2023 Water Quality Test Results

Contaminant	Highest Level Allowed (MCL)	Goal Not to Exceed (MCLG)	Highest Level Detected	Lowest Level Detected	Date of Highest Level Detected	Typical Source of Contaminant
Primary Standards Regulated by EPA for Protecting Public Health						
Arsenic	10 ppb	0	2 ppb	<1 ppb	7/13/2021	Erosion of natural deposits
Fluoride	4 ppm[1]	4 ppm	<0.2 ppm	<0.2 ppm	5/18/2021	Geology, natural weathering. Fluoride is not added to water
Lead	15 ppb	0	8 ppb	< 1 ppb	8/10/2021	Geology, brass fittings
Nitrate	10 ppm	10 ppm	4.4 ppm	<1 ppm	1/10/2023	Septic systems, fertilizer, animal waste
Ethylbenzene	700 ppb	700 ppb	0.52 ppb	0.52 ppb	8/30/2023	Discharge from petroleum refineries, paint from new reservoir
Xylenes	10,000 ppb	10,000 ppb	1.74 ppb	1.74 ppb	8/30/2023	Discharge from petroleum refineries and chemical factories, paint from new reservoir
Radium 228	5 pCi/L	0 pCi/L	1 pCi/L	< 1 pCi/L	7/19/2022	geology, natural weathering
Total Coliform Bacteria (% monthly samples testing positive)	5%	0%	0%	0%	9/28/2022	Naturally present in the environment
Free Chlorine Residual	4 ppm	4 ppm	0.89 ppm	0.30 ppm	5/1/2023	Added as a disinfectant to the water system
Total Trihalomethanes[2]	80 ppb	NA	9.7 ppb	<1 ppb	8/23/2023	Reaction of chlorine with naturally occurring organic matter
Total Haloacetic acids[3]	60 ppb	NA	<1 ppb	<1 ppb	N/A	Reaction of chlorine with naturally occurring organic matter
Regulated Per- and Polyfluoroalkyl Substances (PFAS)[4]						
PFOA	4 ppt	0 ppt	2.5 ppt	<0.075 ppt	12/1/2023	Run-off or leaching from firefighting foam, industrial discharge, and landfills; wastewater treatment plants
PFOS	4 ppt	0 ppt	2.6 ppt	<0.098 ppt	12/1/2023	
PFNA	10 ppt	10 ppt	0.14 ppt	<0.087 ppt	12/1/2023	
PFHxS	10 ppt	10 ppt	1.6 ppt	<0.061 ppt	12/1/2023	
Unregulated PFAS						
PFBS	345 ppt (SAL)		2.4 ppt	<0.11 ppt	12/1/2023	Run-off or leaching from firefighting foam, industrial discharge, and landfills; wastewater treatment plants
PFPeS	unregulated		0.34 ppt	<0.05 ppt	12/1/2023	
PFBA	unregulated		0.81 ppt	<0.057 ppt	12/1/2023	
PFPeA	unregulated		1.3 ppt	<0.10 ppt	12/1/2023	
PFHxA	unregulated		1.9 ppt	<0.11 ppt	12/1/2023	
PFHpA	unregulated		0.71 ppt	<0.052 ppt	12/1/2023	
Secondary Standards Regulated by EPA for Aesthetics						
Chloride	250 ppm		18 ppm	1 ppm	8/10/2021	Geology, natural weathering
Copper	1300 ppb	1300 ppb	43 ppb	<20 ppb	8/10/2021	Geology, natural weathering
Iron	300 ppb		370 ppb	<100 ppb	9/13/2021	Geology, natural weathering
Manganese	50 ppb		61 ppb	<10 ppb	7/14/2021	Geology, natural weathering
Sulfate	250 ppm		14 ppm	2 ppm	7/13/2021	Geology, natural weathering
Conductivity	700 µS/cm		282 µS/cm	105 µS/cm	8/10/2021	Geology, natural weathering
Regulated by the State at the Consumer's Tap						
Contaminant	State Action Level (SAL)	Goal Not to Exceed (MCLG)	90% percentile	# Samples Over State Action Level	Date of Highest Level Detected	Typical Source of Contaminant
Copper	1300 ppb	1300 ppb	749 ppb	0 samples	7/19/2023	Corrosion of household plumbing or erosion of natural deposits
Lead	15 ppb	0 ppb	6.4 ppb	0 samples	7/19/2023	Corrosion of household plumbing or erosion of natural deposits
Unregulated Contaminants - sampled as required by EPA						
	State Action Level	Goal Not to Exceed (MCLG)	Highest Level Detected	Lowest Level Detected	Date of Highest Level Detected	Typical Source of Contaminant
Bromide	unregulated		48 ppb	< 0.02 ppb	4/7/2020	Geology and natural weathering, industrial and consumer products
Unregulated Water Constituents of interest for fish aquariums, and home brewing[5]						
Alkalinity (mg/L as CaCO3)	unregulated		107	63	3/21/2023	Geology, natural weathering
Total Hardness (mg/L as $CaCO_3$)	unregulated		120	32	8/10/2021	Geology, natural weathering
Calcium Hardness (mg/L as CaCO3)	unregulated		98	25	4/11/2018	Geology, natural weathering
Silica	unregulated		59 ppm	33 ppm	10/4/2011	Geology, natural weathering. Rarely tested
Sodium	unregulated		22 ppm	6 ppm	4/29/2021	Geology, natural weathering

Footnotes:

1. U.S. Department of Health and Human Serv.ices recommends <0.7 ppm fluoride in drinking water

2. Highest locational running annual average was 9.65 ppb. In 2023, the highest concentrations of individual trihalomethanes were chloroform (5.8 ppb), bromoform (0.55 ppb), chlorodibromomethane (1.1 ppb), and bromodichloromethane (2.72 ppb).

3. There were no detection for Haloacetic acid compounds detected in 2023.

4. (PFBS)Perfluorobutanesulfonic acid; (PFPeS)Perfluoropentane sulfonic acid; (PFHxS)Perfluorohexanesulfonic acid; (PFOS)Perfluorooctanesulfonic acid; (PFBA)Perfluorobutanoic acid; (PFPeA)Perfluoropentanoic acid; (PFHxA)Perfluorohexanoic acid;

5. Ranges shown are from all 20 groundwater wells that supply the water system. Ranges in tap water at specific locations will depend on which wells serve the particular area.

Definitions:

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

CaCO3: Calcium carbonate

EPA: U.S Environmental Protection Agency

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.

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 contaminants.

mg/L: miligrams per liter

ppm: Parts per million is equivalent to milligrams per liter (m/l). One ppm is approximately equal to 1 drop in 22 gallons of water.

ppb: Parts per billion. One ppb is approximately equal to 1 drop in 22,000 gallons of water (equivalent to about 1 drop in a small swimming pool).

ppt: Parts per trillion. One ppt is approximately equal to 1 drop in 22,000,000 gallons of water (equivalent to about 1 drop in Long's Pond).

pCi/L: picocuries per liter is the unit of measure used to describe an amount of radiation.

Primary Standard: the MCL for these substances is set primarily for health reasons.

Secondary Standard: the MCL for these substances is set primarily for non-health reasons such as color, tase, or fixture staining or indirect health concerns when levels are too high.

µS/cm: Microsiemens per centimeter is a measure of electrical conductivity.