

WARREN WATER DISTRICT

2024 WATER QUALITYREPORT

P. O. Box 536
Warren, MA01083-0536

PWS ID #1311000

Section 1: PUBLIC WATER SYSTEM INFORMATION

We are pleased to provide you, our customer, with this year's Annual 2024 Water Quality Report. If you have any questions about this report or concerning your water utility, please the District office at 413-436-9819, 9 a.m.–1 p.m., Monday through Thursday, or e-mail us at wwd@warrenwater.comcastbiz.net.

We want our valued customers to be informed about their water utility. If you would like to learn more, please attend any of our regularly scheduled meetings. They are held the 1st and the 3rd Wednesday of the month at 10:00 a.m., at 988 Main Street. Please phone the office if an evening meeting is needed to be scheduled. Large print documents will be provided upon request at no additional cost to the person requesting accommodations.

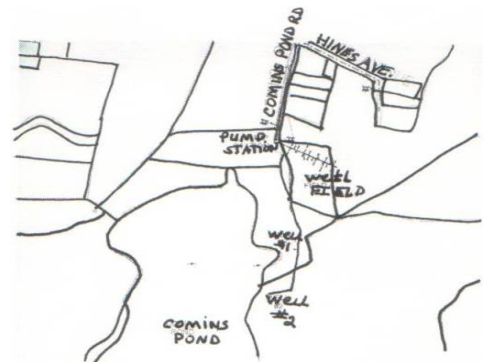
The Warren Water District is governed by a three-member elected Board. The current Commissioners are: Loretta Beaudry, David Kelly and Cynthia Baxter. The Commissioners serve a three-year term and the District encourages minorities, females, and individuals with disabilities to apply for nomination papers which must be filed thirty days prior to the Annual Meeting. The Annual District Meeting is held the 2nd Thursday of May each year, in the Shepard Municipal Building, Gym at 48 High St. Warren, MA.

LANDLORDS: Please make this report available to your tenants.

BUSINESSES, SCHOOL OFFICIALS AND PUBLIC BUILDINGS: Please post this report where employees and people who may drink this water may read it.

Section 2: DRINKING WATER SOURCE

Our water sources are two gravel packed wells located at Comins Pond. The water enters a treatment plant where it uses Greensand filtration to remove iron and manganese from the water. We are currently adding a blend of orthophosphate, sodium hypochlorite and potassium hydroxide. The orthophosphate forms a protective film on ductile iron, steel, copper, lead and other metals to reduce corrosion. The sodium hypochlorite activates the greensand filters to remove iron and manganese as well as for disinfection. Potassium hydroxide is being used to adjust the pH of the drinking water. Zone I is a 400-foot radius around each well.



Section 3: PROFESSIONAL LICENSED STAFF

The State of Massachusetts has very specific laws requiring operators to be certified to provide drinking water to the public. Our certified operators are required to hold both a systems operator license and a treatment license. Our operators are certified by the Association of Boards of Certification by meeting required training and continuing education as required by the Massachusetts Division of Registration, Drinking Water Operators Certification Board.

Section 4: SUBSTANCES FOUND IN TAP WATER

Drinking water, including bottled 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 (1-800-426-4791).

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 activity. Contaminants that may be present in source water include:

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

Inorganic contaminants- such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and farming.

Pesticides and herbicides - which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants- including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants- which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Department of Environmental Protection (DEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. All drinking water, including bottled 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).

Some people may be more vulnerable to contaminants 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 some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on lowering the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

In order to ensure that tap water is safe to drink, EPA and MassDEP prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. FDA and Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health).

Section 5: IMPORTANT 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 using the best available treatment technology.

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.

Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Variances and Exemptions – State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

ppm= parts per million, or milligrams per liter (mg/L) **ppb** = parts per billion, or micrograms per liter (ug/L)

pCi/L = picocuries per liter (a measure of radioactivity) **ppt**= parts per trillion, or nanograms per liter (ng/L)

ND: Non-Detect, the chemical analyzed was not detected in the sample.

Section 6: 2024 WATER QUALITY TESTING RESULTS

The water quality information presented in the tables is from the most recent round of testing done in accordance with regulations. All data shown was collected during the calendar year of January 1 to December 31, 2024, unless otherwise stated.

