

Annual Drinking Water Quality Report for 2025
Village of Warwick
77 Main Street
Warwick, N.Y. 10990
(Public Water Supply ID# 3503561)

INFORMACIÓN PARA RESIDENTS QUE NO HABLAN INGLÉS

Español

Este informe contiene información muy importante sobre el agua potable. Este informe se puede ver en español en el sitio web de el Pueblo de Warwick <http://www.villageofwarwickny.gov>

INTRODUCTION

To comply with State and Federal regulations, the Village of Warwick annually issues a report describing the quality of your drinking water. The purpose of this report is to raise your understanding 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 in the report 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 consult the Village website www.villageofwarwick.org. If you need further information contact Cathy Schweizer, Village DPW office at (845) 986-2031 ext. 110, between the hours of 8:30 am and 4:00 p.m. Monday through Friday. The Village wants you to be informed about your drinking water. If you want to learn more, please attend or view online any of the regularly scheduled Village Board meetings. These meetings are normally held on the first and third Monday of each month at 7:30 P.M. at Village Hall, 77 Main St., Warwick, NY. The meetings can be viewed live or recorded and can be accessed by going to the Village of Warwick website <https://villageofwarwickny.gov>

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 concentration of certain contaminants in water provided by public water systems. The New York State Department of Health (NYSDOH) and the FDA regulations establish limits for contaminants in bottled water, which are required to provide the same protection for public health. During 2025 the Village initiated Voluntary Water Use Restrictions due to low reservoir levels resulting from a lack of precipitation.

Reservoir Filtration Plant (a.k.a. RWTP)

Our main surface water source is the Village of Warwick's three reservoirs located on Village owned property north of Black Rock Road in the Town of Warwick. The surface water from these reservoirs is gravity fed into the Reservoir Filtration Plant where it is treated with Sodium Permanganate for taste and odor control, treated with a Pacl coagulant, then filtered to remove particulate matter; it is then chlorinated to destroy microorganisms prior to entering the distribution system. The plant injects Orthophosphate into the treated water to sequester iron and manganese, which can cause discoloration of the water without this treatment.

Well #1

Well #1 is in Memorial Park and is a small supply source that has not been in service for many years primarily because it is hydraulically connected to Well #2.

Well #2 / Microfiltration Plant (a.k.a. MWTP)

Well #2 is a substantial supply, which supplies the Microfiltration Plant. Both are in Veterans Memorial Park. The well is a 47-foot deep Cassion well. This plant is a membrane filter system with a rated capacity to treat 1,000,000 gallons per day. This facility went into service in April 2012. The plant has been producing water of outstanding quality from a source that previously had no filtration and was determined to be Groundwater Under Direct Influence (GWUDI) of

surface water. Chlorine for disinfection and Orthophosphate for sequestering are the only chemicals added to the water at this plant.

Well # 3

Well #3 is a backup source located north of Route 17A at the east end of the Village. The well is a 45.5-foot deep Cassion well. Well #3 has been offline since May 2nd, 2012, shortly after the Microfiltration Plant came online on April 30th, 2012. In the past when Well #3 was used, the water was disinfected with chlorine to destroy microorganisms prior to entering the distribution system. The water from Well #3 has been determined to be Groundwater Under Direct Influence (GWUDI) of surface water, which requires treatment by filtration. Because of this determination, this supply, currently without filtration, would only be used in a very limited fashion, generally during emergency situations. Were the well to be used without filtration the Village would issue a Boil Water Order for its customers. The Village completed an engineering evaluation for a treatment system that will provide the ability to use the well as a safe water resource meeting State and Federal requirements. The final design and contract documents were completed and approved by the Orange County Health Department. The Village received bids and entered contracts to construct the project. The project schedule calls for the construction to be completed and the plant brought online by June 2026. The Village has received a \$959,752 grant from Congressman Pat Ryan which will pay for a portion of the cost of the project.

SOURCE WATER ASSESSMENT PROGRAM SUMMARY

The NYS DOH has evaluated this Public Drinking Water Sources (PWS)'s susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraph below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for the PWS. This PWS provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

The assessment area for this drinking water source contains no discrete Potential Contaminant Sources (PCS)'s, and the amount of pastureland in the watershed results in this reservoir system having a high susceptibility to protozoa. However, the high mobility of microbial contaminants in reservoirs results in this drinking water intake also having medium-high susceptibility ratings for enteric bacteria and viruses. Furthermore, reservoirs are highly susceptible to water quality problems caused by phosphorus additions. A copy of this assessment, including a map of assessment area, can be obtained by contacting the Village of Warwick.

