

**WEIRTON AREA WATER BOARD**  
**WV3300516**  
**Consumer Confidence Report –**  
**2020**  
**Covering Calendar Year – 2019**



This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies.

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**The Weirton Area Water Board**  
**Members:**

*Jim Shockley – Chairman*  
*Don Gianni Jr. – Vice Chairman*  
*Sonny Marino - Treasurer*  
*Rocky Bragg*  
*Ron Jones*  
*Flora Perrone – Ex-Officio*

Director  
 A.D. Mastrantoni

Assist. Director  
 Sam Stoneking Jr

Chief Operator  
 Jasen Havens

Your water comes from:

Source Name	Source Water Type
WELL	Ground Water
INTAKE OHIO RIVER	Surface Water

Buyer Name	Seller Name
There are no additional purchases to display.	

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 about drinking water 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).

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).

The sources of drinking water (both tap water and bottled water) included 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 sources water before we treat it include: Microbial contaminants, such as viruses and bacteria, which may come from

sewage treatment plants, septic systems, 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 or farming.

Pesticides and herbicides, which may come from a variety of sources such as storm water run-off, agriculture, and residential users.

Radioactive contaminants, which can be naturally occurring or the result of mining activity.

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

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system has a 2018 estimated population of 18,449, according to census.gov, and is required to test a minimum of 25 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

**Water Quality Data**

The following tables list all of the drinking water contaminants which were detected during the 2019 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in these tables are from the testing done January 1- December 31, 2019. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

**Terms & Abbreviations**

**Maximum Contaminant Level Goal (MCLG):** the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** the "Maximum Allowed" MCL is 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.

**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.

**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

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

**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.

**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.

**Parts per Million (ppm)** or milligrams per liter (mg/l)

**Parts per Billion (ppb)** or micrograms per liter (µg/l)

**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Monitoring Period Average (MPA):** An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity

in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

### Testing Results for: WEIRTON AREA WATER BOARD

Microbiological	Result	MCL	MCLG	Typical Source
COLIFORM (TCR)	In the month of September, 1 sample(s) returned as positive	Treatment Technique Trigger	0	Naturally present in the environment

This positive result was due to a simple sampling error. Repeat samples were taken, as required by EPA, and those samples came back negative. The MCL was not exceeded

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
BARIUM	2/19/2019	0.035	0.035	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CIS-1,2-DICHLOROETHYLENE	12/17/19	1.0	1.0	ppb	0	70	Discharge from industrial chemical factories
FLUORIDE	2/19/2019	0.34	0.34	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	7/9/2019	0.76	0.76	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TRICHLOROETHYLENE	12/17/19	0.6	0.6	ppb	5	0	Discharge from metal degreasing sites and other factories

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCL G	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	128 AMERICAN WAY	2019	18	8.06 - 28.2	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	2883 KINGS CREEK ROAD	2019	15	9.4 - 21.4	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	307 COUNTRY CLUB BLVD	2019	19	6.61 - 27.2	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	372 LIBERTY AVENUE	2019	21	13.4 - 28.9	ppb	60	0	By-product of drinking water disinfection
TTHM	128 AMERICAN WAY	2019	32.9	11.4 - 43	ppb	80	0	By-product of drinking water chlorination
TTHM	2883 KINGS CREEK ROAD	2019	36.1	12.6 - 52.6	ppb	80	0	By-product of drinking water chlorination
TTHM	307 COUNTRY CLUB BLVD	2019	35.0	18.6 - 52.4	ppb	80	0	By-product of drinking water chlorination
TTHM	372 LIBERTY AVENUE	2019	44.6	24.8 - 67.3	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90 <sup>th</sup> Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2019	0.59	0.0155 - 0.72	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2019	1.8	0 - 2.9	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits

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. Your water system 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 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
12/01/2019 - 12/31/2019	1.3	MG/L	1.3	MG/L

Unresolved Deficiency Date Identified	Facility	Comments	ACTION
04/27/2017	DISTRIBUTION SYSTEM	The June 2016 water unaccountability rate was 19.8%.	City-wide Meter Replacement Project Completion April 2019
04/27/2017	WATER SYSTEM	Weircrest Storage Tank #1 & #2 require painting. of this report	Painted Weircrest Storage Tanks #1 & #2 Completion February 2019

Total Organic Carbon Lowest Month for Removal	Collection Date	Highest Value	Range	Unit	TT	Typical Source
CARBON, TOTAL	4/9/2019	2.27	1 - 2.27	MG/L	0	Naturally present in the environment

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
TURBIDITY	TREATMENT PLANT	0.2	NTU	FEB 2019

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
GROSS ALPHA, EXCL. RADON & U	4/9/2019	1.07	1.07	pCi/L	15	0	Erosion of natural deposits

Secondary Contaminants-Non-Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
CARBON, TOTAL	9/10/2019	2.02	1 - 2.02	ppm	10000
NICKEL	2/19/2019	0.0012	0.0012	MG/L	0.1
SODIUM	2/19/2019	29.7	29.7	MG/L	1000
SULFATE	2/19/2019	86.6	86.6	MG/L	250

