A Brief History of the DCR/MWRA Water System

1600s-1700s- Boston's Early Water Supply-

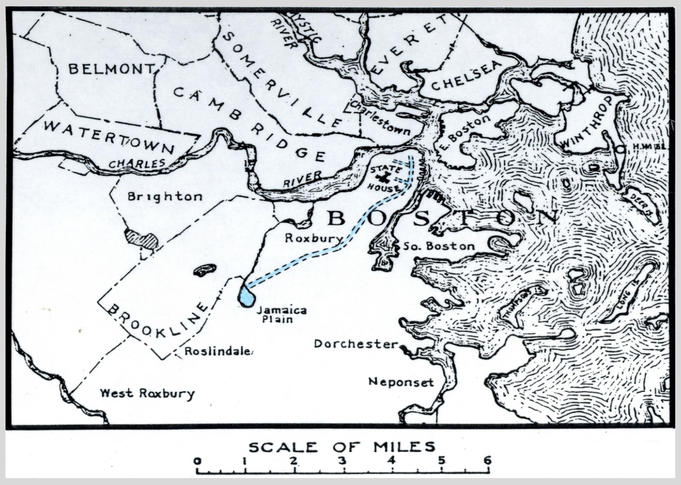
Boston was settled in 1630 and its first water supply was a spring near the common. Most earlier settlers relied on water from cisterns and underground wells, but the quality was poor and the supply inadequate.

As Boston became more populated, lack of water became a greater problem, especially for fire control.

An illustration of firefighting in Boston's early years.

1796-The Aqueduct Corporation – Jamaica Pond

The first attempt to provide a more organized water supply system came in 1796. The Aqueduct Corporation began delivering water from Jamaica Pond through wooden pipes.



An early map showing the route of the aqueduct from Jamaica Pond.

A wooden aqueduct with a fireplug from Boston's early water system. When a fire broke out, volunteer firefighters bored holes into the wooden mains and tapped them. After the fire, they plugged the holes and marked the spot for future fires.

1846- Lake Cochituate and the Metropolitan System

By 1825 the population of Boston had grown to 50,000 people and had suffered a devastating fire. Aside from low-water pressure, contaminated water was also a concern. Boston needed a reliable supply of water for drinking water and to fight fires.

After decades of debate, the state legislature voted to build a publicly owned aqueduct system as well as to buy property from the Aqueduct Corporation and other private water corporations.

Long Pond in Natick was recommended as a spot for a reservoir and a 14.62-mile aqueduct was built to supply 16 million gallons a day. Renamed Lake Cochituate, the reservoir was in use until 1946.

View of the celebration on Boston Common, October 25, 1848. The first water from Lake Cochituate flowed into the Frog Pond at a dedication ceremony which drew 100,000 people.

View of Lake Cochituate c. 1900. In 1951, it was removed from the active water system and is now managed as a state park.

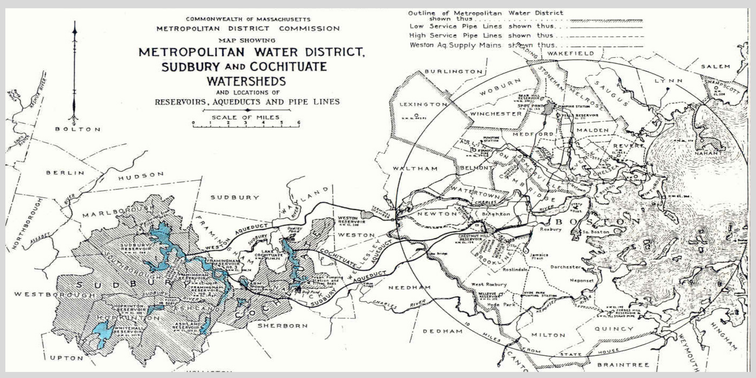
1870 - Expanding the Water Supply

By 1868 Boston's population had reached 225,000. This dramatic growth in population along with the introduction of indoor plumbing put further strains on Boston's water supply.

In 1870, the Mystic Lakes system in Winchester, Medford, and Arlington, which had been developed by Charlestown, was added to the Boston system when Charlestown was annexed. This lake system had a yield of 30 million gallons a day. In 1910, the Mystic Lakes were removed from the water system due to pollution and became a recreation area.

1878 - Sudbury Reservoirs

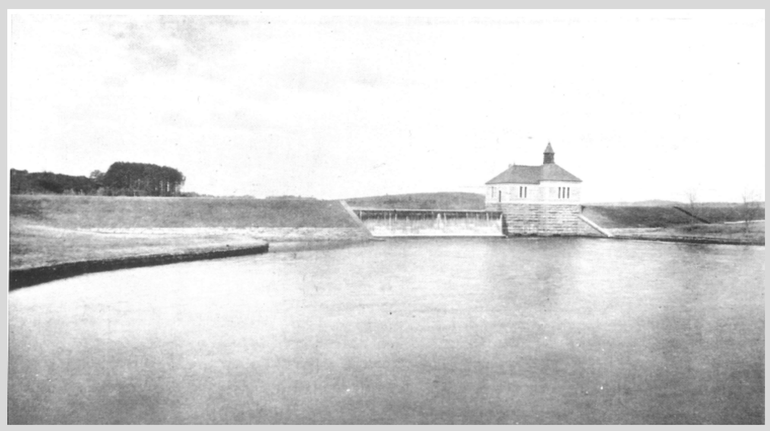
In 1878 construction began on a system along the Sudbury river to supplement the Lake Cochituate system in Natick. These new reservoirs were Sudbury, Whitehall, Hopkinton, Ashland, Stearns, Brackett, and Foss. These reservoirs collectively added 10 billion gallons to the water supply.



