



2019 Water Consumer Confidence Report

(Informe contiene información importante y debe traducirse
Copias disponibles en el Ayuntamiento O en línea)

Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies. Last year, we conducted tests for over 60 contaminants. We only detected 7 of those contaminants, and found only 1 at a level higher than the EPA allows. As we informed you at the time, our water temporarily exceeded drinking water standards. (For more information see the section labeled Violations at the end of the report.)

Do I need to take special precautions?

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 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 (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from?

The City of Monroe's water source is surface water from the Long Tom River. Surface water is subject to seasonal changes in water quality. Storm events increase river turbidity, which in turn increases the complexity involved in delivering a high quality drinking water. Summer months' algal blooms will occasionally cause taste and odor problems, such as a musty smell in the water. It does not present a health hazard; however, it can temporarily affect the aesthetic quality of the water. The management and staff at the water treatment plant are engaged in activities to deliver the best possible drinking water to its community, and we appreciate the opportunity to serve the citizens.

Description of Water Treatment Process

The Monroe water treatment plant is located at the City Park on Highway 99. In 2019, monthly water production ranged from a low of 1,035,950 gallons to a high of 2,424,300 gallons. Surface water from the Long Tom River is pumped through an intake structure and into the treatment plant where both chemical and physical treatment takes place. The finished water pH is modified to reduce the corrosive nature of the water, which can cause lead and copper used in plumbing to leach into the water supply. Chlorine is then added for final disinfection.

Source water assessment and its availability

All states must conduct a Source Water Assessment or SWA. The purpose of the assessment is to provide water systems with the information they need to develop a strategy to protect their drinking water resource if they choose. The respective Drinking Water Programs of the Departments of Human Resources and Environmental Quality have

completed the assessment of our system. The primary water source is the Long Tom River. While the river has its origins in the coastal range of western Oregon, the water is retained at Fernridge reservoir upstream from Monroe and winds through farmland before reaching Monroe. Potential water quality issues addressed in the assessment report include annual drawdown releases from Fernridge and runoff contaminants from livestock, pesticides, and fuel spills. A copy of the report is on file at City Hall. The last SWA was updated in 2018.

Why are there contaminants in my drinking 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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

Significant Deficiencies

During the September 2019 State survey of the Water Treatment Plant, several deficiencies were noted. These include ensuring water tight access hatches, filter system plumbing changes, correcting disinfectant contact time discrepancies, a filter repair plan, and verifying/documenting various reservoir vents and valves. All of these have either been corrected or in the process of being submitted to the State as corrected.

Additional Information for 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. The City of Monroe Oregon 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>.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Unit Descriptions	
Term	Definition
ug/L	Number of micrograms of substance in one liter of water
ppm	parts per million , or milligrams per liter (mg/L)
ppb	parts per billion , or micrograms per liter (µg/L)
ppt	parts per trillion , or nanograms per liter
pCi/L	picocuries per liter (a measure of radioactivity)
NTU	Nephelometric Turbidity Units . Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

Unit Descriptions	
NA	not applicable
ND	Not detected

Important Drinking Water Definitions	
Term	Definition
MCLG	Maximum Contaminant Level Goal: 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.
MCL	Maximum Contaminant Level: 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.
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

2019 Sample Data

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Haloacetic Acids (HAA5) (ppb)	NA	60	51.325	43	74.6	2019	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	84.78	50.2	130	2019	Yes	By-product of drinking water chlorination
Inorganic Contaminants								
Nitrate [measured as Nitrogen] (ppm)	10	10	ND	NA	NA	2019	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Microbiological Contaminants								
Turbidity (NTU)	NA	1.0	<1	.04	.19	2019	No	Soil runoff
100% of the samples were below the TT value of 1. A value less than 95% constitutes a TT violation. The highest single measurement was .19. Any measurement in excess of 5 is a violation unless otherwise approved by the state.								
Radioactive Contaminants								
Radium (combined 226/228) (pCi/L)	0	5	ND	NA	NA	2019	No	Erosion of natural deposits
Uranium (ug/L)	0	30	ND	NA	NA	2019	No	Erosion of natural deposits
Synthetic organic contaminants including pesticides and herbicides								
2,4,5-TP (Silvex) (ppb)	50	50	ND	NA	NA	2019	No	Residue of banned herbicide

