



**American Water Works  
Association**

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**ANSI/AWWA G300-14**  
(Revision of ANSI/AWWA G300-07)

**AWWA Management Standard**

# Source Water Protection

Effective date: June 1, 2014.

First edition approved by AWWA Board of Directors Jan. 21, 2007.

This edition approved Jan. 19, 2014.

Approved by American National Standards Institute Feb. 6, 2014.



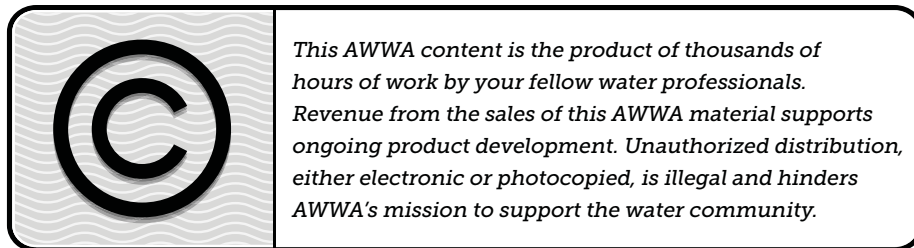
## AWWA Management Standard

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ISBN-13, print: 978-1-62576-0-180

eISBN-13, electronic: 978-1-61300-278-0

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## Committee Personnel

The AWWA Standards Committee on Source Water Protection, which reviewed and approved this standard, had the following personnel at the time of approval:

Chi Ho Sham, *Chair*

### *General Interest Members*

D.M. Flancher,* Standards Engineer Liaison, AWWA, Denver, Colo.	(AWWA)
M.W. Grimm,* Standards Council Liaison, The Cadmus Group Inc., Happy Valley, Ore.	(AWWA)
J.C. Keck, California Water Service Company, San Jose, Calif.	(AWWA)
C. McElhinnery, US Environmental Protection Agency, Chicago, Ill.	(ILUSEPA)
C.H. Sham, The Cadmus Group Inc., Waltham, Mass.	(AWWA)
L.P. Warren, Launch Consulting, Charlottesville, Va.	(AWWA)

### *User Members*

P.R. Easley, Central Arkansas Water, Little Rock, Ark.	(AWWA)
R.W. Gullick, Passaic Valley Water Commission, Totowa, N.J.	(AWWA)
R. Morgan, Beaver Water District, Lowell, Ark.	(AWWA)
D.W. Peters, City of Portland Water Bureau, Portland, Ore.	(AWWA)
F. Reynolds, Salt Lake City Water Department, Salt Lake City, Utah	(AWWA)

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\* Liaison, nonvoting

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## Foreword

*This foreword is for information only and is not a part of ANSI\*/AWWA G300.*

### **I. Introduction.**

I.A. *Background.* The AWWA Management Standards Program is designed to serve water, wastewater, and reuse utilities—hereafter the water sector—and their customers, owners, service providers, and government regulators. The standards developed under the program are intended to improve a utility's overall operation and service. Among these standards is this effort to establish formal management and operational guidelines. These guidelines identify appropriate practices, procedures, and behaviors whose implementation will promote effective and efficient utility operations and, thus, will contribute to protection of public health, public safety, and the environment.

AWWA's standards process has been used for more than 90 years to produce American National Standards Institute (ANSI)-recognized 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. Likewise, this management standard is developed using the same ANSI-recognized formal process. Volunteer standards committees establish standard practices in a uniform and appropriate format.

Formal standards committees have been and continue to be formed to address the individual standard practices for the diverse areas of the water sector. A formal standards committee was formed during the first quarter of 2002 to approve standards for Source Water Protection. This standard is a principal deliverable of that committee.

The objective of source water protection is to maintain, safeguard, and/or improve the quality of source water. All water agencies strive to consistently supply their customers with sufficient quantities of high-quality water at affordable rates. The drinking water industry uses a multiple-barrier approach to achieve this goal. The multiple-barrier approach involves several consecutive steps, including selection of high-quality source water(s), source water protection, optimized water treatment as necessary, distribution system management, and water quality monitoring. Optimization of each step in this process is a logical and prudent approach in responding to higher customer drinking water quality expectations, more stringent regulatory requirements, and the

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

uncertainties represented by the growing number of microbiological and chemical drinking water contaminants of concern.

