

*Annual Drinking Water Quality Report for 2012*  
**Grand Gorge Water District**  
*Town of Roxbury*  
*P.O. Box 189*  
*Roxbury, New York 12474*  
*Public Water Supply ID#1200263*

## **INTRODUCTION**

To comply with State regulations, [Grand Gorge Water District](#) will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. [Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard.](#) This report is an overview of last year's water quality. Included in this report are details about where your water comes from, what it contains, and how it compares to State standards. We are pleased to provide you with this information because informed customers are our best customers.

If you have any questions about this report or concerning your drinking water, please contact **the Grand Gorge Water District Operator, Philip Nikolaus, at (518) 231-2381**. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings. The meetings are held on the second Monday of each month at the Town Hall, starting at 7:30 p.m.

## **WHERE DOES OUR WATER COME FROM?**

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 Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water system serves 380 people through 152 service connections. Our current water source is the Roxbury Water District; we began using this source in August 2003. Prior to then, our water source consisted of the Frevert Road Well No. 1 rock well. The Frevert Road Well had been used solely since October 1998. Prior to October 1998, BOCES Wells No. 1 and No. 3 were used; these wells are now retained for auxiliary purposes. Treatment at the Frevert Road site consisted of aeration, settling, chlorinating and effluent pumping. The Water District's distribution system consists of approximately 3.5 miles of one, four, six and eight-inch diameter water mains. Storage for daily demand fluctuations and emergency use is provided by a 250,000 gallon welded steel storage tank located east of Route 30 and south of Route 23. Daily water consumption is estimated to be approximately 85,000 gallons per day.

The well systems had not been reliable sources of supply. On several occasions in past years, the Water District

has been forced to withdraw water from either Jump Brook or Bearkill Creek in order to maintain water in the storage tank. When this has happened, the Water District has issued a Boil Water Order. In August of 2003, the Water District completed the connection to the Roxbury Water District to solve its water supply problems. At that time, the Grand Gorge Water District began using Roxbury's water as its primary source.

## ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: [total coliform](#), [inorganic compounds](#), [nitrate](#), [lead and copper](#), [volatile organic compounds](#), [synthetic organic compounds](#) and [radiological pollutants](#). The table presented below depicts which compounds 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 be reasonably 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 Oneonta District Office Health Department at (607) 432-3911.

Table of Detected Contaminants – Grand Gorge Sources							
Contaminant	Violation Yes / No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contamination
<b>Radio Active Contaminants</b>							
Combined radium – 226 and 228	No	10/10/08	0.3 +/- 0.31 0.07 – 0.60	pCi/l	0	5	Erosion of natural deposits.
Gross Alpha	No	10/10/08	3.1	pCi/l	0	15	Erosion of natural deposits.
<b>Inorganics-Nitrate</b>							
Nitrate	No	10/07/10	0.88	mg/l	10	10	Runoff from fertilizer use; Leaching from septic from septic tanks, sewage; Erosion of natural deposit.
<b>Inorganics</b>							
Copper	No	07/2012	0.65 <b>See footnote (1)</b>	mg/l	1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead	No	07/2012	0.001 <b>See footnote (1)</b>	mg/l	0	0.15	Corrosion of household plumbing systems, erosion of natural deposits.
Contaminant	Violation Yes / No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contamination
<b>Disinfection By-products</b>							

Total Trihalomethanes (TTHMs – chloroform, bromodichloromethane, dibromochloromethane, and bromoform)	No	9/2/10	0.0049	mg/l	N/A	100	By-product of drinking water chlorination needed to kill harmful organisms. TTHM's are formed when source water contains large amounts of organic matter.
Haloacetic Acids (mono-di-, and trichloroacetic acid, and mono- and di-bromoacetic acid)	No	9/2/10	0.0033	mg/l	N/A	100	By-product of drinking water chlorination needed to kill harmful organisms.

**Notes:**

1 - The level presented represents the 90<sup>th</sup> percentile of the 10 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90<sup>th</sup> percentile is equal to or greater than 90% of the copper or lead values detected at your water system. **The action levels for neither lead nor copper were exceeded.**

**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.

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

**Nephelometric Turbidity Unit (NTU):** A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**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).

**Picocuries per liter (pCi/L):** A measure of the radioactivity in water.

**WHAT DOES THIS INFORMATION MEAN?**

As you can see by the tables, we are proud to report that our system had no violations. We have learned through our testing that some other contaminants have been detected; however, these contaminants were detected below the levels allowed by the State.

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to the drinking water sources 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. While nitrates (and other inorganic contaminants) were detected in our water, it should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants from natural sources. The presence of contaminants does not necessarily indicate that the water poses a health risk. The nitrate levels in our sources are not considered high in comparison with other sources in this area. See section “Are there contaminants in our drinking water?” for a list of the contaminants that have been detected.

As mentioned before, our water is derived from one drilled well and also purchased from Roxbury Water District. The source water assessment has rated the well as having a high susceptibility to microbials. This rating is due primarily to the close proximity of septic systems within the assessment area. In addition, the well draws from an unconfined aquifer of unknown hydraulic conductivity. While the source water assessment rates our well(s) 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 below.

## **IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

During 2012, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

## **DO I NEED TO TAKE SPECIAL PRECAUTIONS?**

Although our drinking water met or exceeded state and federal regulations, 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).

## **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.

## **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.

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