



# WESTFIELD DPW - WATER DIVISION

January 1, 2022 through December 31, 2022

## WATER QUALITY REPORT

PWS ID# 1329000

### Department of Public Works – Water Division

Fran Cain, Interim Director  
28 Sackett Street, Westfield, MA 01085  
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### Board of Water Commissioners

Ronald J. Cole, John Niedzielski, and Joseph Popielarczyk  
Generally meets the 1<sup>st</sup> Tuesday of each month,  
7:00pm City Hall Room 201. Public attendance is welcomed.

### WHAT IS THIS?

The Westfield Department of Public Works- Water Division (DPW-Water) is committed to supplying safe drinking water that meets or exceeds all state and federal standards. In order to ensure that your tap water is safe to drink, the US Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (DEP) prescribe regulations that limit the amounts of certain contaminants in water provided by public drinking water systems. We treat and test all of our water in accordance with these EPA and DEP regulations. This water quality report is intended to share with you how well we are doing meeting our commitment. Food & Drug Administration regulations and the Massachusetts Department of Public Health establish limits for contaminants in bottled water that must provide the same level of protection for public health.

### Drinking Water Sources

For those connected to the Westfield water distribution system, drinking water at an individual tap comes from a combination of the storage tanks and active sources closest to that tap. The Granville Reservoir is a man-made surface water source located in the Town of Granville, MA. Water from this source is treated and filtered at our facility in Southwick, MA. The City also has eight (8) groundwater wells which are located off East Mountain Road (Wells 7&8), Holyoke Road (Well 1 *offline*), Union Street (Well 2 *inactive in 2022*), Northwest Road (Wells 5&6) and Shaker Road (Wells 3&4). The water from all sources is treated to reduce its corrosivity. Well 1 was turned off in March 2019 and remains offline. Well 2 was in a standby status for 2022 until it was taken offline in coordination with the new treatment plant construction. Water from Wells 3&4 is treated to remove the fungicide Ethylene DiBromide (EDB). Water from Wells 7&8 is filtered to remove Per and Poly Fluorinated Alkyl Substances (PFAS).

### Interconnections to Other Water Systems

The City of Springfield Cobble Mountain Reservoir surface water source, treated at their West Parish Filter facility in Westfield, is interconnected with Westfield in several spots so we may purchase water from them. No connections were active and no water was purchased in 2022 or over the past decade. Shaker Road interconnect would pump water directly to Westfield's system, but Southwick Road and two more connections on Shaker Road would only activate in low pressure conditions in Westfield's system.

### HOW DID WE DO IN 2022?

The Westfield Department of Public Works - Water Division had several challenges during 2022 and has taken a variety of steps to correct those issues. We had particular difficulty with our sampling program this year. Arsenic samples in May, Perchlorate in the 3<sup>rd</sup> quarter, and Well 7 & 8 PFAS in November were taken by our staff and sent in for analysis, but they were not appropriately analyzed or reported by our labs to DEP within the timeframes required, which is a violation. Additionally there were two incidents when we were required to take follow up samples but were notified on weekends or holidays when our labs were not available for analysis. To correct these issues we will use a different lab and have reached out to and confirmed weekend and holiday coverage from another lab, so moving forward we do not expect this issue to reoccur.

In 2021, our sampling results for Total Trihalomethanes (TTHMs) brought our locational Running Annual Average (RAA) for our Loomis Street sampling location to approximately 85 parts per billion for the 4<sup>th</sup> quarter, over the Massachusetts Maximum Contaminant Level (MCL) RAA of 80ppb, which is a violation. While our results in January 2022 showed significant reductions in TTHM levels, that RAA remained over the MCL, so we again sent out notices to ratepayers and continued to work with our hired consultant and the DEP with the goal of preventing future violations. We are pleased to report that we have adjusted some of our dosing and flushing operations, and continue to see results significantly below the 2021 levels, and also well below the MCL.

### Source Water Protection

The DEP has completed a Source Water Assessment for all Westfield Municipal drinking water sources. This Source Water Assessment and Protection (SWAP) report identifies land uses within water supply protection areas that may be potential sources of contamination. City groundwater sources were determined to be highly vulnerable to contamination due to the absence of hydrogeologic barriers that can prevent the contaminant migration from activities on the land surface. The overall ranking of susceptibility to contamination for Westfield's drinking water sources is high due to the presence of such high threat land uses as auto repair/body shops, airport, railroads, machine shops, transportation corridors and illegal dumping. Copies of this report are available at the DPW-Water office located at 28 Sackett Street.

## Educational Information

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. 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.*
- *Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.*
- *Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.*
- *Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.*

## Monitoring Data for Unregulated Contaminants Available

Unregulated contaminants are those that don't have a drinking water standard set up by the EPA. As required by EPA, our water system sampled for a series of these contaminants during the most recent round of sampling, Unregulated Contaminant Monitoring Rule 4 (UCMR4) and those results were reported on the Water Quality Report when they were taken in 2019 & 2020. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a public health protection standard. To discuss the results, contact Systems Engineer Heather Stayton at [h.stayton@cityofwestfield.org](mailto:h.stayton@cityofwestfield.org), 413-572-6226 or 28 Sackett Street, Westfield, MA 01085.

## Water Quality Data

The following tables list all the drinking water contaminants that were detected during the 2022 calendar year. The presence of these contaminants in the water does not necessarily mean the water poses a health risk. Unless otherwise noted, the data shown is from finished water testing done January 1 to December 31, 2022. The state requires Westfield to monitor certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Because of this, some of the data, though representative of the water quality, is more than one year old.