Historic map of the Metropolitan Water District. The Sudbury Reservoirs added 10 billion gallons of water to the system.

Photo of laborers clearing land for Sudbury Reservoir c. 1875. All told, construction required moving about 4.5 million cubic yards of soil and boulders.

In 1947 the Whitehall, Hopkinton and Ashland Reservoirs became part of the state park system (currently managed by DCR), and in 1976 the entire Sudbury System was officially reclassified as an emergency water supply. Today the DCR Office of Watershed Protection manages 4,943 acres of land in the Sudbury Reservoir watershed system. However, only the Sudbury Reservoir and Foss (Framingham Reservoir No. 3) are classified as a reserve drinking water supply.



Gatehouse at Foss Reservoir (Framingham Reservoir #3). Only the Foss and Sudbury Reservoirs remain as emergency backup for the current water system.

dcr
Massachusetts

Quabbin Reservoir
Department of Conservation and Recreation
Division of Water Supply Protection
Office of Watershed Management
485 Ware Road
Belchertown, MA 01007
413-323-7221
www.mass.gov/dcr/watershed

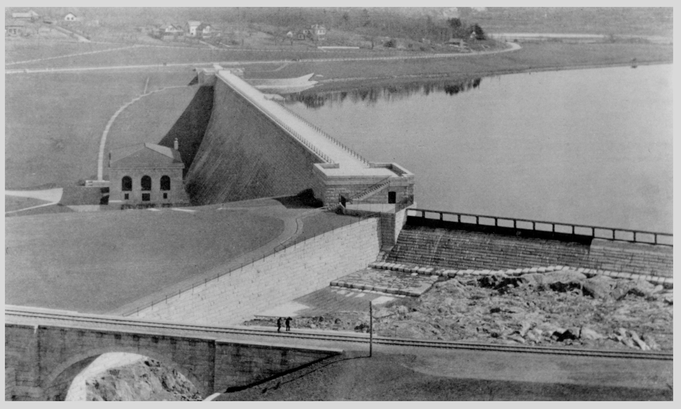
1897-Wachusett Reservoir

As metropolitan Boston's population continue to grow, plans were made to expand the water supply by investigating many of the watersheds in the central part of Massachusetts.

In 1897, work began to impound the Nashua River above the town of Clinton. Six and 1/2 square miles were cleared and flooded in the towns of Boylston, West Boylston, Clinton and Sterling. Water from the Wachusett Aqueduct could be released into the reservoirs of the Sudbury River system for transport to Boston via the Sudbury Aqueduct. Water from the Wachusett Reservoir could also flow through the new Sudbury Reservoir to the Weston Aqueduct.

In 1905 the reservoir was completed, and it was first filled to capacity in May 1908. Built to service the 29 municipalities within the 10-mile radius of the State House, the Wachusett Reservoir added 64 billion gallons of water to the water supply.

Laborers clearing the area to be flooded to create the Wachusett Reservoir. Built between 1896-1906, the construction came just before the availability of gasoline powered hydraulic engines.



The Clinton Dam was completed in 1905. At the time, the Wachusett Reservoir was the largest public water supply reservoir in the world.

1927-Ware River Watershed

Often overlooked, the Ware River watershed is an important piece of the drinking water supply for Greater Boston and the Chicopee Valley.

Developed in conjunction with the Swift River Valley, approximately 23,000 acres of land were taken by the state to protect the Ware River watershed area. West Rutland village, Coldbrook Springs in Oakham and White Valley in Barre were cleared of all farms, factories and homes, along with Rutland State Prison. In all, 350 people lost their homes and businesses to the project in the Ware River watershed.

1927-1939 Quabbin Reservoir

After the completion of the Wachusett Reservoir in 1908 failed to meet the region's long-term water needs, officials set their eyes upon the Swift River valley.

Due to the geography of the valley with its low hills and broad lowlands, as well as the high quality of the water, this area had been considered since 1895 as an excellent spot to build a reservoir. By impounding the Swift River and Beaver Brook where they exited the valley, a huge source of fresh water could be created.

In 1927, after years of discussion, the legislature passed the Swift River Act, appropriating money to build a reservoir in the valley. The project was completed in 1939 and the reservoir was full by 1946, adding 412 billion gallons to the water supply.

1950-Chicopee Valley Aqueduct

In 1947 work was begun on the Chicopee Valley Aqueduct that was completed three years later.

Today, Chicopee, Wilbraham and South Hadley Fire District #1 are serviced by this aqueduct. Water from the CVA is treated at the Quabbin Water Treatment Plant in Ware. From there water travels to the Nash Hill storage tank in Ludlow and then to the service communities.