During the 2019 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
1/1/2019 - 12/31/2019	1,1,1-TRICHLOROETHANE	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	XYLENES, TOTAL	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	TOLUENE	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	1,2-DICHLOROPROPANE	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	TRANS-1,2-DICHLOROETHYLENE	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	ETHYLBENZENE	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	CARBON TETRACHLORIDE	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	P-DICHLOROBENZENE	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	1,1,2-TRICHLOROETHANE	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	1,1-DICHLOROETHYLENE	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	DICHLOROMETHANE	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	CHLOROBENZENE	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	TETRACHLOROETHYLENE	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	STYRENE	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	BENZENE	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	1,2-DICHLOROETHANE	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	O-DICHLOROBENZENE	REPORTING, ROUTINE MAJOR
1/1/2019 - 12/31/2019	1,2,4-TRICHLOROBENZENE	REPORTING, ROUTINE MAJOR

Upon review of rescind request, it was determined that the operator collected VOC samples as required, however, a laboratory clerical error on sample results occurred.

additional Required Health Effects Language:

Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

There are no additional required health effects violation notices.

Important Information about your Drinking Water:  
**Weirton Area Water Board's Data for Unregulated Contaminant Monitoring Rule 4 (UCMR4)**

Throughout 2018 and 2019, our water system sampled for a series of unregulated contaminants as required by the US EPA. Unregulated contaminants are those that do not yet have a drinking water standard set by the US EPA. The purpose of this monitoring was to assist EPA in determining whether these contaminants should be regulated.

Weirton Area Water Board customers have the right to know that this information was provided to the EPA and is now available. The results of the UCMR4 Assessment Monitoring are as follows:

**UCMR4 Assessment Monitoring**

Assessment Monitoring 1- Metals and Pesticides Sample

Location: Entry Point to Distribution System Sample Dates:

7/2/2018 through 3/5/2019

EPA Method	Unregulated Contaminant	Assessment Result (ug/l)
200.8	1032: Manganese	0.616
	1053: Germanium	ND
530	2433: Butylated Hydroxyanisole	ND
	2434: o-Toluidine	ND
	3435: Quinoline	ND
	2084: 1-Butanol	ND
	2431: 2-Methoxyethanol	ND
	2432: 2-Propenol-ol	ND
525.3	2057: Chlorpyrifos	ND
	2114: Total Permethrin	ND
	2115: Alpha-Hexachlorocyclohexane	ND
	2116: Dimethipin	ND
	2117: Oxyfluorfen	ND
	2118: Profenofos	ND
	2119: Tebuconazole	ND
	2120: Tribufos	ND
7570: Ethoprop	ND	

Assessment Monitoring 2 - Haloacetic Acids (HAA), Bromide, and Total Organic Carbon (TOC) Sample

Dates: September 2018 through March 2019

Site	EPA Method	Unregulated Contaminant	Assessment Range (ug/l)	Assessment Result (ug/l)
128 American Way	552.3	2456: HAA5	6.8-37.5	20.1
		2457: HAA6Br	15.3-45.7	31.9
		2459: HAA9	17.1-69.6	42.6
307 Country Club Blvd.	552.3	2456: HAA5	7.8-17.1	12.4
		2457: HAA6Br	17.1-36.4	26.8
		2459: HAA9	18.9-42.5	30.7
372 Liberty Ave.	552.3	2456: HAA5	8.9-52.9	29.5
		2457: HAA6Br	19.4-40.2	28.1
		2459: HAA9	27.1-70.9	50.8
2883 Kings Creek Rd.	552.3	2456: HAA5	7.5-27.2	17.3
		2457: HAA6Br	18.2-26.5	22.4
		2459: HAA9	20.1-45.3	32.7

Site	Method	Unregulated Contaminant	Assessment Range (ug/l)	Assessment Result (ug/l)
Ohio River	EPA 300.0	1004: Bromide	38.2-42.0	40.6
	Standard Methods 5310C	2920: TOC	2,410-3,040	2,650

Assessment Monitoring 3 - Cyanotoxins Sample  
Location: Entry Point to Distribution System  
Sample Dates: 7/2/2018 through 10/15/2018

EPA Method	Unregulated Contaminant	Assessment Result (ug/l)
545	3302: Cylindrospermopsin	ND
	3311: Anatoxin -a	ND
546	3301: Total Microcystin	ND

**Covid-19 Pandemic**

The Covid-19 Virus has presented unprecedented challenges to our Water Department. Increased efforts have been established to help continue a safe work environment while continuing to provide Good Quality Water to our customers. During times like this, it reminds us of how important water is. As stated in the media, one of the biggest deterrents of getting the virus is hand washing. At our facility and outlying offices, we have implemented more disinfection and sanitizing procedures as well as reducing the amount of foot traffic on our properties and inside of our facilities. Our Staff follows the mandates of Social Distancing and Hand Washing Frequently (or use of Hand Sanitizer when water is not available). All employees have been provided with Personal Protection Equipment encompassing masks, gloves, and disinfecting agents. The 2 most effective processes to inactivate Covid-19 is thru chlorine disinfection and UV light. Both of these processes take place at our water treatment facility. Currently there is **NO** evidence that COVID-19 is in Drinking Water.

During this time be assured that the Weirton Area Water Board and Employees are doing everything we can to help keep employees safe and provide Good Quality Water to our customers.

Your CCR is available at <https://www.weirtonutilities.com/consumer-reports>. To receive a paper copy in the mail, please contact us at the phone number above.