

ANSI/AWWA **G440-22**
(Revision of ANSI/AWWA G440-17)

AWWA Standard

Emergency Preparedness Practices

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American Water Works
Association



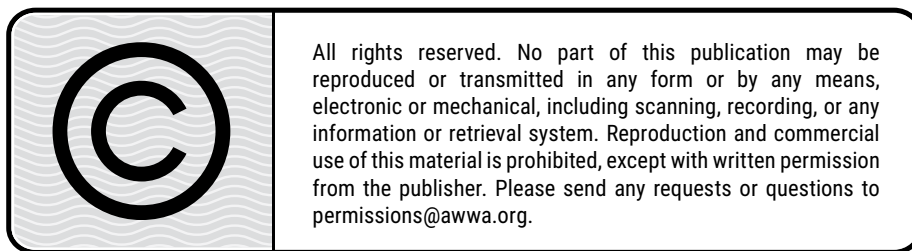
AWWA Management Standard

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Foreword

This foreword is for information only and is not a part of ANSI/AWWA G440.*

I. Introduction.

I.A. *Background.* The AWWA Standards Program is designed to serve water, wastewater, and reclaimed water utilities—hereafter, the water sector—and their customers, owners, service providers, and government regulators. The standards developed under the program are generally intended to improve a utility’s overall operations and service. Among the standards is a specific effort to establish formal management and operations guidelines. These guidelines identify appropriate practices, procedures, and behaviors that promote effective and efficient utility operations and contribute to the protection of public health, public safety, and the environment.

AWWA’s standards process has been used for more than 100 years to produce ANSI–accredited standards for materials and processes that are used by the water sector. These standards are recognized worldwide and have been adopted by many utilities and organizations. Volunteer standards committees establish standard practices in a uniform and appropriate format.

Formal AWWA standards committees have been, and continue to be, formed to address individual standard practices for the diverse range of water sector utilities. A formal standards committee was created in March 2005 to develop a standard for emergency preparedness practices. This standard is the outcome of Emergency Preparedness Practices Standards Committee industry expertise.

The Utility Management G-Series Standards were developed to assist utilities with identifying and implementing applicable best management practices. To further enhance the use of the standards, the AWWA Utility Quality Management Committee developed both self-assessment and peer-review programs to assist utilities that choose to meet performance criteria contained within the standards. The committee developed a framework for the stringent expectations of all Utility Management Standards, as follows:

- Utility Management Standards are voluntary, and their intent is to provide guidance toward best management practices.
- The requirements set forth in the standards describe best practices that are achievable but not necessarily the best of class.

* American National Standards Institute, 25 West 43rd Street, 4th Floor, New York, NY 10036.

- The language used in the standards should avoid requirements related to numeric values and words such as “shall” or “must” in areas that describe or could be considered in exceedance of existing local and/or federal regulations.

I.B. *History.* The first edition of this standard was approved by the AWWA Board of Directors on June 12, 2011. This second edition was approved on Jan. 14, 2017. This edition was approved on Oct. 24, 2022.

The America’s Water Infrastructure Act (AWIA) of 2018 (PL 115-270) requires community water systems serving a population of more than 3,300 to prepare a risk and resilience assessment and emergency response plan every 5 years. The risk and resilience assessment must consider threats from both malevolent acts and natural hazards that could impact the mission of the utility because of physical or cyber incidents. The findings of the risk and resilience assessment must then be used to inform the development of an emergency response plan that considers plans and procedures that can be implemented to “obviate or significantly lessen the impact” on the health, safety, and supply of drinking water from malevolent acts or natural hazards. The G440 standard provides the necessary framework to prepare the required emergency response plan, including consideration of actions that reduce risk or enhance resilience as called for in the emergency response plan requirement of AWIA. Application of the G440 standard is enhanced when implemented with complementary standards and resources, including:

- ANSI/AWWA G430—Security Practices for Operation and Management;
- ANSI/AWWA J100—Risk and Resilience Management of Water and Wastewater Systems;
- ANSI/AWWA G300—Source Water Protection;
- AWWA M19, *Emergency Planning for Water and Wastewater Utilities*;
- AWWA Water Sector Resource Typing Guidance and Implementation Toolkit; and
- Water Sector Cybersecurity Risk Management Guidance and Assessment Tool.

I.C. *Acceptance.* There is no applicable information for this section.

II. Special Issues.

II.A. *Advisory Information on Application of Standards.* This standard includes only those requirements that are limited exclusively to emergency preparedness practices for operation and management of drinking water, wastewater, or reclaimed water systems. Separate standards adopted by the Standards Program cover utility management programs such as distribution system operation and management, water

treatment, source water protection, security, communication and customer relations, and business systems. More topics will be added over time, including those for wastewater utilities.

III. Use of This Standard. It is the responsibility of the user of an AWWA standard to determine that products and practices described in the standard are suitable for use in the particular application being considered.

III.A. *Purchaser Options and Alternatives.* The following information should be provided by the purchaser:

1. Industry standard used—that is, ANSI/AWWA G440, Emergency Preparedness Practices, of latest revision.

III.B. *Modification to Standard.* There is no applicable information for this section.

IV. Major Revisions. Major changes made to the standard in this revision include the following:

1. Background information on the Utility Management G-Series Standards was added to Sec. I.A of the Foreword.

2. Background information on the America’s Water Infrastructure Act (AWIA) of 2018 and G440’s relation to the AWIA requirements was added to Sec. I.B of the Foreword.

3. Added definitions for day, reclaimed water, and wastewater to Sec. 3 based on Standards Council boilerplate language requirements.

4. Sec. 4.5. was expanded to include the use of Incident Specific Response Procedures (ISRPs), and power outage/cyberattack was added to the list of recommended example scenarios.

V. Comments. If you have any comments or questions about this standard, please call AWWA Engineering and Technical Services at 303.794.7711; FAX at 303.795.7603; write to the department at 6666 West Quincy Avenue, Denver, CO 80235-3098; or email at standards@awwa.org.

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AWWA Management Standard

Emergency Preparedness Practices

SECTION 1: GENERAL

Sec. 1.1 Scope

This standard covers the minimum requirements to establish and maintain an acceptable level of emergency preparedness based on the identified and perceived risks facing utilities within the water sector.

Sec. 1.2 Purpose

The purpose of this standard is to define the minimum emergency preparedness requirements for water, wastewater, and reclaimed water utilities and associated assets; to respond to emergencies and restore normal operations; and to minimize disruption of critical lifeline services that are essential to public health, fire protection, sanitation, economic activity, and consumer confidence.

Sec. 1.3 Application

This standard can be referenced to evaluate, develop, implement, and maintain emergency preparedness practices. Stipulations of this standard apply when this document is referenced and then only to the emergency preparedness practices of the utility.