

Town of Townsend, MA

Townsend Water Department

Distribution System Information:

Sources: Water is supplied to customers from ground water consisting of (5) separate wells. For each source per regulation we maintain (2) critical areas of protection.

The first is known as the “Zone I”. This is a 400 foot radius around each source which must be owned or controlled by the Water Department.

The second is known as the “Zone II”. The Zone II means that area of an aquifer that contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated (180 days of pumping at approved yield, with no recharge from precipitation). In most cases the Zone II is a very large area and can at times extend into an adjacent Town. Both zones are closely monitored and in 1998 the Ground Water Protection District By-Law was created to restrict or prohibit any activities that could possibly pose a threat of contamination to these sources. These sources are:

<u>Source Name</u>	<u>Source Location</u>
1. Main St. Well	Main St. (West Townsend)
2. Cross St. Well	Off Cross St. (Center of Town)
3. Harbor Trace Well	Harbor Trace Rd. (Harbor)
4. Witch’s Brook Well 1	Off Ash St. (Harbor)
5. Witch’s Brook Well 2	Off Ash St. (Harbor)

Storage:

We have (2) storage tanks that contain a total of 1.5 million gallons of water for fire protection

1. A riveted steel tank off of Fitchburg Rd. that holds .5 million gallons.
2. A concrete tank located on Highland St. that holds 1.0 million gallons.

Transmission Water Mains:

There are approximately 50 miles of pipe that distribute water throughout the system. Some of these pipes date back to 1934. There are various types and sizes of pipe within the system such as Cast Iron, Ductile Iron, Transite, and High Density Polyethylene (HDPE) pipe ranging in size from 4” to 16”

No. of Fire Hydrants: 362

No. of Service Connections: 2006

Approximate Population Served: 6,294

Amount of Water Pumped in 2010: 233,238,000 Gallons

Treatment: Ground water sources in the northeast are predominantly corrosive (e.g., they have a PH of less than 7.0) untreated the water attacks and corrodes piping and fixtures causing harmful metals such as lead and copper to leach out into the water. For this reason we add a chemical called Sodium Hydroxide at a 25% solution. This adjusts the water to a more neutral PH.

Water Quality:

In accordance with the Safe Drinking Water Act (SDWA) the United States Environmental Protection Agency established primary drinking water standards to insure the protection of human health. In order to meet these standards we routinely monitor the water quality that enters the system through each of our wells. We also monitor water quality within the distribution itself at several key designated locations. Each month 19 samples are collected and tested for the presence of Total Coliform Bacteria. In addition, throughout the year we collect and test for more than 140 other contaminants.