Annual Drinking Water Quality Report for 2015
Warnerville Water District # 1
378 Mineral Springs Rd, New York 12187
Public Water Supply ID# NY4700101
Issued May 2016

INTRODUCTION

Safe, clean drinking water is a part of life that most of us take for granted. Few issues are more critical to our health and welfare than the quality of our drinking water. This report provides information about the quality of water we deliver to our customers, water sources and the programs underway to meet the challenges of the future.

If you have any questions about this report or concerning your drinking water, contact the water operator Joseph Redmond (234-2195) or Peter Cappellano at the Schoharie County Department of Health, (Post Office Box 667 Schoharie, NY 12157) 295-8382. We want you to be informed about your drinking water. Mr. Redmond is Superintendent of the Village of Cobleskill Water system which supplies water to and operates the District. He became operator on April 1, 2014 If you want to learn more, please feel free to attend any of our regularly scheduled Board meetings held at 7:00 PM on the third Tuesday of each month at the Cobleskill Firehouse, Main Street Village of Cobleskill. Warnerville Water District was constructed in 2004 and completed in 2005 and serves about 80 services at this time. Our water rates are $ 10.43 per 1000 gallons metered for residential services billed quarterly and monthly for large commercial services. The District is responsible for maintenance of the District owned portion. Water delivered to the District in 2015 was Approximately 6,221,050 gallons which is approximately 17,043 gallons per day. Water delivered to the District in 2014 was Approximately 4,643,420 gallons which is approximately 12,722 gallons per day. Water delivered to the District in 2013 was approximately 6,369,690 gallons which is approximately 17,451 gallons per day. Water delivered to the District in 2012 was approximately 4,412,836 gallons which is approximately 12,985 gallons per day. Water delivered to the District in 2011 was approximately 4,412,836 gallons which is approximately 12,090 gallons per day. Water delivered to the District in 2010 was approximately 4,132,850 gallons which is approximately 11,322 gallon per day. Water delivered to the District in 2009 was approximately 4,179,955 million gallons, which is approximately 11,420 gallons per day.

WHERE DOES OUR WATER COME FROM?

Your water comes from the Village of Cobleskill water system ID# NY4700094. The Village of Cobleskill water sources are three surface water reservoirs; Dow Reservoir, Smith Reservoir, and the Holding Pond located in the town of Cobleskill. These reservoirs have a useful storage of approximately 296 million gallons of water. The Village's watershed consists of agricultural land and woodlands, covering approximately 4 square miles. This acreage supplies water by means of two brooks to Dow and Smith Reservoirs. The water quality is very good, having low raw water turbidity. The Dow watershed has a higher percentage of farmland and its water is of lower quality than that of Smith's watershed. The Village also owns two wells, which serve as a backup source for the system. These wells are located on France lane in the Village of Cobleskill. The treatment Facility is a conventional clarification-followed-by-filtration plant. This state of the art plant allows the Village to provide the District with safe, high quality water at all times. In its effort to supply with the safest possible product, the Village of Cobleskill chlorinates the water supply for disinfection of viruses and bacteria after filtration. Fluoride is also added to enhance dental protection for children. The levels of these two additives are monitored daily to ensure proper dosages are being added. The District is connected to the Cobleskill system on Mineral Springs Road where there is a booster chlorination station prior to services in the District. The water flows to the district and fills a 250,000-gallon storage tank on West Fulton Road for fire protection and pressure maintenance. The Village of Cobleskill provides information of the source water quality. A supplement is available for the water monitoring results conducted by the Village of Cobleskill. The District monitors daily for free chlorine residual, for turbidity 5 times per week, monthly for total coliform bacteria, quarterly for disinfection byproducts, and lead and copper (beginning in 2006).

It should be noted that all drinking water, including bottled drinking water, might 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 Schoharie County Department of Health at 295-8382. 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 form the presence of animals or human activities. Contaminants that may be present in any water include:

-Microbial contaminants such as viruses and bacteria, which may come from agricultural livestock operations, wildlife, sewage treatment plants, and inadequate septic systems.

-Inorganic contaminants, such as salts and metals which can be naturally occurring or result from urban storm water runoff,

industrial or domestic wastewater discharges, oil and gas production, mining or farming.
-Organic chemicals including synthetic and volatile chemicals, pesticides and herbicides, which may come from a variety of sources such as by-products of industrial processes, petroleum production and storage, gas stations, agriculture, urban storm water run off, residential uses and improper disposal.