MONITORING WAIVER GRANTED: The Department of Environmental Protection granted a waiver for the testing of **Synthetic Organic Chemicals (SOC)**.

LEAD AND COPPER

	Date Collected	90 TH percentile	# of sites exceeded	# of sites sampled	Action level	MCLG	Violation (Y/N)	Possible source of contamination
Lead ug/L	8/30/22	0.0037	0	10	.015	.015	N	Corrosion of household plumbing systems, erosion of natural deposits
Copper mg/L	8/30/22	0.514	0	10	1.3	1.3	N	Corrosion of household plumbing systems, erosion of natural deposits

90th Percentile: Out of every 10 homes sampled, 9 were at or below this level. This number is compared to the action level to determine lead and copper compliance. **The next round of Lead and Copper is scheduled for 2025.**

Lead: There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of persons who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your risks.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Warren Water District 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 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 method and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Copper: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level, over many years, could suffer liver and kidney damage. People with Wilson's disease should consult their personal doctor.

MANGANESE:

Manganese is a naturally occurring mineral found in rocks, soil and groundwater, and surface water. Manganese is necessary for proper nutrition and is part of a healthy diet, but can have undesirable effects on certain sensitive populations at elevated concentrations. The United States Environmental Protection Agency (EPA) and MassDEP have set an aesthetics-based Secondary Maximum Contaminant Level (SMCL) for manganese of 50 ug/L (micrograms per liter), or 50 parts per billion. In addition, MassDEP's Office of Research and Standards (ORS) has set a drinking water guideline for manganese (ORSG), which closely follows the EPA public health advisory for manganese.

Drinking water may naturally have manganese and, when concentrations are greater than 50 ppb, the water may be discolored and taste bad. Over a lifetime, the EPA recommends that people drink water with manganese levels less than 300 ppb and over the short term, EPA recommends that people limit their consumption of water with levels over 1000 ppb, primarily due to concerns about possible neurological effects. Children up to 1 year of age should not be given water with manganese concentrations over 300 ug/L, nor should formula for infants be made with that water for longer than 10 days.

The ORSG differs from the EPA's health advisory because it expands the age group to which a lower manganese concentration applies from children less than 6 months of age to children up to 1 year of age to address concerns about children's susceptibility to manganese toxicity. See:

EPA Drinking Water Health Advisory for Manganese

https://www.epa.gov/sites/production/files/2014-09/documents/support_cc1_magnese_dwreport_0.pdf and

MassDEP Office of Research and Standards Guideline (ORSG) for Manganese
<http://www.mass.gov/eea/agencies/massdep/water/drinking/manganese-in-drinking-water.html>

Unregulated or Secondary Contaminant	Date Collected	Result	SMCL	ORSG or Health Advisory	Possible Sources
Manganese (mg/L)					
Pre-Treatment	4/10/24	0.206	0.050	300**	Erosion of natural deposits
Post-Treatment	4/10/24	ND			

**US EPA and MassDEP have established public health advisory levels for manganese to protect against concerns of potential neurological effects.

IRON:

Unregulated or Secondary Contaminant	Date Collected	Result	SMCL	ORSG Health Advisory	Possible Sources
Iron (mg/L) Pre-Treatment Post-Treatment	4/10/24 4/10/24	0.856 ND	0.30	N/A	Erosion of natural deposits

SYNTHETIC ORGANIC COMPOUNDS: The (SOC) was tested on 6/1/2021, and the test results were Below Regulated Limit (B.R.L.) for all compounds..

VOLATILE ORGANIC COMPOUNDS: The (VOC) was tested on 5/17/23, and the test results were Below Regulated for all compounds. Next round of testing 2026.

RADIUM-226 & RADIUM-228:

Regulated Contaminant	Date Collected	Result	MCL	MCLG	Violation (Y/N)	Possible Source(s) of Contamination
Radium 226 & 228 (pCi/L) (combined values)	8/14/24	0.51	5	0	N	Erosion of natural deposits

NITRATE:

Nitrate in drinking water at levels above 10 ppm 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.

Regulated Contaminant	Date Collected	Result Mg/L	Detection Limit Mg/L	MCLG	Violation (Y/N)	Possible Source of Contamination
Nitrate	11/19/24	0.53	0.010	10.0	N	Run-off from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits.

