

WARREN WATER DISTRICT

2023 WATER QUALITY REPORT

P. O. Box 536
Warren, MA 01083-0536

PWS ID #1311000

April 2, 2024

Section 1 PUBLIC WATER SYSTEM INFORMATION

We are pleased to provide you, our customer, with this year's Annual 2023 Water Quality Report. If you have any questions about this report or concerning your water utility, please contact Andy Lalashius at 413-436-9819, 9 a.m.–1 p.m., Monday through Friday, 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.

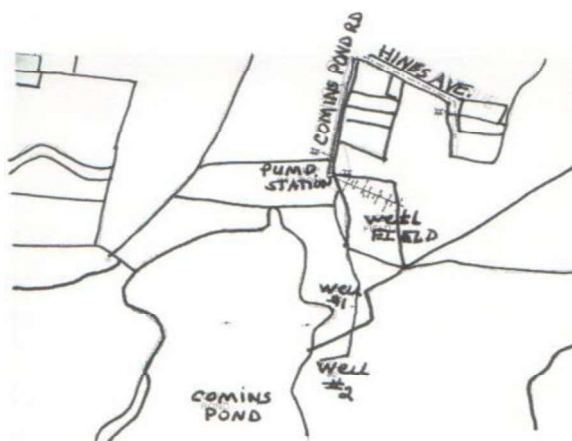
LANDLORDS: Please make this report available to your tenants.

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, which went online in April 2023, 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

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.

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

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).

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)

Section 6 2023 WATER QUALITY TESTING RESULTS

The water quality information presented in the table(s) 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, 2023.

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

LEAD AND COPPER: Educational flyers on the health effects of lead in drinking water are available at the District office. 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.***

	<i>Date Collected</i>	<i>90TH percentile</i>	<i># of sites exceeded</i>	<i># of sites sampled</i>	<i>Action level</i>	<i>MCLG</i>	<i>Violation (Y/N)</i>	<i>Possible source of contamination</i>
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

Lead is a common metal found throughout the environment in lead-based paint, air, soil, household dust, and food, certain types of pottery porcelain and pewter, and water. Lead can pose a significant risk to your health if too much of it enters your body. Lead builds up in the body over many years and can cause damage to the brain, red blood cells, and kidneys. The greatest risk is to young children and pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies. In addition, a child at play often comes into contact with sources of lead contamination – like dirt and dust- that rarely affect an adult. It is important to wash children's hands and toys often, and to try to make sure they put only food in their mouths. Educational flyers on the health effects of lead in drinking water are available at the District office.

Lead: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. 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 ug/L, the water may be discolored and taste bad. Over a lifetime, the EPA recommends that people drink water with manganese levels less than 300 ug/L and over the short term, EPA recommends that people limit their consumption of water with levels over 1000 ug/L, 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

http://www.epa.gov/safewater/ccl/pdfs/reg_determine1/support_cc1_magnese_dwreport.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)	5/19/23 5/19/23	A*: 0.177 B*: ND	0.050	300**	Erosion of natural deposits

*A: Sources Pre- treatment

*B: Comins Pond Treatment Plant

**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	Possible Sources
Iron(mg/L)	5/19/23	A* 1.15 B* ND	0.3	Erosion of natural deposits

*A: Sources Pre-treatment

*B: Comins Pond Pump Station

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.

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 or	Violation (Y/N)	Possible Source of Contamination
Nitrate	11/16/23	0.93	0.010	10.0	N	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits.

PFAS6: On October 2, 2020, MassDEP published its PFAS public drinking water standard, called a Massachusetts Maximum Contamination Level (MMCL), of 20 nanograms per liter (ng/L) (or parts per trillion (ppt)) – individually or for the sum of the concentrations of six specific PFAS. These PFAS are perfluorooctane sulfonic acid (PFOS); perfluorooctanoic acid (PFOA); perfluorohexane sulfonic acid (PFHxS); perfluorononanoic acid (PFNA); perfluorohexanoic acid (PFHpA); and perfluorodecanoic acid (PFDA). MassDEP abbreviates this set of six PFAS as “PFAS6.” This drinking water standard is set to be protective against adverse health effects for all people consuming the water.

