Data Analytics in Supporting Effective Management of Wastewater Collection Systems

Tuesday, June 2

8:30 AM – 5:00 PM

This workshop is intended to offer participants an opportunity to learn about or expand their knowledge of advancements in flow monitoring and data analytics for effective wastewater collections systems. Workshop participants will gain a deeper understanding of prevailing practices; and technological advancements and innovation in flow metering equipment and data acquisition /management/analytics to support two key aspects of the collection systems management functions: 1) capital improvement programs to address I/I reduction, overflow control and capacity/condition assurance; and 2) operation and maintenance to achieve operational optimization and in-time maintenance targets. In essence, the proposed workshop will help participants gain/enhance their knowledge on prevailing industry practices as well as the futuristic trends.

Srini Vallabhaneni, Stantec; Hatem El-Sayegh; Richard Kauffman, The Metropolitan St. Louis Sewer District; Phillip Hubbard, HRSD; Fazle Rabbi, Houston Water; Kevin Enfinger, ADS Environmental Services; Rick Dey, Teledyne, Isco; James Caruso, Hach Company; Kristina Zuniga, EBMUD

Facility Tours
(Additional fees apply)

Tour 1: Lift Stations and Hickerson Water Reclamation Facility

Thursday, June 4

8:00 AM – 11:30 AM

Built in 1994, the large Frontera Lift Station collects and pumps the majority of the flow for the Westside of El Paso. It uses super oxygenation for odor control. Upstream three miles is the Coates Lift Station, which was built in 1991 and uses magnesium hydroxide for odor control.

In operation since 1987, the Hickerson Water Reclamation Facility receives wastewater from residential, commercial and industrial sources on the west side of El Paso and treats up to 17.5 MGD per day. The plant is an extended aeration activated sludge treatment plant that uses both electric and gas-powered aeration blowers in the treatment process and UV radiation as a means of disinfection of treated wastewater. The plant produces reclaimed water for parks, schools and a country club golf course.

University of Texas at El Paso's Engineering Department will have a portable laboratory onsite at the treatment plant to mimic the advanced water purification process, taking treated wastewater to drinking water standards.

Tour 2: Kay Bailey Hutchison Desalination Plant and TechH2O Learning Center

Friday, June 5

8:00 AM – 11:30 AM

El Paso is home to the world's largest inland desalination plant, which opened in 2007 and is frequented by visitors from all over the globe. El Paso has vast brackish groundwater resources that were previously unusable. The Desalination Plant filters out the salts using reverse osmosis to produce up to 27.5 MGD of fresh water daily. About 83% of the water is recovered while the remainder is produced as a concentrate, which is disposed through deep-well injection.

Next door to the Plant is the TechH2O Learning Center, a museum-quality education center that hosts thousands of students every year for field trips and events.