We are required to publish a source water assessment summary in accordance with the State Sanitary Code:

Source Water Assessment Summary from the Village of Cobleskill PWS # NY4700094
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 to the reservoirs. 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 section "Are there contaminants in our drinking water?" 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.
Organic contaminants (which are the disinfection by-products of total trihalomethanes and haloacetic acids) were detected below legal limits in our water in the last samples analyzed for them in 2015. Natural organic matter in surface water affected these tests. The reservoirs have a medium susceptibility rating to natural organic matter, which is referred to as disinfection by-product precursors. The raw and treated water is tested monthly for disinfection by-product precursors and the system has been in compliance with these requirements (they are not required to be reported in this report). The Village tests the treated water every quarter for trihalomethanes and haloacetic acids.
As mentioned before, our water is derived from Dow Reservoir, Smith Reservoir and the Holding Pond. The source water assessment has given natural sensitivity ratings for contaminants. The source water assessment has assigned the reservoirs a high natural sensitivity to phosphorus, protozoa, enteric bacteria and enteric viruses. The source water assessment has assigned the reservoirs a medium natural sensitivity to pesticides, herbicides, metals, nitrates, sediments, turbidity, and disinfection by-product precursors (natural organic matter). The source water assessment has assigned the reservoirs a low natural sensitivity to halogenated solvents, petroleum products, and other industrial organics.
The source water assessment has not rated the land use susceptibility to halogenated solvents, petroleum products, other industrial organics, metals, nitrates, sediments, turbidity, cations/anions (salts, sulfate), disinfection by-product precursors because of low contaminant prevalence in the watershed. The source water assessment has given a medium-high land use susceptibility rating to phosphorus, enteric bacteria, and enteric viruses because of agriculture and pasture in the watershed. The source water assessment has given a high land use susceptibility rating to protozoa because of a medium contaminant prevalence rating, pasture in the watershed, and recycling of filter backwash to the Dow Reservoir (required as part of treatment plant approval by New York State when the plant was reconstructed). The source water assessment has rated the reservoirs as having a high susceptibility to halogenated solvents, protozoa enteric bacteria, and enteric viruses. These ratings are due primarily to the close proximity of permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government), in this case the recycling of filter backwash to the Dow Reservoir. While the source water assessment rates our reservoirs as being susceptible to protozoa, enteric bacteria and enteric viruses, please note that our water is filtered and disinfected to ensure that the finished water delivered into your home and business meets New York State's drinking water standards for microbial contamination.

The reservoirs are protected from contamination by watershed rules and regulations found in the New York State Sanitary Code, sewage treatment regulations of the Schoharie County Sanitary Code, and land use review by the Town of Cobleskill Planning Board. The Water Treatment Plant Operators patrol the watershed routinely.
A copy of the assessment, including a map of the assessment area, can be obtained by contacting us, as noted above.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?
As the State regulations require, the drinking water is tested for numerous contaminants. These contaminants include: total coliform bacteria, turbidity, 22 inorganic compounds, nitrate, nitrite, 10 lead and copper samples at residences, 54 volatile organic compounds, total trihalomethanes and other disinfection by-products, 4 radionuclides and 39 synthetic organic compounds (including herbicides and pesticides). Measurements of chlorine and turbidity are done in the Cobleskill distribution system and the plant. The Filtration Plant has recorders that monitor turbidity and chlorine 24 hours per day as well. Every week five distribution samples for turbidity and free chlorine are done. In order to ensure that tap water is safe to drink, the Environmental Protection Agency prescribes regulations which limit the amount of certain contaminants in water provided by public water systems like the Village's. These regulations also apply to bottled water. The EPA's drinking water website is available at www.epa.gov/safewater/. The NYS DOH website is www.health.state.ny.us - go to "Health & Safety in the

Workplace & Outdoors", then "Drinking Water".
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. Lead and copper have not been detected in the source water.

Definitions of terms you will find in the table of detected contaminants and the report:

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, based upon a running annual average of the samples. 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 contaminants.
Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. The value given for the MCL of lead and copper is an action level and is a 90th percentile value. A percentile is a value on a scale of 100 that indicates the percent of distribution that is equal to or below it. The 90th percentile is equal to or greater to 90 % of the lead and copper values detected at the water system.
Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
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).

