



TOWN OF NORTH READING

Massachusetts

Department of Public Works

Discolored Water Update

The North Reading Water Department has experienced a number of calls relating to brown or discolored water in the water system beginning in the middle of July. As of early August, while the number of calls has decreased, we continue to receive these calls.

The Water Department believes the source of the discolored water is related to the water use and the restrictions that are currently in place. In an effort to reduce overall water demands, the Town enacted Stage 1 water use restrictions in June. The Stage 1 restrictions limit outdoor watering to two days per week.

As more people come into compliance with the restrictions, water demands during the allowable irrigation periods has increased. The Water Department has recorded the water level in the Tower Hill water storage tank falling by up to 2.4 feet during the maximum 15 minute demand period in the early morning. This equates to the tank draining at a rate of about 750 gallons per minute, which is a flow rate typical of a fire hydrant being opened.

Similar to when fire hydrants are flushed in the fall, the water velocity in the mains due to these high demands increases during the early morning hours to the point where the fine iron and manganese sediment in the bottom of the water mains is becoming suspended in the water and appears as the discoloration at resident's taps. When the velocity slows down, the sediment settles out again, only to show up during the next high-demand period.

In addition to the high demands in North Reading, the Town of Andover is also reporting similar issues with discoloration in their water system. As North Reading purchases approximately 70% of our water during the summer months from the Town of Andover, issues with discolored water in Andover can impact North Reading. As we move toward the end of the summer, water demands in both communities should decrease and the discolored water issues should end.

The Water Department continues to work to diagnose this issue and minimize this problem. Residents experiencing issues with discolored water are asked to note the day and time they first notice the discoloration, how long the problem persists, and whether the color is isolated to the cold water or hot water.