



Barrington, Bristol and
Warren, Rhode Island

WATER SUPPLY SYSTEM MANAGEMENT PLAN

EXECUTIVE SUMMARY

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TABLE OF CONTENTS

PREAMBLE..... 1

INTRODUCTION..... 3

WATER SUPPLY SYSTEM DESCRIPTION..... 5

 Organization and Legal Structure..... 5

 Water Supply Sources..... 5

 Dams..... 7

 Treatment, Storage and Transmission Facilities..... 8

 Treatment..... 9

 Storage Facilities..... 10

 Pump Stations..... 10

 Transmission..... 11

 Distribution..... 12

 Interconnections..... 15

 Service Area..... 17

 Source and Distribution Metering..... 17

 System Production Data & Water Use..... 19

 Major Users..... 20

 Legal Obligation to Provide Water..... 20

 Non-Account Water Use..... 20

 Water Conservation Program..... 21

WATER QUALITY PROTECTION AND MANAGEMENT..... 22

SUPPLY MANAGEMENT..... 23

 Anticipated Future Demands..... 24

 Available Water..... 26

DEMAND MANAGEMENT..... 27

SYSTEM MANAGEMENT..... 29

 Meter Installation, Maintenance, and Replacement..... 29

 Leak Detection and Repair Plan..... 30

 Preventative Maintenance..... 31

EMERGENCY AND DROUGHT MANAGEMENT..... 33

IMPLEMENTATION PLAN..... 36

 20-Year ICP..... 38

FINANCIAL MANAGEMENT..... 39

COORDINATION..... 43

PREAMBLE

This Water Supply System Management Plan (WSSMP) Update has been prepared as required under Rhode Island General Laws 46-15.3, as amended and titled “The Water Supply System Management Planning Act” (Act). The legislative authority to effectuate the goals and policies of this Act has been conferred to the Rhode Island Water Resources Board (RIWRB). To this end, the RIWRB has promulgated the Rules and Regulations for Water Supply System Management Planning (Rules), last revised in October 2002, as amended to implement the provisions of this Act. The WSSMP has been prepared to be consistent with the goals of these Rules as well as the strategies and goals articulated in the RIWRB’s 2012 Strategic Plan. It is also consistent with the goals of State Guide Plan Element No. 721 – RI Water 2030 and the goals stipulated in the Comprehensive Plans for the Towns of Bristol, Warren, and Barrington.

The Bristol County Water Authority (BCWA), as a water purveyor supplying over 50 million gallons (MG) of water a year, is responsible for updating its WSSMP every five years. The BCWA prepared an update to the WSSMP in December 2010 and has made periodic updates to the plan in the time since then to clarify and address comments made by regulatory agencies following their review of the plan. The last significant WSSMP update was done in 2015. During the last five years, however, significant changes have occurred in the way the BCWA manages their supply sources now and how they look to do so in the future. Since 2011, the BCWA has used wholesale water purchased from Providence Water through the East Bay Pipeline as the sole source of supply to the system. Prior to this, the BCWA used wholesale water purchased from Providence Water in addition to water withdrawn from their own source reservoirs that was treated at the Child Street Water Treatment Plant. The treatment plant and reservoirs are maintained by the BCWA and are available in the event of an emergency, but they are not actively used to supply the system.

Previous versions of the WSSMP recommended that upgrades be made to the Child Street WTP and that transmission infrastructure be rehabilitated in order to improve the capacity, redundancy, and dependability of the BCWA’s own supply sources. However, the BCWA does not consider the use of its own source water a sustainable approach for system supply in the future. Therefore, the BCWA believes that the best path forward is to partner with neighboring water systems to develop new supply interconnections and eventually altogether discontinue the use of their own sources and treatment plant. This approach is as follows:

- Continue to purchase wholesale water from Providence Water from the existing East Bay Pipeline interconnection, which has a supply capacity of 7.5 MGD that exceeds current and anticipated future daily demands.

- Develop an alternate wholesale connection from a second water supplier, Pawtucket Water Supply Board, for an additional +/-7.5 MGD in transmission capacity. This would meet current and anticipated future average day demands but will also provide overall supply redundancy from a source entirely separate from Providence Water and the Scituate Reservoir.
- Constructed a 4.0 MGD emergency interconnection with the City of East Providence.
- Continue to maintain the current emergency interconnections with East Providence with supply capacity totaling approximately 1.0 MGD.
- Connected with the Swansea Water District in Swansea, MA for up to 1.0 MGD in supply capacity during emergencies.

The BCWA is pursuing this approach and anticipates working with the RI Water Resources Board, RI Department of Environmental Management, and other State agencies in continuing to pursue changes in legislation that will allow for the current sources to be abandoned.