DRINKING WATER SOURCE PROTECTION PROGRAM (DWSP2)

The Village is participating in the state-run Drinking Water Source Protection Program (DWSP2). The voluntary Program is directed at municipalities with proactively protecting the drinking water sources. The Village entered the program in 2024 and was assigned a technical assistance provider who will lead the Village in preparing drinking water source protection plans. A stakeholder group has been formed, and work has begun on developing the plan. The process is expected to take about two years with completion in 2026.

FACTS AND FIGURES

Our water system serves approximately 6,767 people and numerous businesses through 2662 service connections. The highest single day production was 956,000 gallons, which occurred August 24, 2025. Village Usage includes public buildings, water main breaks, hydrant flushing, storage tank overflows, cemetery usage, park usage, wastewater treatment plant usage, firefighting and training, and Fire Department tanker filling. Unaccounted for water was 27.00% of the total amount of water produced. The unaccounted water can be attributed to undetected/unrepaired leaks, losses through under registering and failed meters and estimating accuracy.

Water Use Figures	2025	2024	2023	2022
Produced Annual (gallons)	229,143,420	216,184,000	214,873,000	235,841,000
Produced- Average Daily (gallons/day)	627,790	592,285	588,693	646,140
Produced Highest Single Day (gallons)	956,000	848,000	1,127,000	991,000
Metered Delivered Annual (gallons)	157,422,000	163,709,000	158,086,000	165,873,000
Village Usage- Metered and Unmetered (gallons)	9,842,500	9,850,500	15,872,850	8,759,500
Total Accountable Water (gallons)	167,264,500	173,559,500	173,958,850	174,632,500
Accountable Water Average Daily (gallons/day)	458,258	475,505	476,600	478,445
Unaccounted for Usage Annual	61,878,920	42,624,500	37,705,150	61,208,500
Percent Unaccounted Water (%)	27.00	19.72	17.55	25.95

Village of Warwick Water Rates FY 2024-25	Residential/ Commercial Customer In-Village	Industrial Customer In-Village	Residential/ Commercial Customer Outside Village	Industrial Customer Outside Village
Minimum Service Charge per Quarter	\$12.25	\$12.25	\$15.00	\$15.00
1000-25,000 gallons (per 1000 gallons)	\$7.05	\$12.14	\$16.26	\$20.80
26,000-75,000 gallons (per 1000 gallons)	\$8.83	\$12.14	\$18.03	\$20.80
Over 76,000 gallons (per 1000 gallons)	\$12.14	\$12.14	\$20.80	\$20.80

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, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological 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, are more than one year old. It should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain 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 Orange County Health Department at 845-291-2331.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Sulfate	No	01/02/2025	19.9	mg/l	250	MCL = 250	Naturally occurring
Selenium	No	01/02/2025	2.54	ug/l	50	MCL = 50	Erosion of Natural Deposits
Nitrate	No	04/02/2025	Max=1.08 Range= 0.05 to 1.08	mg/l	10	MCL = 10	Runoff from fertilizer use.
Five Haloacetic Acids** (HAA5)	No	Quarterly	Max=38.4 Range= 7.5 to 38.4	ug/l	N/A	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalo-methanes** (TTHMs)	No	Quarterly	Max=65.6 Range= 2.4 to 65.6	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.
Copper (see note 1)	No	6/08/2023	90 th =0.229 Range = 0.029 - 0.280	mg/l	1.3	AL=1.3	Corrosion of household plumbing
Lead (see note 2)	No	6/08/2023	90 th = ND Range =ND - 1.62	ug/l	0	AL=15	Corrosion of household plumbing
oSodium	No	01/02/2025	70.2	mg/l	N/A	See Note 5	Road Salt
Chloride	No	01/02/2025	126.96	mg/l	N/A	MCL=250	Road Salt
Turbidity MWTP ³	No	06/06/2025	0.083	NTU	N/A	TT=< 1	Soil Runoff
Turbidity MWTP ³	No	Monthly	100%	NTU	N/A	TT=95% of samples≤ 0.3 NTU	Soil Runoff

