



## 2019 Annual Report

The Mattapoisett River Valley Water District (District) was formed in 2004 to construct and operate the six million gallon per day (mgd) Mattapoisett River Valley Water Treatment Facility (MRVWTF). The District is comprised of the Towns of Fairhaven, Marion, Mattapoisett and Rochester. The treatment facility, located in Mattapoisett, began operations in 2008.

The MRVWTF treats raw water from eight municipal water supply wells owned and operated by the District Towns. The sources include three Mattapoisett wells, one Marion well, and four Fairhaven wells, which are located in Mattapoisett and Rochester. Treatment at the facility includes oxidation with ozone followed by membrane ultrafiltration with Koch membrane filters for the removal of iron and manganese. The finished water is treated to adjust the pH for corrosion control.

The District received the Massachusetts Department of Environmental Protection 2019 Beyond Compliance Public Water System Award. The District was recognized for being in complete compliance with state and federal drinking water regulations since 2018, and for also not having any violations within the past 5 years.

2019 represented the twelfth year of operation of the MRVWTF. The plant processed 655 million gallons of water during the year. The FY20 operating budget for the plant is \$2,121,132 which represents an increase of approximately 3.25% over FY19. The major expenses include power, labor, and chemicals to maintain and operate the MRVWTF, and equipment replacement identified in the Capital Improvement Plan. As of May, the District finalized the solar power Net Metering agreement with ECA Solar LLC. The District does not pay any capital or operating costs for the power generation and the facilities are located on commercial buildings located in Walpole, MA.

The MRVWTF operated well throughout the year, with the exception of the Koch Membrane Filter system. In January, the Koch system shut down the entire MRVWTF, due to a clogged pressure transmitter. Other operational issues associated with the Koch system continued through the year, and increased levels of iron and manganese in the raw water required more frequent cleaning of the system. The MRV operations personnel have done an excellent job maintaining the Koch system past its typical useful life expectancy of 5-7 years. The District is concerned about the aging infrastructure and decided to investigate replacement options. Representatives from KOCH Membrane Systems, Inc. presented replacement options to the District which consist of replacement with in-kind membranes or replacement with newly developed advanced technology membranes that significantly reduce operating costs. The District identified that simple in-kind replacement of the membranes does not address other infrastructure that requires evaluation and replacement. A Filter Replacement Evaluation Study which will evaluate capital and operational costs as well as logistics of implementation of the alternatives is proposed to identify the best option for equipment replacement.

Construction of the MRVWTF Primary Electric Service Replacement began in November. The purpose of the project is to complete necessary electrical service upgrades to meet current standards, and improve electrical reliability to the MRVWTF. Construction is expected to be complete in January 2020.

Addition of a new District representatives for the Town of Marion and Rochester was required in 2019 due to the retirement of Mr. Jonathan Henry and Mr. Jeffrey Eldridge. Mr. David Willett, Marion DPW Director, was appointed representing the Town of Marion, and Ms. Sandy Keese of Rochester, was appointed representing the Town of Rochester. The District thanks Mr. Jonathan Henry and Mr. Jeffrey Eldridge for their service and contributions.

Respectfully submitted  
Mattapoisett River Valley Water District Commission

Town of Fairhaven  
Mark Rees  
Vincent D. Furtado  
Jeffrey Furtado

Town of Marion  
David Willett  
David Pierce  
Randy Parker

Town of Rochester  
Laurell Farinon  
Sandy Keese  
Rick Charon

Town of Mattapoisett  
Paul Silva  
William Nicholson  
Henri Renauld

