

## Technology Trends and Outlook for the Municipal Water Sector

Michael W. Sweeney<sup>1\*</sup>

<sup>1</sup>Toho Water Authority, 951 Martin Luther King Blvd, Kissimmee, Florida, 34741, USA

(\*correspondence: msweeney@tohowater.com)

### FORMAT

30 minute presentation

### KEYWORDS

AWWA, Municipal Water, Data, Big Data, Analytics, Automation, Water Conservation, Water Reuse, Water Utility, Cyber Security

### ABSTRACT

IBM has noted that at present, the amount of such data produced every two days on the web is more than all of the data available prior to 2004. Most of us might be experiencing the collateral effects of this proliferation as evidenced by the amount of emails with attachments, various water industry updates on social media and the like we receive daily.

Our biggest challenge and trend is transforming this growing level of data stemming from our plants, offices and customers into beneficial information and knowledge that better serves our customers and public health. Examples of applying and adapting our automation assets to address major initiatives near and dear to us in Central Florida that are enabled by and rely on automation is the focus of this presentation. These initiatives also reflect national concerns and include water conservation and reuse, customer care and partnerships, and inter-utility collaborations to share and save resources. Lastly, AWWA's recently launched effort to updated and improve the guidance to water utilities toward protecting our control systems from cyber-attack will be briefly covered.

### About the Speaker:



**Michael Sweeney, Ph.D.** He is a member of AWWA and WEF currently serving as chair of the Utility Management Committee and chair of the Literature Review Committee as well as the ISA WWWID. He has served as the Deputy Executive Director of Toho Water Authority since 2011. Prior to this appointment he has 30 years' experience with water and wastewater utilities and public works serving Indianapolis, Cincinnati and Louisville in various senior management and technical capacities. He has also provided consulting services for numerous clients in the areas of utility management and technology throughout the United States and Canada. His academic experience includes serving as Adjunct Assistant Professor of Environmental Engineering at Purdue University and Adjunct Associate Professor of Civil and Environmental Engineering at the University of Louisville. He is a registered professional engineer and holds M.S. and Ph.D. degrees in Environmental Engineering from Purdue University and a B.S. degree in Public Health from Indiana University.