

Annual Drinking Water Quality Report for 2024

Town of Marshall - Deansboro Water District

PO Box 242 - Deansboro, NY 13328
(Public Water Supply ID#NY 3202387)

INTRODUCTION

To comply with State and Federal regulations, the Town of Marshall - Deansboro Water District is issuing this 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. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact Dan Yoxall, Water Superintendent at 315-368-3217. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Water Advisory Board meetings. The meetings are held on the first Tuesday of each month at 5:30PM at the Town of Marshall Town Hall, Water District Office, NYS Route 12B, Deansboro.



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 that 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 approximately 450 people through 143 service connections. Our water sources are drawn from three separate spring sources located west of the Hamlet of Deansboro off West Hill Road. The source can be supplemented by an unnamed tributary brook. Since the sources are considered surface water or groundwater under the influence of surface water all sources are filtered via the slow sand filters. After sedimentation and filtration, the water flows to a collection tank. From there, the water is pumped to the water treatment plant where it is injected with sodium hypochlorite solution (liquid chlorine) and treated with Ultraviolet Light before it enters the storage tank on West Hill Road. The treated water flows from the tank via gravity throughout the system.

SOURCE WATER ASSESSMENT INFORMATION

A Source Water Assessment has been completed for the DEANSBORO WD Water System. Possible and actual threats to drinking water source(s) 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 source(s). 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. The Source Water Assessment Program (SWAP) is designed to compile, organize and evaluate information to make

better decisions regarding protecting sources of public drinking water. A copy of the assessment, including a map of the assessment area, can be obtained by contacting us, as noted above.

The land uses around the DEANSBORO WD Water System sources were rated for their potential to cause contamination to the sources. The Cheeseboro and Van Swall springs were considered at a medium risk for contaminants related to agriculture. These include a medium risk for pesticides, nitrates, protozoa, enteric bacteria and viruses, and Disinfection By-Product precursors. The Steinman springs also reflect these contaminant concerns. When combined with a low risk of contamination from discrete sources and a high natural sensitivity based on soils, surficial geology, aquifer information and bedrock geology, this created a medium high to high susceptibility for the source to contamination. 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.

Based upon the SWAP Report determinations, good judgment should be used and caution should be exercised when determining placement of certain materials, actions and facilities, including animal feed lots, manure storage piles, or chemical storage in and around the areas adjacent to the sources. We work hard to ensure that the source of water for our system is protected from contamination.

GROUNDWATER UNDER THE DIRECT INFLUENCE OF SURFACE WATER (GWUDI) INFORMATION

From 2003-2005, the Oneida County Health Department conducted a study of our water system to determine if our source was under the direct influence of surface water. Based upon the data collected (e.g. temperature, conductivity, and precipitation), geology, construction methods, and soils, the OCHD has determined that the water source for the water system demonstrates characteristics of a groundwater source that is under the direct influence of surface water (GWUDI). Therefore, we were required to filter our water and provide additional Ultraviolet Light (UV) Disinfection treatment to meet the water treatment standards established by the State. We have completed these upgrades.

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, nitrite, lead and copper, radioactive contaminants, disinfection byproducts, volatile organic compounds, and synthetic organic compounds. 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, may be 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 Oneida County Health Department at 315-798-5064.

Table of Detected Contaminants

Contaminant	Is the System in Violation?	Date of Sample	Level Detected Average or Maximum (Range)	Unit Measurement	MCLG / MRDLG	Regulatory Limit (MCL, MRDL, TT or AL)	Likely Source of Contamination
Physical Parameters							
Turbidity	No	1/27/24	0.077 (highest single measurement) ⁽¹⁾	NTU	N/A	TT = <1.0 NTU	Soil Runoff.
Turbidity	No	All Months	100% ≤ 1.0 (lowest monthly percentage of samples meeting specified limits)			TT = 95% of samples <1.0 NTU	
Inorganic Contaminants							
Barium	No	08/13/24	0.180	mg/l	2	MCL = 2	Erosion of natural deposits.
Copper	No	07/2022	0.135 ⁽²⁾ (range = 0.025 – 0.15)	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead	No	07/2022	1.9 ⁽³⁾ (range = <1 - 2.3)	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
Nitrate	No	Quarterly	5.5 ⁽⁴⁾ (range = 5.02-6.02)	mg/l	10	MCL = 10	Runoff from fertilizer use; Erosion of natural deposits.
Disinfectants							
Chlorine Residual	No	Daily/ Monthly	0.43 ⁽⁵⁾ (range = 0.03 – 0.82)	mg/l	N/A	MRDL = 4 ⁽⁶⁾	Water additive used to control microbes.
Disinfection Byproducts							
Haloacetic Acids (mono-, di-, and trichloroacetic acid, and mono- and dibromoacetic acid)	No	8/7/24	6.3	ug/l	N/A	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes (TTHMs – chloroform, bromodichloromethane, dibromochloromethane and bromoform)	No	8/7/24	18	ug/l	N/A	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Radioactive Contaminants							
Gross Alpha	No	8/04/20	4.25	pCi/L	0	MCL = 15	Erosion of natural deposits

