2025 Annual Drinking Water Quality Report

The Fort Drum

Directorate of Public Works

Fort Drum, New York 13602

Public Water Supply ID #2212214

April 2026

OVERVIEW

The Fort Drum Directorate of Public Works (DPW) is proud to provide you with this copy of its 2025 Annual Drinking Water Quality Report. DPW publishes this report annually to comply with state and federal regulations and to provide our consumers with detailed information on the water they drink.

In summary, DPW monitors its water for contaminants throughout the year. In 2025, **our water system met all water quality standards.** Included are details about where our water comes from, what it contains, and how it compares to state and federal standards.

We want you to be informed about your drinking water. If you have any questions about this report or concerning your drinking water, please contact Thomas P. Hudon, Chief Water Plant Operator, at (315) 774-0249, or Michael Valvo, Drinking Water and Wastewater Program Manager, at (315) 405-2118.

HOW DO I KNOW MY WATER IS SAFE?

In general, the sources of drinking water (both tap 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 it can pick up substances resulting from the presence of animals or from human activities. To ensure that tap water is safe to drink, the state and the Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Similarly, the New York State Department of Health and the Food and Drug Administration have established limits for contaminants in bottled water, providing for equal protection of public health.

DPW routinely tests for contaminants that may be present in source water, including microbial contaminants, inorganic contaminants, pesticides and herbicides, organic chemical contaminants, and radioactive contaminants.

Kayakers on the Black River in Brownville, New York.

FORT DRUM'S WATER SUPPLY

Our Fort Drum drinking water system serves approximately 40,000 people. This population constantly fluctuates due to frequent military reassignments. This figure includes Fort Drum residents, soldiers and employees.

Fort Drum obtains its water from two sources: groundwater wells located near the airfield and from the City of Watertown, which draws water from the Black River.

Fort Drum's water plant pumped and treated 307 million gallons in 2025. Our peak daily production was 1.462 million gallons. Fort Drum also purchased 329 million gallons of water from the Development Authority of the North Country (DANC).

Under a purchase agreement, Fort Drum receives approximately 800,000 gallons per day from DANC. DANC purchases water from the City of Watertown and delivers it to Fort Drum through its pumping and piping systems.

The City of Watertown's water source is the Black River, a surface water source, which originates in the Adirondack Mountains and runs through the center of the city and westerly to Black River Bay. Flows of the Black River are regulated by the Hudson Black River Regulating District and are controlled by a series of hydroelectric power dams stretching from its headwaters in the Adirondacks to its mouth in Lake Ontario.

The City of Watertown's 15 million gallons per day water treatment plant uses 2.3% of the minimum flow of the Black River. The water is treated within modern facilities before distribution. Liquid alum and a nonionic polymer are added to the water to coagulate and settle out dirt and organic matter through a dosing station upstream of the water plant. The settled water is then pumped to the processing complex at 1707 Huntington Street, Watertown NY, 13601. Polyaluminum chloride and nonionic or cationic polymer are added before filtering. Carbon may be added to combat taste and odor.

The filtered water is disinfected with chlorine to kill bacteria, viruses, and other microorganisms. The water is then treated with sodium silicate for corrosion control and with fluoride to help fight tooth decay. The finished product, high-quality potable water, is pumped to the city's distribution system and through DANC's line to Fort Drum.

Fort Drum's groundwater source currently consists of five wells. These wells were installed and approved by the New York State Department of Health (NYSDOH) and New York State Department of Environmental Conservation (DEC) in August 2016.

Fort Drum's wellfield is permitted to withdraw 2.2 million gallons of water per day. Raw groundwater is treated at the Fort Drum Water Treatment Plant with ultraviolet (UV) light and then chlorine to kill bacteria and viruses. Fluoride is added to help fight tooth decay. Then the treated drinking water is pumped into the distribution system where it mixes with purchased drinking water from the City of Watertown.

In August 2020, New York State adopted new drinking water standards and set maximum contaminant levels (MCLs) of 10 parts per trillion (10 ppt) for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), and 1 part per billion (1 ppb) for 1,4-Dioxane. DPW has been monitoring PFOA and PFOS in Fort Drum's drinking water since 2016. In April 2024, the EPA adopted new drinking water standards and set MCLs of 4 ppt for PFOA and PFOS and 10 ppt for PFHxS, PFNA and HFPO-DA. Fort Drum must comply with these new EPA MCLs beginning in 2029. Fort Drum continued sampling in 2025, and results are included in Table 3.