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit of Measure	MCLG Or MRDLG	Regulatory Limit (MCL, TT, AL or MRDL)	Likely Source of Contamination
Turbidity	No	Continuous recording	All below 0.3 At plant and less than 5 in District	NTU	N/A	Less than 5 NTU in District Less than 0.3 NTU at Filter plant	Soil runoff. Turbidity is a measure of the cloudiness of water. It has no health effects. It is used as a test because it is a good indicator of the filters' effectiveness.
Chloride	No	11/08/2011	16.1	mg/l	N/A	250	Naturally occurring
Barium	No	11/08/2011	0.015	mg/l	2	2	Erosion of natural deposits
Sodium	No	11/11/15	15.5	mg/l	N/A	N/A see below for further information	Naturally occurring, road salt, water softeners, animal waste.
Fluoride	No	daily	Range was 0.3 to 1.5	mg/l	2.2	2.2	Naturally occurring and added to protect teeth
Sulfate	No	11/08/2011	8.68	mg/l	N/A	250	Naturally occurring and leaching from septic tanks.
Lead	No	2014	.006 highest level detected	ug/l	zero	15 is the action level	Corrosion household plumbing systems, and water service lines. See below for further information.

Copper	No	2014	.33 highest level detected	mg/l	1.3	1.3 is the action level	Corrosion household plumbing systems, and water service lines. See below for further information.
Iron	No	11/08/2011	4	ug/l	Not applicable	300	Naturally occurring.
Manganese	No	11/08/2011	3	ug/l	Not applicable	300	Naturally occurring.
Total Trihalomethanes or TTHM Monitored quarterly	No See Below	Quarterly 2015 See below for additional information	57.3	ug/l	80 based on a running annual average of quarterly samples	80	By-product of drinking water chlorination needed to kill harmful organisms. THMs are formed when source water or distribution system (biofilms) contains large amounts of organic matter.
Haloacetic acids or HAA5 Monitored quarterly	No See Below	Quarterly 2015 See below for additional information	15.5	ug/l	60 based on a running annual average of quarterly samples	60	By-product of drinking water chlorination needed to kill harmful organisms. THMs are formed when source water or distribution system (biofilms) contains large amounts of organic matter.
Chlorine residual	No See below	Daily and at time total coliform bacteria sample is collected	Range was 0.01 to 4	mg/l	4 MRDLG	4 MRDL	By-product of drinking water chlorination. Chlorination is needed to kill harmful organisms if they get into the water

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that contaminants have been detected; however, these other contaminants were detected below New York State requirements. Information below is given on each detected contaminant:

Turbidity

The Cobleskill treatment plant is required to produce water that is less than 0.3 NTU in 95 percent of samples collected each month. This was met in 100 % of measurements reported 2015. The filters must not have turbidity of greater than 1.0 NTU in two consecutive measurements taken 15 minutes apart. The filter plant complied with this performance standard in 2015. Turbidity is measured because it is used to determine the effectiveness of the filtration treatment system. It is a measure of the cloudiness of the water. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organism. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Please pay special attention to the additional statement in this document regarding cryptosporidium. Distribution turbidity limit is 5 NTU in 5 samples per week. Please note that distribution turbidity is usually higher because the water picks up material in the pipes.

Chloride

The Village is not in violation of the chloride limit. In fact, the chloride level is so low in the water it has no health effects observed. However, if chloride were present in the water at the MCL there may be objectionable tastes.

Barium

Barium was present at less than 2 % of the MCL. It is at a level where no health effects are observed. Some people who drink water containing Barium in excess of the MCL over many years could experience an increase in their blood pressure.

Fluoride

Fluoride addition was restarted in May 2010 at the Cobleskill Treatment Plant before it is delivered to us. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal dose of 0.7 mg/l (parts per million). To ensure that the fluoride supplement in your water provides optimal dental protection, the State Health Department requires that Cobleskill Village monitor fluoride levels on a daily basis. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride. Fluoridated water is the most effective method for delivering fluoride to prevent tooth decay and associated health problems. Fluoridated water is the most economical method of delivering fluoride to prevent tooth decay.

Sodium

Sodium is at very low levels in the water. 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 for drinking by people on moderately restricted sodium diets.

Sulfate

The amount of sulfate in the water is so low no health effects can be observed. At high levels, Sulfates can form scale on boiler and heat exchangers.

Lead

The District has complied with the Federal and State Lead and Copper Rule. The highest level of lead tested was .006 ug/l which is below the Action level of 15 ug/l. A total of ten samples for lead and copper were collected from residences during one monitoring period in 2014. Even though the water is incompliance we are providing the following information if you have a concern over the lead and wish to reduce your exposure to it. The lead dissolves from the household plumbing and lead water service lines and gets higher as the water sits motionless in the pipes for a longer period of time. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical and mental development. Children could show slight defects in attention span and learning abilities. Adults who drink water containing lead in excess of the Action Level over many years could develop kidney problems or high blood pressure. Infants and young children are typically more vulnerable to lead in drinking water than the general population. 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. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Flush your tap for approximately 2 minutes before using tap water. There are many ways to flush the water lines with little actual water wasted down the drain. You can contact us if you want additional ideas that may work for you. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791). The next round of samples is in 2017. Contact the District if you wish to take part in that round.

