

Annual Drinking Water Quality Report 2022

Dudley Water Supply, Inc.
11194 Bonta Bridge Road
Cato, NY 13033
Public Water Supply ID # 0501736

INTRODUCTION

To comply with State regulations, Dudley Water Supply, Inc 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 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 Paul or Glen Dudley , co -owners and operators at 315-626-6519. We want you to be informed about your drinking water. As we are a small company, we do not have regular business meetings. We are available daily to answer your questions and help you solve your water problems.

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

Our water system is an unconfined aquifer, pumped from the earth by 5 wells on the Dudley Well Field Site in Meridian, NY. Our water system serves about 250 people in the Village of Meridian. We also provide water to the Village of Cato on an as-needed basis, as well, which has a population of about 600 individuals.

Source Water Assessment

The New York State Department of Health has completed a source assessment for this system based on available information. Possible and actual threats to this drinking water were evaluated. The state source water assessment includes susceptibility rating based on risk posed by each potential source of contamination and how easily contaminants move through the subsurface to the wells. The susceptibility rating is an estimate of the contamination of the water source. It does not mean that the water is or will be contaminated. See the section “Are There Contaminants in our Drinking Water?” for a list of contaminants that have been detected. The source water assessment provides resource managers with additional information for protecting the water source in the future. The source water assessment has rated these wells as having medium risk susceptibility to microbial contaminants. The rating is primarily due to the aquifer’s proximity to agricultural lands in relation to wells. In addition, the wells draw water from an unconfined aquifer with unknown hydraulic conductivity. Please note that while the source water assessment rates our wells susceptible to microbial contamination, our water is disinfected to ensure the water delivered to your homes meets NYS Drinking Water Standards for microbial contamination.

County and New York State Departments will use this information to direct water source protection activities. These may include water quality monitoring, resource management, planning and educational activities. A copy of the assessment is available for review by calling the Cayuga County Health Department at 315-253-1405.

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 organic volatile organic compounds, total trihalomethanes, haloacetic acids, radiologica and synthetic organic compounds. The table present 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 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 Cayuga County Health Department at 315-253-1405.

Below is a list of definitions to help you understand the following Tables

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.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present

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).

Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

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

1 –Copper- The level presented represents the 90th percentile of the five 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. The action level for copper was not exceeded at any of the sites tested in 2020.

2 –Lead- The level presented represents the 90th percentile of the 5 samples collected in 2020. The action level for lead was not exceeded at any of the sites tested. (tested 2020)

Table 1 – Detected Contaminants							
Contaminants	Violation Y or N	Date of Sample	Level Detected Ave/Max (range)	Unit of Measurement	MCLG	Regulatory Limit MCL Total	Likely Source of Contamination
Radiological Contaminants							
Gross Alpha	NO	4/9/17	0.707	pCi/L	0	15	Erosion of natural deposits
Inorganic Contaminants							
Barium	NO	9/16/19	0.087	ppm	2.0	2.0	Discharge of drilling waste. Discharge from metal refineries, erosion of natural deposit.
Copper ¹	NO	8/4/20	0.32 ¹ (range 0.032-0.62)	ppm	1.3	AL = 1 .3	Corrosion of plumbing systems, erosion of natural deposits, leaching from wood preservatives.
Lead ²	NO	8/4/20	0.652 (range <1-1.3)	ppb	0	AL = 1 5	Corrosion of household plumbing systems, erosion of natural deposits.
Nitrate (as Nitrogen)	NO	7/15/22	Well 7 1.95 Well 8 0.93 Well 10 2.38 Well 14 2.07 Well #15 1.21	ppm	10	10	Run off from fertilizer use, leaching from septic tanks, sewage erosion of natural deposits.
Sodium (Salt)	NO	7/14/22	29	ppm	NA	No limit	Naturally occurring road salt, water softeners, animal waste.
SeaQuest	NO	7/14/22	39	ppm	NA	No limit	
Volatile Organic Contaminants							
TTHM (Total Trihalomethanes)	NO	8/4/20	20	ppb	NA	80 ppb	By-product of drinking water chlorination needed to kill harmful organics. TTHMS are formed when source water contains large amounts of organic matter.
HAAS Haloacetic Acids	NO	8/4/20	12	ppb	NA	60 ppb	By-product of drinking water chlorination needed to kill harmful organisms.
1,4-Dioxane	NO	10/20/22	Well 7 0.026 Well 14 0.030 Well 10 .061	ug/L ug/L ug/L	0	1 ug/L	Emission from waste incineration.