SOURCE WATER ASSESSMENT

The NYSDOH evaluated the City of Watertown's water supply for contamination under the Source Water Assessment Program (SWAP).

The City of Watertown's water supply is most susceptible to sediment, turbidity, bacteria, Cryptosporidium oocysts, Giardia cysts and permitted discharges within the watershed.

Fort Drum's groundwater supply wells are most susceptible to inorganic contaminants from runway de-icing and volatile organics from fuel spills.

Both the City of Watertown and Fort Drum provide regular monitoring and treatment to ensure drinking water meets all applicable standards.

ARE THERE CONTAMINANTS IN FORT DRUM'S DRINKING WATER?

Fort Drum and the City of Watertown routinely monitor and test your drinking water for contaminants. These contaminants include coliform, turbidity, inorganic compounds, nitrate, lead, copper, organic compounds, total trihalomethanes, haloacetic acids, Giardia, Cryptosporidium, gross alpha, radium 226 and 228, synthetic organic compounds and chemicals detected during sampling conducted pursuant to the EPA unregulated contaminants monitoring rule (UCMR). Pages 8 through 10 show results for contaminants that were detected in Fort Drum's drinking water.

Table 1: Shows the contaminants that DPW detected in its water supply as compared to the Maximum Contaminant Level.

Table 2: Shows DPW's detections of unregulated contaminants, some of which presently have no MCLs. The EPA has asked water suppliers to monitor these substances to determine if additional regulation of them is needed.

Table 3: Shows Fort Drum's Per- and Polyfluorinated Alkyl Substances (PFAS) sampling.

Table 4: Shows contaminants detected by the City of Watertown, to include substances with and without MCLs.

New York State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently; therefore, some of the data may be more than one year old.

Please note 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 NYSDOH District Office at (315) 785-2277.

DEFINITIONS:

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

Maximum Contaminant Level Goal (MCLG): The level of 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.

Treatment Technique (TT): A required process intended to reduce the level of contaminants in drinking water.

Nanograms per liter (ng/L): Corresponds to one part of liquid in one trillion parts of liquid (parts per trillion - ppt).

Not Applicable (NA): Limits do not apply.

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

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTUs 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).

Million Fibers per Liter (MFL): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

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

Table 1: Fort Drum Table of Detected Contaminants							
Contaminant	**Violation Yes/No**	**Sample Date Mon/Year**	**Level Detected: Average (Range)**	**Regulatory Limit (MCL,TT,AL)**	**MCLG or MRDLG**	**Unit of Measure**	**Likely Source of Contamination**
Total Coliform	No	2025	No positive coliform samples	TT =>5% of all samples positive	NA	Not Applicable	Naturally present in the environment
Turbidity	No	2025	.03	TT=<5NTUs	NA	NTU	Particles from water mains
Fluoride	No	2025	0.71 (0.44-1.15)	MCL=2.2	NA	mg/L (ppm)	Added to prevent tooth decay
Copper[1]	No	2024	0.07 (0.01-0.15)	AL= 1.3	1.3	mg/L (ppm)	Corrosion of household plumbing
Lead[1]	No	2024	0.20 (ND-1.7)	AL=15	0	ug/L (ppb)	Corrosion of household plumping systems; naturally occurring
Nitrate	No	2,5,8,11 2025	0.49 (ND – 1.00)	MCL=10	10	mg/L (ppm)	Natural deposits or fertilizer
Arsenic	No	5 2025	0.08 (0-0.10)	MCL=10	0	ug/L (ppb)	Erosion of natural deposits; runoff from orchards, runoff from glass and electronics
Barium	No	5 2025	0.12 (0.10-0.14)	MCL=2	2	mg/L (ppm)	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
Cyanide	No	5 2025	0.17 (ND-0.5)	MCL=200	200	ug/L (ppb)	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Nickel	No	5 2025	0.05 (ND-.30)	NA	NA	ug/L (ppb)	Oil or coal combustion, nickel metal refining and naturally occurring
Chromium	No	5 2025	.25 (0-1.1)	MCL=100	100	ug/L (ppb)	Discharge from steel and pulp mills; erosion of natural deposits
Radium 226 - 228	No	5 2024	0.63 (0.05-1.64)	MCL=5	NA	pCi/L	Erosion of natural deposits
Total Trihalomethanes[2]	No	2,5,8,11 2025	38.2 (2.2-73.0)	MCL=80	NA	ug/L (ppb)	Byproducts of drinking water chlorination
Haloacetic Acid[2]	No	2,5,8,11 2025	24.9 (0.0-30.2)	MCL=60	NA	ug/L (ppb)	Byproducts of drinking water chlorination