DISINFECTANTS AND DISINFECTION BY-PRODUCTS

Regulated Contaminant	Date Collected	Highest Result	Range Detected	MCL	MCLG	Violation (Y/N)	Possible Source(s) of Contamination
Total Trihalomethanes (TTHMs) (ppb)	8/14/24	1.6	0 - 1.6	80	N/A	N	Byproduct of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	8/14/24	ND	ND	60	N/A	N	Byproduct of drinking water disinfection
Free Chlorine (ppm)	Monthly 2024	0.69	0.50-0.69	4	4	N	Water additive used to control microbes

PFAS 6:

In October 2020 PFAS6 was regulated with a maximum contaminant level (MCL) of 20 parts per trillion (ppt). PFAS6 are comprised of six compounds: perfluorooctane sulfonic acid (PFOS)*, perfluorooctanoic acid (PFOA), perfluorohexane sulfonic acid (PFHxS), perfluorononanoic acid (PFNA), perfluoroheptanoic acid (PFHpA), and perfluorodecanoic acid (PFDA).

Regulated Contaminant	Date Collected	Sample Location	Detect Result	MCL of 20 ppt	Health Effects	Possible Source of Contamination
PFAS 6	01/25/24	Post Treatment	ND	20	Some people who drink water containing these PFAS in excess of the ORSG may experience certain adverse effects. These could include effects on the liver, blood, immune system, thyroid, and fetal development. These PFAS may also elevate the risk of certain cancers.	Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture and oil resistant coatings on fabrics and other materials. Additional sources include the use and disposal of products containing these PFAS, such as fire-fighting foams.

*PFOS was an unregulated chemical from January 1 – October 1, 2020 and had an ORSG of 20 ppt. On October 2, 2020 it became regulated with an MCL of 20 ppt. Any detects found after that time would be reported in the regulated table.

Section 7: SOURCE WATER ASSESSMENT PROGRAM (SWAP)

The Department of Environmental Protection DEP, conducts a SWAP to help the District recognize the potential contaminant sources within Zone I and Zone II, and identify land uses within this area. Potential contaminant sources are the parking area for beach users and aquatic wildlife.

This report is available on DEP's website <https://www.mass.gov/doc/western-region-source-water-assessment-protection-swap-program-reports/download>

Section 8: WATER CONSERVATION TIPS!

INDOOR WATER USE

Check for toilet leaks by adding food coloring to the tank. If the toilet is leaking, color will appear in the bowl within 15 minutes.

Repair dripping faucets and showerheads. A drip rate of one drop per second can waste more than 3000 gallons per year.

Limit the length of your showers to 5 minutes or less.

Stop running the water while you are shaving or brushing your teeth.

Store drinking water in the refrigerator rather than letting the faucet run when you want a cold glass of water.

Don't use running water to thaw meat or other frozen foods.

Run the dishwasher only when it's fully loaded. Run your washing machine with full loads whenever possible.

Install water-saving faucets and low-flow showerheads.

OUTDOOR WATER USE

Look for sprinklers that produce droplets, not mist, or use soaker hoses or trickle irrigation for trees and shrubs.

Water early in the morning or late at night.

Spread a layer of mulch around trees and plants.

Use a broom, not a hose, to clean driveways, decks, and sidewalks.

Don't leave the water running while washing your car.

Section 9: DROUGHT CONDITIONS & CONSERVATION

The District enforced a mandatory water use restriction in June 2024 and has continued this restriction until September 30, 2024 under the guidance of the DEP, Water Management Act Permit.

The District, through its Board of Water Commissioners, may declare a State of Water Conservation if the Board by a majority vote determines a shortage of water exists.

Notification will take place by the following:

- 1) Notice mailed with your quarterly bill 2) Public access TV 3) Bill-board display located at 988 Main St.

The following restrictions may occur:

- 1) Odd/even day outdoor watering 2) Outdoor watering Ban 3) Filling of swimming pools 4) Use of automatic sprinklers OR No nonessential outdoor water use is allowed between 9 a.m. to 5 p.m.

TIPS: Set automatic systems to run before 10am and again after 6pm. Do Not set during heat of the day.