Notes:

- 1 - Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single-entry point (pre-distribution system) turbidity measurement (0.077NTU) for the year occurred on January 27,2024. State regulations require that turbidity must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 1.0 NTU. Turbidity levels recorded during 2024 were all below the maximum level allowed.
- 2 - The level presented represents the 90th percentile of the 5 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 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, the 90th percentile was the average of the two highest values. The action level for copper was not exceeded at any of the 5 sites tested.
- 3 - During 2022 we collected and analyzed 5 samples for lead. The level included in the table represents the average of the two highest levels detected. The action level for lead was not exceeded at any of the sites tested
- 4 - This level represents the average and range of results of quarterly sampling (also see note below 'What does this information mean')
- 5 - This level represents the running annual average and range of results of monthly microbiological sampling.
- 6 - Value presented represents the Maximum Residual Disinfectant Level (MRDL) which is a level of disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. MRDLs are currently not regulated but in the future they will be enforceable in the same manner as MCLs.

Definitions:

ACTION LEVEL	AL	The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
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 possible.
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.
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).
NEPHELOMETRIC TURBIDITY UNIT	NTU	A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
NON-DETECTED	ND	Laboratory analysis indicates that the constituent is not present.
PICOCURIES PER LITER	pCi/L	Picocuries per liter is a measure of radioactivity in water.
TREATMENT TECHNIQUE	TT	A required process intended to reduce the level of a contaminant in drinking.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements. Although nitrate was detected below the MCL, it was detected at levels between 5.02 mg/l and 6.02 mg/l which are greater than one-half of the MCL. Therefore, we are required to present the following information on nitrate in drinking water:

"Nitrate in drinking water at levels above 10 mg/l is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider."

LEAD INFORMATION

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Deansboro Water District is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact Deansboro Water District superintendent Dan Yoxall at 315-368-3217. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available <https://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 (1-800-426-4791).

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2024, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements. On December 10, 2024, the Deansboro Water District was issued a violation from the Oneida County Health Department for a lack of a secondary water source to meet daily demands; and the settling house roof should be evaluated to determine if repairs need to be made. The Deansboro Water District is in the process of actively seeking funding and has hired design engineers to address these violations.

INFORMATION ON LEAD SERVICE LINE INVENTORY

A Lead Service Line (LSL) is defined as any portion of pipe that is made of lead which connects the water main to the building inlet. An LSL may be owned by the water system, owned by the property owner, or both. The inventory includes both potable and non-potable SLs within a system. In accordance with the federal Lead and Copper Rule Revisions (LCRR) our system has prepared a lead service line inventory and have made it publicly accessible by contacting the Deansboro Water District office at 315-841-4473.

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present 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.

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:

- Use low flow shower heads and faucets.
- Get a run for your money... load washing machines and dishwashers to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it, and you can save almost 6,000 gallons per year.
- Check 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 can save more than 30,000 gallons a year.
- Don't cut your lawn too short, long grass saves water.
- Water lawns sparingly and only in the early morning or late evening.
- Turn off outdoor water faucets and disconnect hoses during cold weather to prevent freezing.
- Use your water meter to detect hidden leaks. Simply check the reading on your meter, turn off all taps and water using appliances, then check the meter again after 15 minutes. If it moved, you have a leak.
- Water saving pamphlets are available at the water billing office in the Town Hall.

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 result in periodic changes to the rate structure. Rate adjustments may be necessary in order to address updates within our system. We ask that all our customers help us protect and preserve our water sources, which are the heart of our community. We encourage all residents to be mindful of our water supply and to notify water district staff should they note any leak, unusual ponding or runoff of water on the ground surface or any changes to water pressure. Please call our office at 315-841-8525 if you have questions.