Manual of Water Supply Practices

M52

Water Conservation Programs

A Planning Manual

Second Edition



American Water Works Association

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American Water Works Association

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Water Conservation Programs—A Planning Manual

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Chapter 1

Introduction

Water conservation is a key component of overall water resources planning. Conservation programs that are carefully designed and implemented can bring many benefits. Among these are the efficient utilization of available sources of supply, public recognition and participation, and improved support for water pricing adjustments.

WHAT IS WATER CONSERVATION?

If this question was asked of water professionals in the 1930s through the 1960s, most would have said "water conservation involves building a reservoir to capture runoff that would otherwise be wasted by flowing into an unusable water body, like the ocean." Starting in the 1970s, water professionals became aware that minimizing water waste was essential. For example, AWWA's water resources policy in 1975 included the statement, "Every effective means to prevent and minimize waste and promote wise use should be employed by all entities, public and private, engaged in water resource activities." AWWA's first handbook on water conservation, *Water Conservation Management*, was published in 1981 followed by an updated handbook, *Water Conservation*, in 1987 (AWWA 1981; AWWA 1987).

The first edition of this manual published in 2006 was an update of these original works (AWWA 2006). This second edition, published in 2017, is a further update with revised case studies, two more chapters, and additional content.

Shown in Figure 1-1 is AWWA's policy on water conservation. The most up-to-date policy statement can be found at www.awwa.org/about-us/policy-statements.aspx. A more extensive description of the role of water conservation in water resources management is contained in AWWA M50, *Water Resources Planning* (AWWA 2017).

Long-Term Versus Short-Term Conservation

A common and long-held public perception is that water conservation means restricting or curtailing customer use as a temporary response to drought. Today, while water use restrictions are still a useful short-term drought management tool, most utility-sponsored water conservation programs emphasize lasting long-term improvements in water use efficiency while maintaining quality-of-life standards. In a growing number of communities, this now includes permanent water use restrictions such as limiting the number of

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