Regulated Contaminant (CASRN)	Date Collected	Sample Location	MCL of 20 ppt	Health Effects	Possible Source of Contamination
Perfluorohexanoic acid (PFHxA)	01/25/23	Post Treatment	1.44 J	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.
Perfluorooctanoic acid (PFOA)	01/25/23	Post Treatment	2.03		
Perfluorobutane sulfonic Acid (PFBS)	01/25/23	Post Treatment	0.736 J		
Perfluoroheptanoic Acid (PFHpA)	01/25/23	Post Treatment	0.666 J		
Perfluorooctane sulfonic Acid (PFOS)	01/25/23	Post Treatment	0.666 J		
All other PFAS.	01/25/23	Post Treatment	ND		
“J”= estimated below Reporting Limit.					

*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 www.state.ma.us/dep/brp/dws/

Section 8 WATER CONSERVATION TIPS!

FIX A LEAK WEEK: The Warren Water District has teamed up with Lowes at 348 Palmer Rd., Ware to offer discount savings on plumbing supplies to fix a leak and replacement showerheads, faucets or toilets. Look for information on Fix-a-leak week coming in March 2024.

Install: water-saving faucets and low-flow showerheads.

Check your toilets for leaks: The leaks are sometimes so small you cannot hear or see them. Remove the tank cover and add a few drops of food coloring (red, green) to the tank, let set for approximately 2 hours. Then, look in the bowl. Do you see discolored water (red, green)? If so, you have a leak and should call a professional plumber. A leaking toilet can use up to 200 gallons a day.

Section 9 DROUGHT CONDITIONS & CONSERVATION

The District enforced a mandatory water use restriction in June 2023 and has continued this restriction until September 30, 2023 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 property owners. Homeowners are required to protect their drinking water supply when residential sprinkler systems are installed.



Surveys are conducted on new businesses as required. During 2022, in accordance with regulations fifteen businesses and three home sprinkler systems were tested. One device failed and repaired.

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 VISIT OUR DISTRICT WEBSITE

The website has been developed to provide you updates on meeting date and times, hydrant flushing, office hours, office policies such as shut off procedures. Please visit: warrenwaterdistrict.net

Section 14 CONSTRUCTION

Otis St.: The Warren Water District in conjunction with The Community Development Block Grant will begin construction in 2024 on Otis St. We are asking all residents to upgrade their water service line from the curb stop to the meter located within your home. Most of these service lines are over 50 years old and this is the time to replace the old piping. A tie-in application is available at no charge from the district office.

Section 15 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>. In the spring/summer of 2024, certain locations will be selected for a vacuum excavation of the service line in the ground. This means a truck will vacuum out dirt at the outside shut off valve in order to determine the service line type in the ground. There will be minimal disruption to the property in that small area. The excavation will not occur where shut off boxes are location in asphalt or cement. We received a grant under the State Revolving Fund for the Lead Inventory.

Section 16 CLOSING STATEMENT

The construction for the new Treatment Plant is complete. Customers have been calling with very positive water quality results. Select locations in the distribution have been sampled monthly for iron and manganese since May of 2023. The testing has shown that the levels of iron and manganese have continually decreased over the months, with the latest results showing no concentrations of either iron or manganese. Hydrant flushing will continue throughout the year to remove any dirty water remaining 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. At this time, the assessment fee is approximately \$46.00 per quarter. This is subject to change based on the number of units at the time of calculation. The Commissioners and staff would like to thank everyone for being so understanding over these past few years as we are working diligently to correct the brown water issues.

"This institution is an equal opportunity provider and employer.

If you wish to file a Civil Rights program complaint of discrimination, complete the USDA Program Discrimination Complaint Form, found online at https://www.ascr.usda.gov/complaint_filing_cust.html, or at any USDA office, or call (866) 632-9992 to request the form. You may also write a letter containing all of the information requested in the form. Send your completed complaint form or letter to us by mail at U.S. Department of Agriculture, Director, Office of Adjudication, 1400 Independence Avenue, S.W. Washington, D.C. 20250-9410, by fax (202) 690-7442 or email at program.intake@usda.gov