Water use restrictions are implemented to protect your water supply and ensure water quality during a State of Water Supply Emergency. (Article 15 of the District By-laws, Water Use Restrictions, available upon request)

Section 10: BACKFLOW PREVENTION & CROSS CONNECTION

What is a cross connection? A cross connection is a direct arrangement of a piping line which allows the potable water supply to be connected to a line which contains a contaminant. An example is: a garden hose attached to a service sink with the end of the hose submerged in a tub full of detergent. The District is regulated under a Department of Environmental Protection approved cross connection program in accordance with 310 CMR 22.22. Cross connection control is achieved by the combined cooperative effort between plumbing and health officials, the water supplier, and the property owners. Homeowners are required to protect their drinking water supply when residential sprinkler systems are installed.



There are three easy ways you can prevent a cross connection at your home.

- 1) Never place the end of a hose where it can suck contaminants into your drinking water. 2) Leave at least a one-inch gap between the end of a hose and a source of contamination. 3) Use proper protection devices. Each spigot at your home should have a hose-bib vacuum breaker installed. This is a simple, inexpensive device that can be purchased at any plumbing or hardware store. Installation is as easy as attaching your garden hose to a spigot..

Section 11: ONLINE BILL PAY or Autopay

To accommodate our customers, we offer online bill pay through Unibank. Go to: <https://unipaygold.unibank.com> Choose Warren Water District. Enter your 8 digits of your account number and complete each screen to process your payment. We also accept MasterCard, American Express and Discover credit card payments. Fees assessed on a per transaction basis by UniPay Gold.

Section 12: GROUNDWATER PROTECTION

The Wellhead Protection Plan that was approved by the Department of Environmental Protection along with this and other by-laws are the cornerstones of our Master Plan. The Groundwater Protection By-law was adopted by the Town of Warren May of 2005. The purpose of this by-law is to promote the health, safety, and general welfare of the community by ensuring quality and an adequate quantity of drinking water for its residents and to protect the potential sources of our drinking water supply. A Groundwater Protection Regulation was adopted by the Board of Health of the Town of Warren, January 10, 2002 pursuant to M.G.L. Chapter 111, Section 31, and 122.

The Groundwater Protection By-law and Regulation is available upon request at the District office.

Section 13: LEAD INVENTORY

The District is actively working on the Lead Inventory Program in conjunction with Tighe& Bond. This program will determine any lead water services, goosenecks, lead fixtures that will need to be removed from our distribution system. Posted on the website is a link for a Lead Service Line Survey. This will allow customers to upload pictures of their service line in the house and to fill out information about the line. There is also a link to schedule a basement inspection to determine the service line type by a Tighe& Bond contractor. Please fill out the survey or schedule a basement inspection online at <http://warrenwaterdistrict.net/home-page.shtml>. We received a grant under the State Revolving Fund for the Lead Inventory.

Section 14: CLOSING STATEMENT

The Iron and Manganese Treatment Plant is continuing to provide iron- and manganese-free water. Testing has shown that there is no iron or manganese leaving the treatment and the levels in the distribution system continue to decline. Hydrant flushing will continue throughout the year to remove any dirty water in the pipes. There have been calls regarding the chlorine smell that is in the water. The chlorine smell is caused from the addition of sodium hypochlorite to the water before entering the filters. The sodium hypochlorite activates the greensand media which is essential to the process of removing the iron and manganese. Also, the DEP requires a chlorine residual to remain within the distribution system.

The loan repayment fee is based upon the number of units within the district and the cost of the loan payment for that year. An example is a two family will be charged for both units. A four family, four units and so on. No abatements will be granted for the assessment fee. As the loan is paid down your assessment fee will also be lower. The Commissioners and staff would like to thank everyone for being so understanding over the years as we continue to work diligently to alleviate the brown water issues.

2024

CCR Good Faith Delivery Methods

Posted: Town Hall
 Library
 Post Office

Delivered: Wood Side Apartments
 Evergreen Park
 Prospect St. Apartments
 Warren Glen Condo
 Warren Housing

Email delivery: Heritage Villageladyhawke45@comcast.net
 Fountain View Estatesdli@4driveline.com

Notice to the customers:

CONSUMER CONFIDENT REPORT (CCR): The 2024 CCR is available online at <https://www.warren-ma.gov/warren-water-district/news/2024-water-quality-report> and upon request at the office.