

NITRATES IN DRINKING WATER

Nitrate is a compound that occurs naturally and also has many human-made sources. Nitrate is in some lakes, rivers, and groundwater in Massachusetts. You cannot taste, smell, or see nitrate in water. Consuming too much nitrate can be harmful—especially for babies.

Dennis Water District regularly tests for nitrate and makes sure levels meet standards established by the Department of Environmental Protection Standards and the Federal Environmental Protection Agency. The good news is, the nitrates found in your drinking water are way below state and federal standards. You can see the sampling results for each of the District's supply wells by clicking on the following link:

https://www.denniswater.org/sites/g/files/vyhlif4326/f/uploads/nitrate_spreadsheet_1993_to_present.pdf

While looking at the results for any one well, you will notice that they may go up and down over time. Yet, they all remain well under detection levels of 3 parts per million (ppm). The difference observed from year to year are not statistically significant. It means that from year-to-year the changes, whether up or down, are not enough to indicate a trend over time. The District is required to report nitrates, as well as many other contaminants in the Annual Water Quality Report. The report can be found on the District's website at:

<https://www.denniswater.org/resources/reports-publications/pages/annual-water-quality-reports>

It is often difficult to pinpoint sources of nitrates because there are so many possibilities. Major sources of nitrogen and nitrates include runoff from fertilizers and private septic systems. Direction of ground water flow does influence where nitrate concentrations may come from. However, a look at our data shows our wells, while they may fluctuate at low numbers, remain well below the State standard of 10 ppm. This suggests that our drinking water is well protected by more than one thousand acres of water shed owned or controlled by the District. This undeveloped land, along with other lands held in conservation owned or controlled by the Town of Dennis, Dennis Conservation Land Trust and other privately owned parcels also help to protect Dennis' drinking water supply.

If the nitrates were found to be above the maximum contaminant levels, the District would be required to notify the public and take appropriate actions to remediate.