## Vulnerability

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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 providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Some people, who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

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. The Westfield Department of Public Works, Water Division, is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been unused 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 or at <http://www.epa.gov/safewater/lead>.

## Definitions

**Maximum Contaminant Level Goal (MCLG)**, **Maximum Residual Disinfectant Level Goal (MRDLG)**: The level of a contaminant or residual in drinking water below which there is no known or expected risk to health. MCLGs and MRDLGs allow for a margin of safety. These do not reflect the benefit of disinfectants to control microbial contamination.

**Maximum Contaminant Level (MCL)**, **Maximum Residual Disinfectant Level (MRDL)**: The highest level of a contaminant or residual that is allowed in drinking water. These are set as close to the goals as feasible using the best available treatment technology. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Secondary Maximum Contaminant Level (SMCL)**: These standards are developed to protect aesthetic qualities of drinking water & are not health based.

**Maximum Residual Disinfectant Level/Goal (MRDL/G)** Highest Disinfectant level

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

**90th Percentile**: Out of every 10 homes sampled, 9 were at or below this level. This number is compared to the AL to determine lead and copper compliance.

**Unregulated Contaminants**: Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.

**Office of Research and Standards Guideline (ORSG)**: The concentration of a chemical in drinking water at or below which adverse health effects are unlikely to occur after chronic (lifetime) exposure. Serves as an indicator of the potential need for further action if exceeded.

**Treatment Technique (TT)**: a required process intended to reduce the level of a contaminant in drinking water.

**Running Annual Average (RAA)**: The average of 4 consecutive quarters of data.

**Non-Detect (ND)**: Contaminant not detected above the level able to be confidently determined by the analytical method.

**NTU**: Nephelometric Turbidity Units

**PPM**: parts per million or milligrams per liter

**PPB**: parts per billion or micrograms per liter

**PPT**: parts per trillion or nanograms per liter

	As Set By EPA		As Found in Westfield Water			Violation (Y/N)	Possible Sources	Date
	MCL	MCLG	Average Detected	Min Detected	Max Detected			
Inorganic Contaminants								
Arsenic (PPB)	10	n/a	0.11	nd	0.81	N	Erosion of natural deposits; runoff from orchards and glass & electronics production wastes	2022
Barium (PPM)	2	2	0.086	nd	0.24	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	2022
Chromium (PPB)	100	100	0.67	nd	1.2	N	Discharge from steel and pulp mills; Erosion of natural deposits	2022
Fluoride* (PPM)	4	4	0.017	nd	0.05	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	2022
Nitrate (PPM)	10	10	0.81	nd	1.9	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	2022
Perchlorate (ppb)	2	n/a		0.07	0.29	N	Rocket propellants, fireworks, munitions, flares, blast agents	2021
PFAS6 (ppt)	20	n/a	8.8	nd	8.8	N	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	2022

\* Fluoride has a secondary contaminant level (SMCL) of 2 ppm to better protect human health.

Disinfection By-Products and Levels								
Total Trihalomethanes (PPB) (RAA calculated quarterly)	80		32.52	nd	82.03	Y	By-product of drinking water disinfection	2022
Total Haloacetic Acids (PPB) (RAA calculated quarterly)	60		8.95	nd	21.2	N	By-product of drinking water disinfection	2022
Total Chlorine (PPM)	MDRL= 4ppm	MDRLG = 4ppm		nd	2.01	N	Water additive to control microbes	2022

Lead and Copper	90th Percentile	Action Level	MCLG	# of sites sampled	# of sites above the AL	Year Sampled	Possible Source of Contamination
Lead (PPB)	1.4	15	0	121	1	2022	Corrosion of household plumbing systems
Copper (PPM)	0.21	1.3	1.3	121	0	2022	Corrosion of household plumbing systems

Unregulated Contaminants							
	ORSG	Average	Min	Max	Possible Source of Contamination	Date	
Nickel (PPB)	100	0.62	nd	1.5	Discharge from domestic wastewater, landfills, and mining and smelting operations	2022	
Sodium (PPM)	20	10.23	8.7	12	Discharge from the use and improper storage of sodium-containing de-icing compounds or in watersoftening agents	2022	

Secondary Contaminants							
	SMCL	Average	Min	Max	Possible Sources	Date	
Iron (PPB)	300	30	nd	150	Natural and industrial sources as well as aging and corroding distribution systems and household pipes	2022	
Total Dissolved Solids (PPM)	500	151.6	82	210	Runoff and leaching from natural deposits; seawater influence	2022	
Zinc (PPM)	5	293.2	nd	820	Corrosion of household plumbing systems;	2022	

	TT	Lowest Monthly % of samples	Highest Detected Daily Value	Violation?	Possible Source of Contamination	Date
Turbidity						
Daily Compliance (NTU)	5	NA	0.29	N	Soil runoff	2022
Monthly Compliance	At Least 95%	100%	NA	N	Soil runoff	2022



**800-426-4790**

Contact EPA's

Safe Drinking Water Hotline for more information about contaminants and potential health effects and EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants.

If you are interested in knowing more about Water in Westfield and the Westfield Department of Public Works, Water Division, please call our office at 572-6226 or visit our web page at [www.cityofwestfield.org/657/Water](http://www.cityofwestfield.org/657/Water). Or plan to attend a meeting of the Board of Water Commissioners. Ronald J. Cole, John Niedzielski, and Joseph Popielarczyk make up the Water Commission. Meetings are typically the first Tuesday of each month at 7:00 p.m. in City Hall, Room 201 or via teleconference. These meetings are open to the public. Everyone is encouraged to attend and participate. Report completed June 2023.