



Commissioners
Robert E. Corey
William L. Morin
Chairman – William “Zee” Zielinski

Michael Sheu
Superintendent

John M. Hudzik
Field Service Manager
Primary Distribution Operator

Debra H. Vinal
Treasurer

Dracut Water Supply District Customers

April 5, 2021

We are pleased to present the FY20 Annual Report. This Report presents the overview of the District's Governing and Water System as well as the Operations, Planning, and Financial for the FY21& FY22.

Governing

Dracut Water Supply District (DWSD) was established under Massachusetts Legislation Acts (MLA) in 1905 to supply water to part of Dracut and passed MLA in 1943 to supply water to part of Tyngsborough. DWSD is an independent Public Entity, governed by an annual meeting of the District, 3 elected Water Commissioners, and operated by 9 employees. The DWSD's source of income is from the water rate payers.

Water System

The District has two Wellfields, a connection with Lowell Regional Water Facility, two Water Treatment Facilities, 3 Water Storage Tanks, 8 pump Stations and 140 miles of Water Mains.

Current Water System Challenges:

- [Aging Water System Infrastructures](#): The majority of the DWSD's system was installed between 1951 and 1963. Some of the wells, water mains, and water storage tanks have almost exceeded their service life expectancy.
- [Regulation changes](#):
 - Manganese: The Mass DEP issued a Drinking Water Health Advisory for Manganese (Mn) in 2014. This Health Advisory requires the PWS to notify the public if Mn is greater than 0.3 mg/L in the water.
 - PFAS6: The Mass DEP promulgated a Drinking Water Maximum Contamination Level (MCL) for PFAS6 in 2021. The MCL for PFAS is 20 PPT.
- [Water Demands](#): The DWSD has difficulty producing adequate water with the existing infrastructure to meet water demands during the summer months due to the population growth.
- [Water Hydraulic Limitations](#):
 - Well water is rich with Iron and Manganese. Iron and Manganese build up in the water mains and results in restriction of water flow and causes pressure loss.
 - Without water from the Tyngsborough Wellfield, the DWSD would need to purchase more water from Lowell. There would be difficulty to back feed water from Lowell to Tyngsborough customers due to the pressure loss caused by buildup in the water mains.
- [Redundancy](#): Without water from the Tyngsborough Wellfield, 100% of the DWSD's water would have to be purchased from Lowell.
- [Cost of water](#): The DWSD cannot control the water rate if 100% of its water is purchased from Lowell. The City of Lowell just increased 40% of their water rate on 7/1/2021.

- [Water Quality](#): The existing water mains have Manganese and Iron buildups on the pipe. When the water mains are disturbed by the flow or pressure changed, the buildups will peel off from the pipe and results in brown water.
- [Fire Protection](#): some areas in Dracut and Tyngsborough do not have enough water flow for fire protection.

Projects in 2020-2021:

In FY19, DWSD appointed the Engineers of Tighe & Bond (T&B) to overview the DWSD's water system issues and produced a 20 year Master Plan. The Engineers of T&B also provided a 5 year plan out of the Master Plan. This 5 year plan includes 3 improvement projects to resolve the most critical issues that the DWSD's water system is facing. In FY20, with the Engineers of T&B's assistance, DWSD applied and received \$25 million from the Massachusetts Drinking Water State Revolving Fund (SRF).

In the FY 2021, DWSD and Engineers of Tighe & Bond will be implementing the following projects:

- [The Manganese Removal Treatment Facility](#)
- [16" Water Main Improvement Project](#)
- [State Forest Water Storage Tank Replacement](#)

Financial

The District's financial is supported by rate payers. The revenues that we collect are being used on system's operations and many current and future improvement projects. The SRF loan is a 20 year low interest loan (2%). DWSD believes there will be no significant water rate increase to implement the above three projects. DWSD believes that the savings from not purchasing Lowell Water will be able to pay the SRF loan. In addition, DWSD will be able to discontinue 3-4 Pump Stations after the completion of the 3 projects. The operation saving of these Pump Stations will be able to pay the loan.

We are committed to providing safe and high-quality drinking water to our customers. We pledge to continue to work on the behalf of all the District customers and we welcome your constructive criticism in order to improve the efficiency of the District operations.

Respectfully,



Michael Sheu
Superintendent