Turbidity RWTP ³	No	07/08/2025	0.201	NTU	N/A	TT=< 1	Soil Runoff
Turbidity RWTP ³	No	Monthly	100%	NTU	N/A	TT=95% of samples ≤ 0.3 NTU	Soil Runoff
Total Coliform Bacteria	No	8 per month	100% Absent	N/A	0	MCL= 2 positive samples/month	Naturally present in the environment
Distribution System Turbidity ⁴	No	01/08/2025	2.12	NTU	N/A	MCL > 5 NTU	Soil runoff
Perfluorooctanoic Acid (PFOA)	No	11/13/2025	Max=2.45 Range= 1.23 to 2.45	ng/l	N/A	MCL=10	Released into the environment from widespread use in commercial and industrial applications
Perfluorooctanoic Sulfonic Acid (PFOs)	No	11/13/2025	1.14	ng/l	N/A	MCL=10	Released into the environment from widespread use in commercial and industrial applications

** The values shown in the table represent the highest locational running annual average calculated from data collected for Stage 2 compliance monitoring; however, the range of values includes Stage 2 and any Health Department surveillance samples.

1. The copper level presented represents the 90th percentile of the 21 customer locations 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, 21 samples were collected at your water system and the 90th percentile value was the nineteenth highest value, 0.229 mg/l with a range of 0.029 - 0.280 mg/l. The action level for copper was not exceeded at any of the sites tested.
2. The lead level presented represents the 90th percentile of the 21 customer samples collected. 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 because of materials used in customers plumbing components. The Village of Warwick is responsible for providing high quality drinking water but cannot control the variety of materials used in a customer's 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 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 Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.
3. MWTP and RWTP 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 systems. The highest single turbidity measurement (0.201 NTU) for the year occurred on 07/08/2025. State regulations require that turbidity leaving the filter plants must always be at or below 1 NTU. The regulations also require that at least 95% of the turbidity samples which are collected every four hours have measurements at or below 0.3 NTU. The Village satisfied this requirement for turbidity at each filter plant each month of 2025 as 100% of the 4-hour samples were below 0.3 NTU.
4. Distribution Turbidity is a measure of the cloudiness of the water found in the distribution system. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. Our highest average monthly distribution turbidity measurement detected during the year (2.12 NTU) occurred January 8, 2025. This value is below the State's Maximum Contaminant Level (5 NTU).
5. 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.

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.

Method Reporting Limit (MRL): The minimum concentration of a contaminant that can be reported with a specified degree of confidence

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 a contaminant in drinking water.

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 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).

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

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

MWTP: Well #2 / Microfiltration Plant.

RWTP: Reservoir Filtration Plant.

WHAT DOES THIS INFORMATION MEAN?

As noted on the table, the Village of Warwick water system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected in concentrations lower than the State level that would constitute a violation.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether your drinking water meets health standards. During 2025, our water met all drinking water standards established by the U.S.E.P.A. and the N.Y.S.D.O.H.

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 online at the following New York State Health Department address: https://www.health.ny.gov/environmental/water/drinking/service_line/NY3503561.htm. The full, searchable Lead Service Line Inventory can be found on the Village's website at the following address: <https://villageofwarwickny.gov/village-of-warwick-lead-service-line-inventory/>

Lead in drinking water is due to leaching from lead service lines and lead solder joints in service lines and interior building piping. The Village does not believe that it has any lead water lines and in replacing service lines between the main and the curb stop has no history of finding lead lines. The customer is responsible for the line from the curb stop to the structure and all internal piping. If lead is a concern, you should check the materials in your system. The Village of Warwick is responsible for providing high quality drinking water but cannot control the variety of materials used in a customer's plumbing components. When water has been sitting in the pipes for several hours, the potential for lead exposure can be minimized by flushing the tap for 30 seconds to 2 minutes before using water for drinking or cooking.

The Village of Warwick also injects Orthophosphate into the treated water prior to it entering the distribution system. Orthophosphate works as a sequestering agent which provides a coating on the inside of the pipes creating a shield that prevents corrosion and minimizes leaching of lead and other metals. Scientific American has a brief explanation about how this chemical works: <http://www.scientificamerican.com/video/corrosive-chemistry-how-lead-ended-up-in-flint-s-drinking-water1/>

Further the Village of Warwick tests for lead at 21 locations in the system. Samples are taken from tap water inside customer locations and are taken as a first draw after the water has remained in the internal piping for 6 hours. 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 Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791). Please note that after May 2, 2012 all water delivered to customers was treated to remove these microorganisms.