Table 2 – Non-Detected Contaminants						
Contaminant	Violation Yes/no	Date of Sample	Level Detected	Unit Measure	Regulatory Limit MCLTT or AL	Source of Contamination
Methylterbutyl Ether (MTBE)	NO	3/5/18	<.05	ug/L	10 ug/L	Releases from gasoline storage tanks, MTBE is an octane-enhancer in unleaded gasoline. Atmospheric deposition.
Perfluorooctane Acid (PFOA)	NO	10/22/22	Well 7 - ND Well 8 - ND	ng/L	10 ng/L	Release into the environment from widespread use in commercial and industrial applications.
Perfluoractanic Sulfa Acid (PFOS)	NO		Well 10 - ND Well 14 - ND Well 15 - ND	ng/L	10 ng/L	
1,4-Dioxane	NO	10/20/22	Well 8 & 15 <0.020	ug/L	1 ng/L	Emissions from waste incineration and other combustion. Discharge from chemical factories.

Table 3 – Undetected Contaminants

EPA 508 PCB Screen for Synthetic Contaminants (SOC's)			
Contaminant	Date	Violation Yes/no	Results
Aroclor-1016	7/20/22	NO	<0.0001
Aroclor-1221	7/20/22	NO	<0.0001
Aroclor-1232	7/20/22	NO	<0.0001
Aroclor-1242	7/20/22	NO	<0.0001
Aroclor-124/	7/20/22	NO	<0.0001
Aroclor-1256	7/20/22	NO	<0.0001
Aroclor-1260	7/20/22	NO	<0.0001

EPA 508 SOC's Group 1 & 2			
Aldrin	7/14/22	NO	0.001
Chlordane, Total	7/14/22	NO	<0.00002 mg/l
Dieldrin	7/14/22	NO	<0.001
Endrin	7/14/22	NO	<0.00001
Heptachlor	7/14/22	NO	<0.00004
Heptachlor Epoxide	7/14/22	NO	<0.0002
Hexachlorocyclopentadiene	7/14/22	NO	<0.001
Gamma-BHC (Lindane)	7/14/22	NO	<0.00002
Methoxychlor	7/14/22	NO	<0.0001
Toxaphene	7/14/22	NO	<0.001

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 the level allowed by the State.

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 Villages of Meridian and Cato are 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 the 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 Hot Line (1-800-426-4791) at <http://www.epa.gov/safewater/lead>.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2022, 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 all 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).

INFORMATION FOR NON-ENGLISH -SPEAKING RESIDENTS

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

French

Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.

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 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 firefighting 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 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 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. 315-626-6519

Dudley Water Supply, Inc.

11194 Bonta Bridge Road- Cato, NY 1303
Annual Water Quality Report - Updated

Public Water Supply ID# 0501736

Updated – Detected

Contaminant	Violation	Date of Sample	Level Detected	MCLG	Reg. Limit	Source of Contamination
Barium	No	2/24/22	.102	ppm	2.0	Discharge of drilling waste Erosion of natural deposit
Dibromochlor- Omethane	No	2/24/22	0.0008	ppm	NA	Byproduct of chlorination TTHMS are formed when source water Contains organic matter

NYS Screened Contaminants - No detects

Carbamates in Drinking Water EPA Method 531.1

Analysis Date: 2/28/2022

Aldicarb Sulfoxide:	<1.0 ug/L
Aldicarb Sulfone:	<1.0 ug/L
Oxamyl (Vydate):	<1.0 ug/L
Methomyl (Lannate):	<1.0 ug/L
3-Hydroxy Carbofuran:	<1.0 ug/L
Aldicarb (Temik):	<1.0 ug/L
Propoxur (Baygon):	<1.0 ug/L
Carbofuran:	<1.0 ug/L
Carbaryl (Sevin):	<1.0 ug/L
Methiocarb:	<1.0 ug/L

