

# Drinking Water System Profile

## Background

The forerunner of New Hartford's public drinking water operation began in 1895 by the New Hartford Water Company and the consolidation of the Village Water Company in 1974, which is owned today by the Town of New Hartford.

The system originally derived its source water from a brook and a holding pond; followed by a raw water feed from MDC that was treated with chemicals. New Hartford now garners its water from (2) wells following the mandate of the Federal Clean Water Act. These wells are supported by two water-holding tanks that serve to pressurize the gravity feed system. The water company operates under the direction of the (7) member WPCA constituted by ordinance in 1986. Day-to-day operations are provided by Torrington Water Company (TWC) under the provisions of an Agreement which began in February 2014 and is currently implemented on a month-to-month basis subject to (90) days notice for cancellation, pending the sale of the drinking water assets to Aquarion Water Company (AWC). TWC, in addition to providing day-to-day drinking water operations support, processes quarterly bills for both sewer and water services. Clerical support service for the WPCA is provided by a part-time WPCA Clerk. There are 565 water customers.

Long-term debt obligation of drinking water assets includes (2) USDA loans with an aggregate outstanding balance of \$572,545 as of January 1, 2020. Obligation maturities range from 2040 to 2042.

## System Demographics

Two underground wells currently provide all of the water supplied to New Hartford's customers. The Pine Meadow Well at Church Street was first established in 1944 and renovated in place in 2000 and updated with a new well pump in 2019. At a depth of 83 feet + (or) -, it is supported by a 60 hp electrical pump capable of sustaining 200 gallons per minute (gpm). The well's active safe yield is 265 gpm, but it is limited by DEEP permit to 200 gpm.

The second well is located on Black Bridge Road, also in the Pine Meadow section of Town and was placed into service in 1996. This is also supported by a 60 hp motor capable of delivering 200 gpm, with an active safe yield of 200 gpm and a similar permit limit of 200 gpm as set by DEEP. The Black Bridge well was renovated in 2019 and a new pump installed at the same time. Both pumping stations are supported with separate 45kw propane fueled generators.

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“Available supply” for the combined well resources, based upon a 24 hour pumping day is 576,000 gallons per day. By approval of the CT DEEP (Department of Energy and Environmental Protection) New Hartford has an approved Diversion Permit to take a maximum of 494,000 gpd. Our current maximum “day demand” is estimated at 194,400 gallons.

The Pine Meadow and Black Bridge wells are both treated with sodium hydroxide to facilitate a pH adjustment, with Black Bridge also oxidizing and filtering, via a green sand filter, for iron and manganese removal. Additionally, the drinking water is receives chemical treatment with sodium hypochlorite and sodium bisulfite.

Two covered steel water storage tanks are located off the Town’s Industrial Park site on land leased from MDC. The tanks have a capacity of 490,000 gallons and 190,000 gallons, respectively.

Booster pumps are provided at the Black Bridge well head and the Rt. 219 pumping station, adjacent to the entrance of the industrial park. The Town maintains a portable trailer mounted pump for back-up provisioning.

## **Drinking Water Footprint**

The transmission and distribution system consists of an estimated 60,950 feet of associated main ranging in size from 2 to 12 inches. Pipes are constructed from cast iron, asbestos cement, galvanized iron, and ductile iron. Cast iron is predominant. Of the total footage of main, it is estimated that 52% was constructed before 1895. This places much of the drinking water mains well past an industry standard life expectancy between 75-100 years maximum.

Eighty-eight (88) fire hydrants are maintained throughout the water district for fire protection purposes.

Unaccounted water was last examined in 2004 and reflected non-revenue water at 18% and unaccounted water at 7.16%

*Hydrant flow data; Water quality data; distribution system maps; river crossings; fire flows; ISO ratings; population served; production data; distribution of accounts; rate structure; Water Supply Plan; billing documentation; groundwater diversion permit cash flow revenue stream and operations cost detail is available for inspection at New Hartford Town Hall.*