1. *The level presented represents the 90th percentile of the 30 sites tested. All 30 samples were less than the action level. One-half of our drinking water comes from the City of Watertown. 90th Percentile Value: The values reported for lead and copper represent the 90th percentile. A percentile is a value on a scale of 100 that indicates the percentage of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system.*

2. *This level represents the highest locational running annual average of all sites sampled and the range of all samples collected.*

Table 2: Fort Drum Table of Detected Contaminants: Unregulated Contaminants Monitoring Program Rule Five[1]						
Contaminant	**Violation Yes/No**	**Sample Date: Mon/Year**	**Level Detected: Average (Range)**	**Regulatory Limit (MCL,TT,AL)**	**Unit of Measure**	**Likely Source of Contamination**
Perfluorobutanoic Acid (PFBA)	No	2,8 2024	0.008 (0.007- 0.008)	NA	ug/L (ppb)	Manmade compound
Perfluoropentanoic Acid (PFPeA)	No	2,8 2024	0.025 (0.025- 0.025)	NA	ug/L (ppb)	Manmade Compound
Perfluorohexanoic Acid (PFHxA)	No	2,8 2024	0.013 (0.012- 0.013)	NA	ug/L (ppb)	Manmade Compound
Perfluoroheptanoic Acid (PFHpA)	No	2,8 2024	0.004 (0.004- 0.004)	NA	ug/L (ppb)	Manmade Compound
Perfluorohexanesulfonic Acid (PFHxS)	No	2,8 2024	0.0004 (0.003-0.005)	10	ug/L (ppb)	Manmade Compound
1H,1H,2H,2H Perfluorooctane sulfonic Acid (6:2 FTS)	No	2,8 2024	0.020 (0.013-0.026)	NA	ug/L (ppb)	Manmade Compound

1. All detectable unregulated contaminant results are listed. Most unregulated contaminants do not have an MCL and are being monitored to determine future regulations. You may obtain all of the monitoring results by calling Michael Valvo at (315) 405-2118.

Table 3: Fort Drum Table of Sampling of Per- and Polyfluorinated Alkyl Substances (PFAS)						
Contaminant	**Violation Yes/No**	**Sample Date: Mon/ Year**	**Level Detected: Average (Range)**	**Regulatory Limit (MCL,TT,AL)**	**Unit of Measure**	**Likely Source of Contamination**
Perfluorobutanesulfonic Acid (PFBS)	No	2,5,8,11 2025	0.17 (ND- 1.30)	10[1]	ng/L (ppt)	Manmade compound
Perfluoroheptanoic Acid (PFHpA)	No	2,5,8,11 2025	4.58 (ND-12.7)	NA	ng/L (ppt)	Manmade compound
Perfluorohexanesulfonic Acid (PFHxS)	No	2,5,8,11 2025	5.43 (ND-15.5)	10[1]	ng/L (ppt)	Manmade compound
Perfluorohexanoic Acid (PFHxA)	No	2,5,8,11 2025	14.47 (.30-36.4)	NA	ng/L (ppt)	Manmade compound
Perfluorooctanesulfonic Acid (PFOS)	No	2,5,8,11 2025	1.80 (ND-6.34)	4/10[1]	ng/L (ppt)	Manmade compound
Perfluoroctanoic Acid (PFOA)	No	2,5,8,11 2025	1.52 (ND – 5.18)	4/10[1]	ng/L (ppt)	Manmade compound
Perfluorobutanoic Acid (PFBA)	No	2,5,8,11 2025	6.97 (ND-16.0)	NA	ng/L (ppt)	Manmade compound
Perfluoropentanoic Acid (PFPeA)	No	2,5,8,11 2025	25.20 (4.06-63.3)	NA	ng/L (ppt)	Manmade compound
1H,1H,2H,2H Perfluorooctane sulfonic Acid (6:2 FTS)	No	2,5,8,11 2025	47.48 (ND-150)	NA	ng/L (ppt)	Manmade compound
Perfluoropentanesulfonic Acid (PFPeS)	No	2,5,8,11 2025	.17 (ND-1.69)	NA	ng/L (ppt)	Manmade compound

