America’s Water Infrastructure Act (AWIA)
What does this mean to your utility?

An October 2018 amendment to the Safe Drinking Water Act, AWIA requires community water systems serving populations greater than 3,300 to prepare a Risk and Resilience Assessment (RRA) and an Emergency Response Plan (ERP).

Hazen and Sawyer recommends using the J100-10 AWWA Risk and Resilience Management Standard, which was previously approved by the Department of Defense and is considered an industry standard, to fulfill these requirements (see following page).

RRA Submission/Certification

RRA deadlines vary by the size of the population served. Development of the ERP must follow no more than six months following completion of the RRA.

<table>
<thead>
<tr>
<th>Population</th>
<th>RRA Deadline</th>
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<tbody>
<tr>
<td>&gt;100,000</td>
<td>March 31, 2020</td>
</tr>
<tr>
<td>50,000</td>
<td>December 31, 2020</td>
</tr>
<tr>
<td>3,300</td>
<td>June 30, 2021</td>
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RRA Requirements

The RRA evaluates the risks to, and resilience of, the community water system, including:

- **Risks** from malevolent acts and natural hazards
- **Monitoring practices**
- **Financial infrastructure**

ERP Requirements

The ERP details strategies and resources to improve resiliency, encompassing both physical and cyber assets:

- **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 equipment that can be utilized, in the event of a malevolent act or natural hazard that threatens the delivery of safe drinking water
- **Actions, procedures, and equipment** that 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

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**RRA Process**

- Inter-Agency Training Workshop
  - Review AWIA Requirements
  - Review J100 ANSI Seven Steps
  - ID Critical Assets
  - ID Threats
  - ID Consequences

- Critical Asset Assessments
  - Site Visit(s)
  - Asset Characterization
  - Vulnerability
  - Monitoring
    - Consequence Management

- Risk Assessments
  - Review Critical Asset Assessment
  - Risk Prioritization
  - Risk Mitigation Strategies
  - Develop Risk and Resilience Assessment Report

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**Population - Based RRA Deadlines**

- Population Served
  - >100,000
  - 100,000
  - 50,000
  - 3,300

- Deadlines:
  - 2020: March 31, 2020
  - 2020: December 31, 2020
  - 2021: June 30, 2021
  - 2022
Our Recommended Compliance Method

Since the AWIA does not specify the methodology to be used in developing the RRA we recommend using the seven-step risk assessment method from the *J100-10 AWWA Risk and Resilience Management Standard*, which we have used to assess risk and develop emergency response plans for decades. This standard sets the requirements for all-hazards risk and resilience analysis and management for the water sector and prescribes methods that can be used for addressing these requirements.

The first step is to evaluate the information already available:

- Can your Vulnerability Assessment be located? The Vulnerability Assessment was performed to comply with the 2002 Bioterrorism Act.
- When was it last updated?
- What resiliency testing has the system undergone previously?

These answers can help form the basis of the updated RRA.

Do you have ERPs for any system components already? Which need updating and where are new ones warranted? The ERP developed under this exercise will serve as multi-pronged document, providing a response framework for several threats and risk scenarios.

Hazen's recommended approach for developing the RRA is to identify gaps and prioritize risks for each of the eight identified areas of compliance within AWIA. ERP development will be based on RRA findings and utility experience with existing ERPs where applicable.

**WHY HAZEN?**

Decades of experience assessing and managing risk for water utilities of all sizes enables Hazen to efficiently and thoroughly evaluate all risks a water utility could experience and support development of a holistic management plan that will increase the resilience of the entire system.

**Full text of the AWIA:**


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