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although the Village's system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ◆ Saving water saves energy and some of the costs associated with both of these necessities of life.
- ◆ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- ◆ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ◆ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- ◆ Turn off the tap when brushing your teeth.
- ◆ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it 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.
- ◆ Water Softener- Check the softener for leaks from the bottom that may be entering a drain below the unit.
- ◆ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes. If it moved, you have a leak.

SYSTEM IMPROVEMENTS

The Village of Warwick during 2025 made a substantial investment into its water system through multiple improvements and upgrades.

Microfiltration Plant

- Chemical containment installed under all chemicals except chlorine tank.
- VFD repaired on Well 2 Pump 1.
- Replaced 2 failed actuated valves.
- Replaced 4-function valve on chlorinator
- Updated all the firmware on the CL-17 controllers to meet the new HACH Standards.
- Replaced the motor on well pump

Reservoir Filtration Plant

- Bought new replacement Vertical turbine pumps for the Clearwell.
- Repaired failed blower line on Filter 1.
- Removed and replaced all media in Filter 2
- Repaired broken air manifold under filter media
- Chemical containment installed under all chemicals except chlorine tanks
- Drained and cleaned PACL tanks
- Updated all the firmware on the CL-17 controllers to meet the new HACH Standards.

Well #3 Filtration Plant

Engineering firm prepared the final design and contract documents for the treatment facility for Well #3. The design has been approved by the Orange County Health Department. Project was bid and contracts executed. Project completion expected May 2026 and brought online in June 2026. The Village has received a \$959,752 grant from Congressman Pat Ryan which will pay for a portion of the cost of the project.

Water Sources- Reservoirs and Wells

The Village Water Department monitors and reports water levels on a biweekly basis. Raw water in the reservoir and well sources saw diminished capacity during the year to a point where water advisory alerts were issued requesting customers to voluntarily reduce water use. The reservoirs were replenishing but had not returned to full capacity as of the end of the calendar year.

Listed below are the accomplishments made during the year to the reservoir system.

- Annual dam inspection conducted by Tectonic, Village's dam engineer. NYSDEC semiannual dam inspection was performed in November 2025.
- Conducted annual watershed property inspection.
- Mowed all dam faces six times.
- Tectonic is preparing the survey, engineering design and permitting for multi-year improvement projects to increase spillway capacity. Village received a WQIP Dam Rehabilitation \$2.340M grant on an estimated cost of \$5.442M.

The Village received a Water Quality Improvement Project program grant from New York State that will provide funding for the Village to acquire land in the Reservoir watershed so that the Village has greater control over activities and uses that could be detrimental to the water quality. The grant requires a 25% match by the Village and the total received from the State is limited to \$288,150. The Village will begin negotiations with property owners and conduct appraisals and surveys in 2025 with the expectation that transfer of the properties or securing easements will occur in 2026.

Pump Stations and Storage Tanks

Improvements were made to the following:

- Grand St Pump Station (relocated Maple Ave PS)- Construction underway and expected to conclude early 2026. Project is being done ahead of a NYSDOT project to reconfigure the intersection of Maple Ave and Colonial Ave requiring relocation of the Maple Ave Pump Station.
- Repaired multiple leaks on Hilltop and Highland Ave Tanks
- Design is underway for a new storage Tank located above the proposed/approved Village View subdivision located southwest of the intersection of Locust and Woodside. Project will eliminate the Valley View and Chelsea Storage Tanks. Negotiating with developer to acquire land.

Distribution

Below is a listing of the Distribution projects performed during 2025.

- Continued the Lead Service Line inventory of the Village's distribution system. Updated inventory will be submitted to NYS Health Department on in late December. Confirmatory potholing and ElectroScan to be conducted over the next three months.
- Performed system-wide flushing in April and July. Due to depleted reservoir volume the Village will not perform a third flushing this year.
- Installed 2 new hydrant to replace existing.
- Repaired 6 hydrants that had failed.
- Repaired two water main breaks.
- Installed 6 new services.
- Repaired 9 service lines.
- Replaced 98 meters and 105 MXU's
- Valves- No curb stops or hydrant isolation valves were mapped this year due to intern time being spent on Lead Service Line Inventory. Altitude valves and PRV's were inspected for proper operation and adjusted as required.

General

- Emergency Response Plan and Vulnerability Assessment was reviewed, and no edits were necessary this year. The Orange County Health Department has the updated version of both.

CLOSING

Thank you for allowing us to continue to provide you with quality drinking water. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office at the Village Hall (845) 986-2031 ext. 110 if you have any questions, concerns, or suggestions.