1. *Current NYS MCLs for PFOA/PFOS are set at 10ppt. Current EPA MCLs for PFOA/PFOS are set at 4ppt and PFHxS/PFBS are set at 10ppt in finished water. EPA standards are not enforceable until 2029.*

Table 4: City of Watertown Table of Detected Contaminants						
Contaminant	**Violation Yes/No**	**Sample Date: Mon/Year**	**Level Detected: Average/Max (Range)**	**Regulatory Limit (MCL, TT, AL)**	**Unit of Measure**	**Likely Source of Contamination**
Turbidity (NTU)[1]	Yes	2025	<0.3 (ND-2.4)	TT=<0.3 NTU	NTU	Particles from water mains; runoff
Nitrate	No	2025	0.10	MCL=10	mg/L(ppm)	Runoff from fertilizer use; Leaching from septic tanks, sewage: Erosion natural deposits
Fluoride	No	2025	0.5 – 0.97	MCL=2.2	mg/L (ppm)	Added to prevent tooth decay
Copper[2]	No	2025	0.408 (ND-.531)	AL=1.3	mg/L (ppm)	Corrosion of household plumbing
Lead[2]	No	2025	6.3 (ND-19.7)	AL=15	ug/L (ppb)	Corrosion of household plumbing
Barium	No	2025	0.013	MCL=2	mg/L (ppm)	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Total Trihalomethanes[3]	No	2025	47.7 (13.9-57.6)	MCL=80	ug/L (ppb)	Byproducts of drinking water chlorination
Haloacetic Acid[3]	No	2025	35.7 (24.2-41.4)	MCL=60	ug/L (ppb)	Byproducts of drinking water chlorination
Total Organic Carbon (% Removal)	No	2025	NA	TT	NA	Naturally present in the environment
Perfluoroctanoic Acid (PFOA)	No	2025	(ND-0.00073)	MCL=4/10	ug/L (ppb)	Manmade Compound

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. The highest distribution turbidity measurement for the year was 2.4. State regulations require that the monthly average turbidity must always be below 5 NTUs. The regulations also require that 95% of the combined filter effluent turbidity levels recorded have measurements below 0.3 NTUs. In December 2025, 93.55% of turbidity samples met this requirement. A value below 95% constitutes a treatment technique violation, in which the City of Watertown was in violation. The City of Watertown and Ft. Drum were placed on a Boil Water Notice from 12/21-12/25. Upon identifying the elevated turbidity levels, operations staff immediately investigated and adjusted treatment processes to restore proper filtration performance.
2. The levels presented represent the 90th percentile of the 30 sites. 90th Percentile Value: The values reported for lead and copper represent the 90th percentile. 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 lead and copper values detected at your water system.
3. This level represents the highest locational running annual average of all the sites sampled and range of all collected samples.

INFORMATION ON LEAD

Table 1 shows that lead was detected at levels well below New York State Action Levels. If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. DPW 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 two 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. In 2024, the EPA required all community water systems to develop a Lead Service Line Inventory (LSLI). Fort Drum has completed its LSLI with no lead piping found. The following link can be used to access Fort Drum's LSLI inventory information: https://home.army.mil/drum/about/fort- drum-lead-service-line-inventory. 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 www.epa.gov/safewater/lead.