I.B. *History.* The first edition of this standard was approved by the AWWA Board of Directors on Jan. 21, 2007. This edition was approved on Jan. 19, 2014.

I.C. *Acceptance.* In May 1985, the US Environmental Protection Agency (USEPA) entered into a cooperative agreement with a consortium led by NSF International (NSF) to develop voluntary third-party consensus standards and a certification program for direct and indirect drinking water additives. Other members of the original consortium included the American Water Works Association Research Foundation (AwwaRF, now Water Research Foundation\*) and the Conference of State Health and Environmental Managers (COSHEM). The American Water Works Association and the Association of State Drinking Water Administrators (ASDWA) joined later.

In the United States, authority to regulate products for use in, or in contact with, drinking water rests with individual states.† Local agencies may choose to impose requirements more stringent than those required by the state or province. To evaluate the health effects of products and drinking water additives from such products, state, provincial, and local agencies may use various references, including

1. An advisory program formerly administered by USEPA, Office of Drinking Water, discontinued on April 7, 1990.
2. Specific policies of the state or local agency.
3. Two standards developed under the direction of NSF, NSF‡/ANSI 60, Drinking Water Treatment Chemicals—Health Effects, and NSF/ANSI 61, Drinking Water System Components—Health Effects.
4. Other references, including AWWA standards, *Food Chemicals Codex*, *Water Chemicals Codex*,§ and other standards considered appropriate by the state or local agency.

Various certification organizations may be involved in certifying products in accordance with NSF/ANSI 60 and 61. Individual states, provinces, or local agencies have authority to accept or accredit certification organizations within their jurisdiction. Accreditation of certification organizations may vary from jurisdiction to jurisdiction.

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\* Water Research Foundation, 6666 W. Quincy Avenue, Denver, CO 80235.

† Persons outside the United States should contact the appropriate authority having jurisdiction.

‡ NSF International, 789 N. Dixboro Road, Ann Arbor, MI 48105.

§ Both publications available from National Academy of Sciences, 500 Fifth Street, N.W., Washington, DC 20001.



ANSI/AWWA G300 does not address additives requirements. Thus, users of this standard should consult the appropriate state or local agency having jurisdiction in order to

1. Determine additives requirements, including applicable standards.
2. Determine the status of certifications by all parties offering to certify products for contact with, or treatment of, drinking water.
3. Determine current information on product certification.

## **II. Special Issues.**

II.A. *Advisory Information on Application of Standards.* This standard includes only those requirements that are limited exclusively to source water protection. The standard does not specifically address source water selection. Separate standards adopted by the Standards Program will cover utility programs such as safety, emergency preparedness and security, customer relations, financial management, human relations, and other business systems.

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

III.A. *Options and Alternatives.* The following information should be provided by the user.

1. Standard used—that is ANSI/AWWA G300, Source Water Protection, of latest revision.
2. Details of other federal, state or provincial, and local requirements (Section 4.4.6).

III.B. *Modification to Standard.* Any modification of the provisions, definitions, or terminology in this standard must be provided by the user.

## **IV. Major Revisions.**

1. Clarification of certain concepts in the Standard.
2. Moving optional analysis and plans from Section 4.2 to Section 4.4.
3. Updating concepts and references with information available after 2007.

**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](mailto:standards@awwa.org).

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## AWWA Management Standard

# Source Water Protection

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## SECTION 1: GENERAL

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### **Sec. 1.1 Scope**

This standard describes the essential elements for the effective protection of source waters.

### **Sec. 1.2 Purpose**

The purpose of this standard is to define the minimum program requirements for the protection of source waters.

### **Sec. 1.3 Application**

This standard can be referenced in the evaluation of source water protection for recognition. The stipulations of this standard apply when this document has been referenced and then only to the protection of source waters. Given that source water protection is a continuous, ongoing process that can span many years, it is not expected that a water utility would complete all aspects of its source water protection program within five or even 10 years from the initiation of the program. However, a water utility shall complete or demonstrate substantial progress in all six (6) elements of its source water protection program (as described in Section 4), especially with regard to the implementation of key action items of its program. Performing a source water assessment and developing a source water protection plan by themselves are not enough to satisfy the criteria of this standard. Completion or substantial implementation of action items is essential for a source water