

Water Sector Approach to Cybersecurity

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SUBMISSION TYPE

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ABSTRACT

This presentation will provide an overview of the American Water Works Association's development of a sector-specific approach to support voluntary use of the NIST Cybersecurity Framework. The AWWA guidance and use-case tool were developed to aid non-technical utility managers gain an understanding of key risk management actions that can support a robust cybersecurity program. The application of the use-case tool generates a prioritized list of recommended controls based on pre-defined use cases, where the highest priority is assigned to controls that will have the most impact in the short term. The AWWA guidance and use-case tool have been recognized by NIST, USEPA and the Water Sector Coordinating Council.

ABOUT THE AUTHORS



Kevin M. Morley, Ph.D. is the Security & Preparedness Program Manager for the American Water Works Association (AWWA). In this role he works closely with a variety of organizations tasked with advancing the security and preparedness of the Nation's critical infrastructure, including DHS/FEMA, EPA, USACE, CDC and the Water Sector Coordinating Council. This has included facilitating the expansion of mutual aid and assistance via the Water/Wastewater Agency Response Network (WARN) initiative. In addition, he has supported the development of water sector standards and guidance for security and preparedness, including ANSI/AWWA G430: Security Practices for Operations and Management, ANSI/AWWA G440: Emergency

Preparedness and ANSI/AWWA J100: Risk Analysis and Management for Critical Asset Protection (RAMCAP®) Standard for Risk and Resilience Management of Water and Wastewater Systems. Most recently he led the development of a resource guide entitled Process Control System Security Guidance for the Water Sector and a supporting Use-Case Tool which provides a water sector-specific approach to the NIST Cybersecurity Framework.

Prior to AWWA, he worked with Delon Hampton & Associates where he was involved in several security projects, including water utility vulnerability assessments and perimeter security evaluations for utility and

government facilities. In addition, he spent several years providing environmental and regulatory consulting services to Fortune 500 companies. Dr. Morley received his Ph.D. from George Mason University for research assessing the resilience of the water sector through the development of the Utility Resilience Index (URI). He holds a M.S. from SUNY College of Environmental Science and Forestry and a B.A. from Syracuse University. Contact: kmorley@awwa.org