UNREGULATED CONTAMINANT MONITORING RULE

The Unregulated Contaminant Monitoring Rule provides the EPA with valid data on the occurrence of contaminants in drinking water. The EPA can estimate the number of people potentially being exposed and provide an estimate of the levels of exposure. This data set is one of the primary sources of occurrence and exposure information the EPA uses to develop regulatory decisions for contaminants of concern. In 2024, UCMR5 required Fort Drum to collect and analyze drinking water samples for the following unregulated contaminants: 29 Per- and Polyfluoroalkyl (PFAS) Substances (PFUnA, PFOA, PFOS, PFNA, PFHxS, PFHxA, PFHpA, PFDoA, PFDA, PFBS, HFPO-DA, ADONA, 11CL-PF3OUdS, PFPeA, PFPeS, PFHpS, PFBA,9CL-PF3ONS, PFMBA, PFMPA, PFEESA, NFDHA, 6:2FTS,4:2FTS, 8:2FTS, NEtFOSAA, NMeFOSAA, PFTA, PFTrDA) and lithium. All results greater than the method detection limits are included in Table 2, Fort Drum Table of Detected Contaminants. For more information, please contact Michael Valvo at michael.j.valvo.civ@army.mil or at (315) 405-2118.

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 people such as people with cancer undergoing chemotherapy, people 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 ON FLUORIDE ADDITION

Our system is one of many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the U.S. Centers for Disease Control and Prevention, fluoride is very effective in preventing cavities when present in drinking water. To ensure that the fluoride supplement in your water provides optimal dental protection, the NYSDOH requires that we monitor fluoride levels daily.

Our New York State target for fluoride is 0.7 mg/L. During 2025, continuous distribution system monitoring showed fluoride levels in your water in the optimal range. None of the monitoring results showed levels that approach the 2.2 mg/l MCL for fluoride.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2025, our system was in compliance with ALL New York State and federal drinking water standard operating, monitoring, and reporting requirements.

Indian River, Fort Drum, NY

SYSTEM IMPROVEMENTS

Fort Drum 2025 improvements included:

- Continued replacing valves and hydrants across base
- Continued developing new drinking water production wells
- Replaced over 24,000 LF of old piping with new HDPE
- Drained water and cleaned interior of Water Tower 3

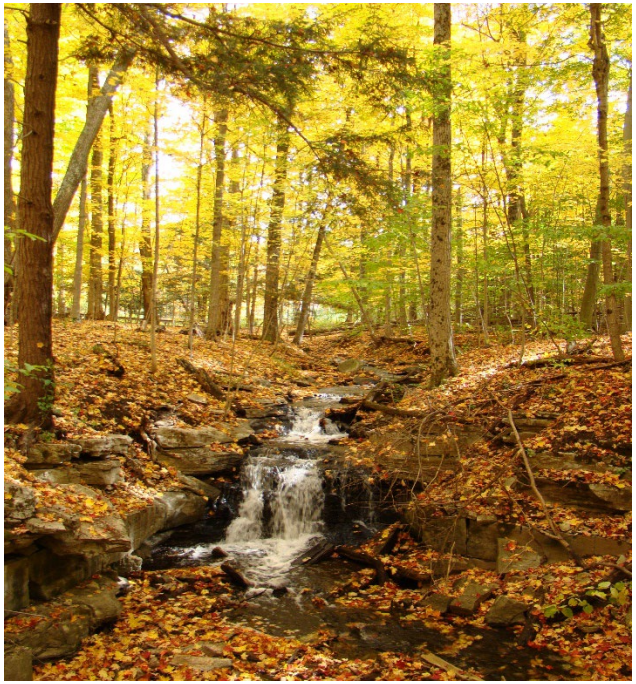
Planned 2026 improvements include:

- Continue replacement of old piping with new HDPE piping
- Install new production pump at Well #16
- Continue developing new drinking water production wells
- Continue replacing valves and hydrants across base

WATER CONSERVATION TIPS

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference; try one today and soon it will become second nature.

- Take short showers - a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and saving up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.



Leray Waterfall, Fort Drum, NY.

Help us to protect our water supply by:

- Repair leaking automobiles
- Picking up trash
- Picking up after your pets
- Disposing of chemicals properly
- Applying pesticides and herbicides conservatively

Thank you for allowing us to continue to provide quality drinking water for you and your family. We ask all our customers to help us to protect our water sources, which are the heart of our community.

Questions? Call our office at (315) 405-2118 or email michael.j.valvo.civ@army.mil.