The 2018 LIFT Intelligent Water Challenge
An Opportunity for Vendors, Civic Hackers, and Students

Today’s water industry operates complex treatment, collection, and distribution systems to protect public and ecological health. With the advent of the Internet of Things, these systems are increasingly instrumented to monitor key process indicators, thereby facilitating operation of the system. The water industry, however, recognizes that the growing store of big data collected across these new “intelligent” water systems may deliver value in unforeseen ways as utilities work to address complex issues such as stormwater management, flooding, eutrophication and algae blooms, aging infrastructure, CSOs, SSOs, process optimization and asset management.

The Leaders Innovation Forum for Technology (LIFT), a joint effort of The Water Research Foundation and the Water Environment Federation (WEF), is holding its first-ever Intelligent Water Challenge to demonstrate the value of intelligent water systems to utilities and thereby foster the adoption of smart water technologies. The Challenge will be supported by American Water Works Association (AWWA), Smart Water Networks Forum (SWAN), and the International Society of Automation’s (ISA) Water and Wastewater Division, and other organizations. The intent of the Challenge is to give students, professionals and technology aficionados the opportunity to showcase their talents and innovation, with a focus on leveraging data using the best available tools to help utilities better understand the dynamics of complex systems for making better decisions.

The Challenge, which will run from March to August 2018, will provide general problem statements and example datasets for participants, along with a series of informational webinars to introduce them to the datasets and underlying systems. Possible problem categories are Collection Systems, Wastewater Treatment Systems, Drinking Water Treatment Systems, Source Water/Watershed, and Distribution Networks.

Teams with exceptional and innovative solutions will be invited to present their results in person at WEFTEC 2018 in New Orleans, LA for final judging. The winning teams in each category will receive cash and other prizes.

The Joint AWWA/WEF Utility Management Conference - a leading and noted management conference for the water sector – has been identified as a fitting venue to kick off the Challenge as we continue our conversations on Intelligent Water Systems and Smart Water. The Challenge will be formally unveiled from 12:00 noon to 2:00 PM CT on Friday, February 23rd 2018 at the Hyatt Regency San Antonio Riverwalk. Presentation of goals, processes, judging criteria, and utilities’ challenges will be followed by a question-and-answer session. Registration for the Challenge will be opened after the launch event.

I invite you to join our kickoff and to participate in the 2018 Intelligent Water Challenge, whether as a challenger, participant or sponsor. Please email me (lut@cleanwaterservices.org) if you plan on attending the February 23rd Challenge unveiling, or if you have any questions.

Ting Lu, Ph.D., P.E.
Principal Technologist, Clean Water Services
Chair, LIFT Intelligent Water Systems Workgroup