Herbicides in Drinking Water EPA Method 515.4

Start Date: 2/23/2022 Analysis Date: 2/28/2022

Dalapon:	<2.0 ug/L
Dicamba:	<1.0 ug/L
2,4-D:	<0.5 ug/L
Pentachlorophenol:	<0.2 ug/L
2,4,5-TP (Silvex):	<0.5 ug/L
2,4,5-T:	<0.5 ug/L
2,4-DB:	<2.0 ug/L
Dinoseb:	<1.0 ug/L
Picloram:	<0.5 ug/L

Trace Metals in Drinking Water by EPA Method 200.8

Analysis Date: 3/15/2022

Beryllium:	<1.0 ug/L
Chromium:	<5.0 ug/L
Nickel:	<5.0 ug/L
Arsenic:	<1.0 ug/L
Selenium:	<3.0 ug/L
Cadmium:	<1.0 ug/L
Antimony:	<1.0 ug/L
Thallium:	<0.5 ug/L
Lead:	<1.0 ug/L

Nitrogen Phosphorus Pesticides in Drinking Water EPA

Start Date: 2/22/2022 Analysis Date: 2/23/2022

Simazine:	<0.1 ug/L
Atrazine:	<0.1 ug/L
Metribuzin:	<0.5 ug/L
Alachlor (Lasso):	<0.1 ug/L
Metolachlor (Dual):	<0.5 ug/L
Butachlor:	<0.5 ug/L

Microextractables in Water EPA Method 504.1

Start Date: 2/24/2022 Analysis Date: 2/24/2022

1,2-Dibromoethane (EDB):	<0.01 ug/L
1,2,3-Trichloropropane:	<0.03 ug/L
Dibromo-3-chloropropane:	<0.02 ug/L

Volatile Organics in Water EPA Method 524.2

Analysis Date: 2/24/2022

Dichlorodifluoromethane:	<0.5 ug/L
Chloromethane:	<0.5 ug/L
Vinyl Chloride:	<0.5 ug/L
Bromomethane:	<0.5 ug/L
Chloroethane:	<0.5 ug/L
Trichlorofluoromethane:	<0.5 ug/L
1,1-Dichloroethene:	<0.5 ug/L
Methylene Chloride:	<0.5 ug/L
trans-1,2-Dichloroethene:	<0.5 ug/L
Methyl-t-Butyl-Ether:	<0.5 ug/L
1,1-Dichloroethane:	<0.5 ug/L
Methyl Ethyl Ketone:	<10 ug/L
dis-1,2-Dichloroethane:	<0.5 ug/L
Bromochloromethane:	<0.5 ug/L
Chloroform:	<0.5 ug/L
2,2-Dichloropropane:	<0.5 ug/L
1,2-Dichloroethane:	<0.5 ug/L
1,1,1-Trichloroethane:	<0.5 ug/L
1,1-Dichloropropene:	<0.5 ug/L
Carbon Tetrachloride:	<0.5 ug/L
Benzene:	<0.5 ug/L
Dibromomethane:	<0.5 ug/L
1,2-Dichloropropane:	<0.5 ug/L

NYS Screened Contaminants con'd- NON DETECTS

Trichloroethene:	<0.5 ug/L
Bromodichloromethane:	<0.5 ug/L
cis-1,3-Dichloropropene:	<0.5 ug/L
Methyl Isobutyl Ketone:	<10 ug/L
trans-1,3-Dichloropropene:	<0.5 ug/L
1,1,2-Trichloroethane:	<0.5 ug/L
Toluene:	<0.5 ug/L
1,3-Dichloropropene	<0.5 ug/L
Tetrachloroethene:	<0.5 ug/L
1,1,1,2-Tetrachloroethane:	<0.5 ug/L
Chlorobenzene:	<0.5 ug/L
Ethylbenzene:	<0.5 ug/L
Bromoform:	<0.5 ug/L
m/p-Xylene:	<0.5 ug/L
Styrene:	<0.5 ug/L
1,1,2,2-Tetrachloroethane:	<0.5 ug/L
o-Xylene:	<0.5 ug/L
1,2,3-Trichloropropane:	<0.5 ug/L
Isopropylbenzene:	<0.5 ug/L
Bromobenzene:	<0.5 ug/L
n-Propylbenzene:	<0.5 ug/L
2-Chlorotoluene:	<0.5 ug/L
4-Chlorotoluene:	<0.5 ug/L
1,3,5-Trimethylbenzene:	<0.5 ug/L
tert-Butylbenzene:	<0.5 ug/L
1,2,4-Trimethylbenzene:	<0.5 ug/L
sec-Butylbenzene:	<0.5 ug/L
1,3-Dichlorobenzene:	<0.5 ug/L
1,4-Dichlorobenzene:	<0.5 ug/L
p-Cymene:	<0.5 ug/L
1,2-Dichlorobenzene:	<0.5 ug/L
n-Butylbenzene:	<0.5 ug/L
1,2,4-Trichlorobenzene:	<0.5 ug/L
Naphthalene:	<0.5 ug/L
Hexachlorobutadiene (C-46):	<0.5 ug/L
1,2,3-Trichlorobenzene:	<0.5 ug/L

