

Annual Drinking Water Quality Report for 2017
Blooming Grove Water District #4
P.O. Box 358, Blooming Grove, NY 10914
(Public Water Supply ID #3503625)

INTRODUCTION

To comply with State regulations, the Blooming Grove Water District #4 (Tappan Homes), issues an annual water report describing the quality of our drinking water. The purpose of this report is to raise the Consumer's understanding of drinking water and awareness of the need to protect our drinking water sources. Included in this report are details about where our water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or questions concerning your drinking water, please contact our Plant Operator, Chris Finnegan at (845) 741-9524, or the Orange County Health Department at (845) 291-2331. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Town Board meetings. The meetings are held the second and fourth Tuesday at 7:30 pm, at the Blooming Grove Town Hall, Horton Road & Route 94, Blooming Grove NY, 10914. The U.S.E.P.A. drinking water website (www.epa.gov/safewater) also provides additional information regarding drinking water.

WHERE DOES OUR WATER COME FROM?

The water supply for the Tappan Water District #4 is provided from drilled bedrock wells. These wells include Well #1A (also known as #5B) a 350' deep bedrock well; Well #3A, a 640' deep bedrock well and Well #6, a 400' deep bedrock well. The well site is located in a green area near Barnes Road and the Moodna Creek. The water is disinfected with chlorine prior to entering the distribution system. Water supply is also treated with greensand filtration to remove iron and manganese prior to distribution. In 2017, our water system produced approximately 10.300 million gallons and served 550 people.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive

contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Departments and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: chloride, ECOLI, total coliform, methylcarbamate pesticides, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, PCB's, herbicide organics, and pesticide/PCB organic compounds. The table presented below depicts which contaminants were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the Orange County Health Department at (845) 291-2331.

The table on the following page summarizes the results of detected compounds and their likely source.

SOURCE WATER ASSESSMENT PROGRAM (SWAP) SUMMARY

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. See "Table of Detected Contaminants" for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

As mentioned before, our water is derived from three drilled wells. The source water assessment has rated these wells as having a medium to medium-high susceptibility to microbials, nitrates, industrial solvents and other industrial contaminants. These ratings are due primarily to the close proximity of a SPDES permitted discharge facility (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) that is located in the assessment area. In addition, the wells draw from a confined aquifer with the estimated recharge area within the selected time of travel and the overlying soils may not provide adequate protection from potential contamination. While the source water assessment rates our well as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting us, as noted in this report.

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ◆ Saving water saves energy and some of the costs associated with both of these necessities of life;
- ◆ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- ◆ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ◆ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- ◆ Turn off the tap when brushing your teeth.
- ◆ Check every faucet in your home for leaks.
- ◆ Just a slow drip can waste 15 to 20 gallons a day. Fix it up and you can save almost 6,000 gallons per year.
- ◆ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- ◆ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

A few simple steps will preserve the resource for future generations and also save up to 30% on your bill:

- ◆ Use low flow shower heads and faucets
- ◆ Repair all leaks in your plumbing system
- ◆ Water your lawn sparingly early morning or late evening
- ◆ Do only full loads of wash and dishes
- ◆ Wash your car with a bucket and hose with a nozzle
- ◆ Don't cut the lawn too short; longer grass saves water

TABLE OF DETECTED CONTAMINANTS

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Arsenic	No	12/08/16	1.8	ug/L	10	MCL = 10	Erosion of natural deposits
Barium	No	12/08/16	230	ug/L	2,000	MCL = 2,000	Erosion of natural deposits
Chloride	YES	Quarterly	Ave - 393 mg/l Range - 370 to 450 mg/l	mg/L	N/A	MCL = 250	Indicative of road salt
Copper (See Note 1)	No	10/03/17	0.12	mg/L	1.3	AL = 1.3	Corrosion of household plumbing
Nickel	No	12/08/16	4.7	ug/L	100	MCL = 100	Erosion of natural deposits
Nitrate as N	No	12/26/17	0.27	mg/L	10	MCL = 10	Runoff from fertilizer use
Selenium	No	12/08/16	5.5	ug/L	50	MCL = 50	Erosion of natural deposits
Sodium	No	12/26/17	170	mg/L	N/A	See Note 3	Road Salt
Sulfate	No	12/08/16	38	mg/L	250	MCL = 250	Erosion of natural deposits
Total Trihalomethanes (TTHMs)	No	08/30/2017	6.2	ug/L	N/A	MCL = 80	By product of drinking water disinfection needed to kill harmful organisms
Five Haloacetic Acids (HAA5)	No	08/30/2017	1.2	ug/L	N/A	MCL = 60	By product of drinking water disinfection needed to kill harmful organisms

Notes:

1. *Only one sample was collected for copper and copper in 2017. No lead was detected at the site tested. The action level for copper was not exceeded at the site tested.*
2. *Chloride is to be sampled quarterly and this level represents the annual quarterly average calculated from data collected. The blended level detected is in excess of 250 mg/L. We received a Notice of Violation from the Health Department, and we provided Public Notification.*
3. *Water containing more than 20 mg/L of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/L of sodium should not be used by people on moderately restricted sodium diets.*

DEFINITIONS:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Milligrams per liter (mg/L): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/L): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

WHAT DOES THIS INFORMATION MEAN?

The table shows that our system uncovered some problems this year with the levels of chlorides in your drinking water. There are no health effects. The MCL for chloride is the level above which the taste of water may become objectionable. In addition, to the adverse taste effects, high chloride concentration levels in the water contribute to the deterioration of domestic plumbing and water heaters. Elevated chloride concentrations may also be associated with the presence of sodium in drinking water. We blend the water from the wells at this water district in order to lower the amount of Chloride, and we continue to monitor quarterly to maintain compliance. Nonetheless, we exceeded the MCL for chloride in 2017. The Tappan Homes Water System is in the process of reviewing recommendations from engineers to address high Chloride levels. New piping and valvework was installed in 2017 to improve operation of the greensand filtration treatment.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2015 & 2016, we did not monitor or test for lead and copper, and therefore cannot be sure of the quality of your drinking water during that time.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The Tappan Homes Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*, *Giardia* and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).