

**DATE:** December 2, 2019  
**TO:** Matthew Jordan, General Manager  
**FROM:** Kenneth R. Herd, Chief Science and Technical Officer *KRH*  
**SUBJECT:** America's Water Infrastructure Act (AWIA) Risk & Resilience Assessment – *Receive Status Report*

**SUMMARY**

Tampa Bay Water will be required to submit Risk and Resilience Assessment certification forms to U.S. EPA by March 31, 2020 for each of its facilities permitted as a Community Water System. This item provides a summary of the actions that are being taken to complete this assessment by the AWIA certification deadline.

**RECOMMENDATION**

Receive Status Report

**COST/FUNDING SOURCE**

Not Applicable.

**DISCUSSION**

The America's Water Infrastructure Act (AWIA) of 2018 was signed into law on October 23, 2018. This law included provisions that amended the Safe Drinking Water Act and set out requirements that Community Water Systems conduct a risk and resilience assessment and prepare or revise an emergency response plan. Community Water Systems serving a population greater than 100,000 are required to submit a form to U.S. EPA by March 31, 2020 certifying that the required Risk and Resilience Assessment has been completed. According to direction received from U.S. EPA, this certification form needs to be completed and submitted for each Community Water System by its Public Water System (PWS) number.

The Risk and Resilience Assessment is required to cover the following:

- The risk to the system from malevolent acts and natural hazards;
- The resilience of the pipes and constructed conveyances, physical barriers, source water, water collection and intake, pretreatment, treatment, storage and distribution facilities, electronic, computer, or other automated systems (including the security of such systems) which are utilized by the system;



- The monitoring practices of the system;
- The financial infrastructure of the system;
- The use, storage, or handling of various chemicals by the system; and
- The operation and maintenance of the system.

Given Tampa Bay Water's role in providing water for the Region, Tampa Bay Water has taken steps to assist its member governments (members) in meeting their AWIA reporting obligations. An AWIA Workshop with the members was held on March 28, 2019 to provide an overview of the AWIA requirements and outline Tampa Bay Water plans for completing its Risk and Resilience Assessments. In completing these assessments, Tampa Bay Water has assembled documentation to support the AWIA certifications of its members as well as its own.

Tampa Bay Water utilized guidance provided by U.S. EPA, the Association of Metropolitan Water Agencies and the American Water Works Association (AWWA) to develop a risk assessment methodology for assessing and documenting threats and risks at a facility level. Tampa Bay Water utilized risk analysis concepts and approaches set out in AWWA J100 for identifying and analyzing threats to Tampa Bay Water's facilities and systems.

The methodology used for the assessment includes:

- Identification of facility-specific information useful for conducting the AWIA threat assessment (Asset Characterization)
- Identification of threats relevant to Tampa Bay Water facilities and the likelihood of each of these threats impacting Tampa Bay Water facilities (Threat Characterization and Analysis)
- Assessment of the potential negative consequences pertinent to each AWIA subject area (Consequence Analysis)
- Identification of the vulnerabilities and controls already in place at Tampa Bay Water facilities to reduce the risks identified in the initial risk analysis (Risk/Resilience Analysis)
- Identification of potential Risk Management Actions for further reducing risk and improving resilience (Risk/Resilience Management)

To facilitate this assessment and to ensure the results are fully documented so they will be available for future review and updating, individual Excel workbooks are being created for each Tampa Bay Water facility covered by the AWIA requirements.

It should be noted that for some threats, Tampa Bay Water has already completed robust risk and resilience assessments. For example, the Master Water Plan includes a detailed assessment of the potential for drought to impact Tampa Bay Water's ability to supply water to the members. These existing assessments are referenced as appropriate in the facility-specific AWIA Risk and Resilience Assessment workbooks.

An update on the results of the AWIA Risk and Resilience Assessments will be provided to the Tampa Bay Water Board at the February 2020 Board Meeting.

## **BACKGROUND**

Additional information on the AWIA requirements can be found on the U.S. EPA website at: <https://www.epa.gov/waterresilience/americas-water-infrastructure-act-risk-assessments-and-emergency-response-plans>.