

**M50**

# Water Resources Planning

Third Edition



American Water Works  
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Manual of Water Supply Practices—M50, Third Edition

## Water Resources Planning

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# Preface



This publication is the third edition of the American Water Works Association (AWWA) Manual M50, *Water Resources Planning*, originally published in 2001, with a second edition released in 2007. The manual presents information on how to develop a plan for new water supplies to accommodate projected future water demands and provides an effective framework for water resources planning for the 21st century.

Water resources planning for potable water supplies is a very broad topic. Issues range from estimating future water demand to evaluating possible new sources of water, protecting water sources, and addressing expanding environmental regulations. One method for preparing a water resources plan is integrated resource planning (IRP). Developed in the 1990s, IRP is a way to bring together myriad issues, interests, and stakeholders through a planning process that can result in a reason-based, cost-effective, and environmentally sound plan the public can support.

This third edition significantly enhances the basis of water resources planning provided in prior editions. Additions and improvements include the following:

- Organization of the manual around the planning process
- Inclusion of stakeholder involvement at various steps throughout the process
- Inclusion of reclaimed water and other source water alternatives in the portfolio of solutions, recognizing the Total Water Solutions planning perspective
- References to AWWA standards and manuals of water supply practices for more details on specific topics
- Expanded emphasis on the evaluation of alternatives
- A new, award-winning case study that illustrates the concepts presented in the manual
- Inclusion of the AWWA policy statement on water resources planning

This manual was prepared by AWWA's Water Resources Planning and Management Committee and associated volunteer authors to help water resources planners meet the challenge of accommodating a growing demand for water, while complying with myriad regulations that govern the development and use of new water supplies.

No two water resources plans are alike, and planning is an ever-changing process. The issues discussed in this manual should allow the planner to develop and implement a comprehensive work plan that responds to technical and institutional questions that must be addressed before deciding how to develop new water supplies.

The AWWA Water Resources Planning and Management Committee welcomes your input and comments on the content and usefulness of this manual.