Mercury in Drinking Water by EPA Method 200.8

Analysis Date: 3/15/2022

Mercury: <0.2 ug/L

Total Cyanide in Drinking Water by EPA Method 335.4

Analysis Date: 2/28/2022

Cyanide, Hydrolyzable: <0.02 mg/L

Total Cyanide in Drinking Water by EPA Method 335.4

Analysis Date: 2/28/2022

Cyanide, Hydrolyzable: <0.02 mg/L

Mercury in Drinking Water by EPA Method 200.8

Analysis Date: 3/15/2022

Mercury: <0.2 ug/L

Fluoride in Drinking Water by SM 4500 F-C

Analysis Date: 3/7/2022

Fluoride, Free: <0.2 mg/L

Perfluorooctanoic acid (PFOA)(CASRN 335-67-1):	<2.00 ng/L
Perfluorononanoic acid (PFNA)(CASRN 375-95-1):	<2.00 ng/L
Perfluorobutanesulfonic acid (PFBS)(CASRN 375-73-5):	<1.77 ng/L
Perfluorohexanesulfonic acid (PFHxS)(CASRN 355-46-4):	<1.89 ng/L
Perfluorooctanesulfonic acid (PFOS)(CASRN 1763-23-1):	<1.91 ng/L
Perfluorododecanoic acid (PFDoA) (CASRN 307-55-1):	<2.00 ng/L
Perfluoroundecanoic acid (PFUnA) (CASRN 2058-94-8):	<2.00 ng/L
Perfluorodecanoic acid (PFDA) (CASRN 335-76-2):	<2.00 ng/L
Perfluoroheptanesulfonic acid (PFHpS) (CASRN 375-92-8):	<1.90 ng/L
Perfluorohexanoic acid (PFHxA) (CASRN 307-24-4):	<2.00 ng/L
Perfluoropentanoic acid (PFPeA) (CASRN 2706-90-3):	<20.0 ng/L
Perfluoropentanesulfonic acid (PFPeS) (CASRN 2706-91-4):	<1.88 ng/L
Perfluorobutanoic acid (PFBA) (CASRN 375-22-4):	<2.00 ng/L
Perfluoro-3-methoxypropanoic acid (PFMPA) (CASRN 377-73-1):	<20.0 ng/L
Perfluoro-4-methoxybutanoic acid (PFMBA) (CASRN 863090-89-5):	<2.00 ng/L
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA) (CASRN 113507-82-7):	<1.78 ng/L
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) (CASRN 756426-58-1):	<1.86 ng/L
11-Chloroicosadecafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) (CASRN 763051-82-8):	<1.88 ng/L
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) (CASRN 151772-58-8):	<2.00 ng/L
4,8-Dioxa-3H-perfluorononanoic acid (ADONA) (CASRN 919005-14-4):	<18.8 ng/L
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)(CASRN 757124-72-4):	<1.87 ng/L
1H, 1H, 2H, 2H-Perfluorooctane sulfonic acid (8:2 FTS) (CASRN 27819-97-2):	<9.48 ng/L
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS) (CASRN 39108-34-4):	<1.92 ng/L
Hexafluoropropylene oxide dimer acid (HFPO-DA)(CASRN 13252-13-6):	<30.0 ng/L

1,4-Dioxane in Drinking Water by EPA Method 522

Start Date: 3/11/2022 Analysis Date: 3/28/2022