

Hazen *Memorandum*

January 29, 2019

To: Shannon R. LaRocque, PE, Utility Director
From: Eric Stanley, PE
Will Thomas, EI
cc: Albert Muniz, PE
Janeen Wietgreffe, PE
Re: Compliance with 2018 Water Infrastructure Act

On October 23, 2018, the America's Water Infrastructure Act of 2018 was signed into law. Section 2013 of the Act addresses community water system risk and resilience. Under the Act, drinking water systems will be required to conduct risk and resiliency assessments and revise emergency response plans based on those assessments with compliance deadlines as soon as 2020. The Village of Wellington Utilities (Village) requested that Hazen and Sawyer (Hazen) review the applicability of the recently passed Act to the Village's operations and determine requirements, deadlines, and potential range of costs to comply.

Risk Assessment Requirements and Deadlines

America's Water Infrastructure Act of 2018 requires that community water systems serving populations greater than 3,300 persons shall assess the risks to, and resilience of, its system (referred to hereinafter as the Risk Assessment or "RA"). The RA shall include the following elements:

- The risk to the system from malevolent acts and natural hazards
- The resilience of the infrastructure, including SCADA/cyber resilience
- The monitoring practices of the system
- The financial infrastructure of the system
- The use, storage, or handling of various chemicals by the system
- The operation and maintenance of the system

The detailed RA shall culminate with an implementation plan for capital and operational needs for risk and resilience management of the system. The assessment shall be finalized and then certified to the Administrator of the Environmental Protection Agency (EPA) by the following dates:

- March 31, 2020, in the case of systems serving a population of 100,000 or more;
- December 31, 2020, in the case of systems serving a population of 50,000 or more but less than 100,000; and
- June 30, 2021, in the case of systems serving a population greater than 3,300 but less than 50,000.

We understand that the Village water system serves a population of 50,000 or more but less than 100,000. Based on the population criteria, the Village of Wellington is required to complete the RA by December

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31, 2020. The RA must be reviewed every five years to determine if the assessment shall be revised. Upon review, the water system shall recertify the original assessment or certify a revision to the assessment.

Emergency Response Plan Requirements and Deadlines

Within six months of completion of the RA, America's Water Infrastructure Act of 2018 also requires a letter of certification to EPA that the Emergency Response Plan (ERP) for a utility is updated, and at least every 5 years thereafter. Based on the population criteria, the Village would be required to complete the ERP by June 31, 2021. The ERP must contain the following elements:

- Strategies and resources to improve the resilience of the system, including the physical security and cybersecurity of the system
- Plans and procedures that can be implemented, and identification of equipment that can be utilized, in the event of a malevolent act or natural hazard that threatens the ability of the community water system to deliver safe drinking water
- Actions, procedures, and equipment which can obviate or significantly lessen the impact of a malevolent act or natural hazard on the public health and the safety and supply of drinking water provided to communities and individuals, including the development of alternative source water options, relocation of water intakes, and construction of flood protection barriers; and
- Strategies that can be used to aid in the detection of malevolent acts or natural hazards that threaten the security or resilience of the system.

The ERP can be developed based on existing emergency plans such as the Village's Hurricane Plan, but is required to include response protocols for any type of emergency or event identified as a threat during the RA. The suggested format for the ERP is based on the Federal Emergency Management Agency Comprehensive Preparedness Guide (CPG101) and on American Water Works Association guidance M19.

Costs to Complete RA and ERP

Completion of the RA and ERP will be on the order of \$150K to \$200K for most utilities. Many utilities spent approximately \$100K years ago to conduct a one-time vulnerability assessment required under the Bioterrorism Act of 2002. The RA is a more involved process, and the ERP incorporates mitigation efforts identified under the RA.

Hazen has recently completed or is currently completing RA and ERP assessments for multiple clients in Florida. Hazen would be pleased to further discuss with the Village what this work entails, and to present a proposal to the Village to perform this work if requested. Note that the assessment can be completed in two parts; if the fee is too large to allocate all funds in the current year, it can be split into a two-year project. The cost for the RA comprises approximately two-thirds of the project, and the cost for the ERP that is due six months later comprises one-third of the project.

Very truly yours,



Eric A. Stanley, PE
Senior Principal Engineer