Copper

The District has complied with the Federal and State Lead and Copper Rule. None of the 10 samples tested exceeded the action level of 1.3 mg/l. Samples at the action level are in compliance. The highest level detected of 0.33 mg/l is shown in the table above. Copper is an essential nutrient to your health. Some people who drink water containing copper in excess of the Action Level over a relatively short period of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the Action Level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor. If you are concerned about the copper in the water flush your tap for approximately 2 minutes before using tap water to help remove it from the drinking water. The next round is in 2017.

Iron-- Barely detected and does not significantly contribute to the quality of the water. It is an essential nutrient.
Manganese-- Barely detected and does not significantly contribute to the quality of the water. It is an essential nutrient.

Total Trihalomethanes and Haloacetic acids (TTHM and HAA5)

Total Trihalomethanes

Total trihalomethanes (are chloroform, bromodichloromethane, dibromochloromethane and bromoform as a group) were not detected above the MCL of 80 ug/l this year. We are presenting the following information on total trihalomethanes in drinking water if you have a concern over them:

> "Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer."

Haloacetic Acids

The maximum contaminant level (MCL) for Haloacetic Acids is effective in the year 2004 for water systems serving fewer than 10,000 persons. We are presenting the following information on haloacetic acids in drinking water if you have a concern over them: "Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer."

Chlorine Residual.

We are mandated to add chlorine to the water to kill any harmful organisms. Our chlorine levels are at acceptable levels and we must always have chlorine in the water. Chlorine residual is a by-product of drinking water chlorination. The MRDL of 4 mg/l was effective on January 1, 2004 and the MRDLG is 4 mg/l. The range was approximately between 0.01 and 4. mg/l. To be a violation there would have to be a monthly average above 4 during a year.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

We constantly test for various contaminants in the water supply to comply with regulatory requirements.

We are required to monitor your drinking water for specific contaminants on a regular basis. The results of regular monitoring are an indicator of whether or not your drinking water meets health standards.

We sample at least twice per month with only one sample in July and August required. All samples for 2015 were taken and reported by Joe Redmond.

Waivers

The Village of Cobleskill which produces the water for Warnerville Water District has a waiver for monitoring of 11 inorganic chemicals for the period of January 1, 2012 to December 31, 2020 because the contaminants are consistently below the MCLs or not detected at all in at least three rounds of sampling. These contaminants include: Arsenic, Antimony, Barium, Beryllium, Cadmium, Chromium, Cyanide, Mercury, Nickel, Selenium, and Thallium. The next routine monitoring for these contaminants is due in 2020.

The TTHM, Haloacetic Acids and free chlorine residual measurements are required to have a monitoring plan that is available for review. Please contact the operator for details.

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).

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our area is very fortunate to receive on average, 35 inches of rainfall per year, conservation efforts by both the Village and the consumer are prudent in deterring increasing cost. As a consumer you can participate in this water conservation effort. The following are some ideas which can be directly applied to your individual homes:

1) Use water-saving, flow restricting shower heads and low flow faucets (aerators);
2) Repair dripping faucets and toilets that seem to flush by themselves;
3) Replace your toilet with a low flow flush model or place a brick in your tank to reduce the volume used on each flush;
4) Water your garden and lawn only when necessary. Remember that a layer of mulch in the flower beds and garden is not only aesthetically pleasing but will help retain moisture;
5) Water your lawn after 6:00 PM, this prevents water loss water loss due to evaporation;
6) When washing your car do not let the hose run continuously;
7) When brushing your teeth, shaving or shampooing avoid running the water unnecessarily, and;
8) Use your water meter to detect hidden leaks. Simply turn off all taps and water to appliances. The check the meter after 15 minutes. If it moved, you have a leak.

Closing

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, our way of life and our children's future. Please contact the Cobleskill Water Dept. at 234-2195 if you have any questions.

Water District Projects

Throughout the year, water dept. staff will be changing out the district's water meters to coincide with the read system currently in place with the Village of Cobleskill. This will require access to the meter (usually in the basement). Dept. staff will be using marked vehicles and will have ID. If no one is home, a door hang will be placed with a number for you to call and make an appointment. If you have any questions regarding their employment, Please call us at (518) 234-2195.

Periodically The Water Supt. will post nonemergency information on the social media Face Book page under " Cobleskill Reservoir ". This includes reservoir info and other activities as well as tips for winter pipe protection.