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
2,4-D (ppb)	70	70	ND	NA	NA	2019	No	Runoff from herbicide used on row crops
Atrazine (ppb)	3	3	ND	NA	NA	2019	No	Runoff from herbicide used on row crops
Benzo(a)pyrene (ppt)	0	200	ND	NA	NA	2019	No	Leaching from linings of water storage tanks and distribution lines
Carbofuran (ppb)	40	40	ND	NA	NA	2019	No	Leaching of soil fumigant used on rice and alfalfa
Chlordane (ppb)	0	2	ND	NA	NA	2019	No	Residue of banned termiticide
Dalapon (ppb)	200	200	ND	NA	NA	2019	No	Runoff from herbicide used on rights of way
Di (2-ethylhexyl) adipate (ppb)	400	400	ND	NA	NA	2019	No	Discharge from chemical factories
Di (2-ethylhexyl) phthalate (ppb)	0	6	ND	NA	NA	2019	No	Discharge from rubber and chemical factories
Dibromochloropropane (DBCP) (ppt)	0	200	ND	NA	NA	2019	No	
Dinoseb (ppb)	7	7	ND	NA	NA	2019	No	Runoff from herbicide used on soybeans and vegetables
Diquat (ppb)	20	20	ND	NA	NA	2019	No	Runoff from herbicide use
Endothall (ppb)	100	100	ND	NA	NA	2019	No	Runoff from herbicide use
Endrin (ppb)	2	2	ND	NA	NA	2019	No	Residue of banned insecticide
Ethylene dibromide (ppt)	0	50	ND	NA	NA	2019	No	Discharge from petroleum refineries
Glyphosate (ppb)	700	700	ND	NA	NA	2019	No	Runoff from herbicide use
Heptachlor (ppt)	0	400	ND	NA	NA	2019	No	Residue of banned pesticide
Heptachlor epoxide (ppt)	0	200	ND	NA	NA	2019	No	Breakdown of heptachlor
Hexachlorobenzene (ppb)	0	1	ND	NA	NA	2019	No	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene (ppb)	50	50	ND	NA	NA	2019	No	Discharge from chemical factories

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Methoxychlor (ppb)	40	40	ND	NA	NA	2019	No	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl [Vydate] (ppb)	200	200	ND	NA	NA	2019	No	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
PCBs [Polychlorinated biphenyls] (ppt)	0	500	ND	NA	NA	2019	No	Runoff from landfills; Discharge of waste chemicals
Pentachlorophenol (ppb)	0	1	ND	NA	NA	2019	No	Discharge from wood preserving factories
Picloram (ppb)	500	500	ND	NA	NA	2019	No	Herbicide runoff
Simazine (ppb)	4	4	ND	NA	NA	2019	No	Herbicide runoff
Toxaphene (ppb)	0	3	ND	NA	NA	2019	No	Runoff/leaching from insecticide used on cotton and cattle
Volatile Organic Contaminants								
1,1,1-Trichloroethane (ppb)	200	200	0	NA	NA	2019	No	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane (ppb)	3	5	ND	NA	NA	2019	No	Discharge from industrial chemical factories
1,1-Dichloroethylene (ppb)	7	7	ND	NA	NA	2019	No	Discharge from industrial chemical factories
1,2,4-Trichlorobenzene (ppb)	70	70	ND	NA	NA	2019	No	Discharge from textile-finishing factories
1,2-Dichloroethane (ppb)	0	5	ND	NA	NA	2019	No	Discharge from industrial chemical factories
1,2-Dichloropropane (ppb)	0	5	ND	NA	NA	2019	No	Discharge from industrial chemical factories
Benzene (ppb)	0	5	ND	NA	NA	2019	No	Discharge from factories; Leaching from gas storage tanks and landfills
Carbon Tetrachloride (ppb)	0	5	ND	NA	NA	2019	No	Discharge from chemical plants and other industrial activities

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Chlorobenzene (monochlorobenzene) (ppb)	100	100	ND	NA	NA	2019	No	Discharge from chemical and agricultural chemical factories
Dichloromethane (ppb)	0	5	ND	NA	NA	2019	No	Discharge from pharmaceutical and chemical factories
Ethylbenzene (ppb)	700	700	ND	NA	NA	2019	No	Discharge from petroleum refineries
Styrene (ppb)	100	100	ND	NA	NA	2019	No	Discharge from rubber and plastic factories; Leaching from landfills
Tetrachloroethylene (ppb)	0	5	ND	NA	NA	2019	No	Discharge from factories and dry cleaners
Toluene (ppm)	1	1	ND	NA	NA	2019	No	Discharge from petroleum factories
Trichloroethylene (ppb)	0	5	ND	NA	NA	2019	No	Discharge from metal degreasing sites and other factories
Vinyl Chloride (ppb)	0	2	ND	NA	NA	2019	No	Leaching from PVC piping; Discharge from plastics factories
Xylenes (ppm)	10	10	ND	NA	NA	2019	No	Discharge from petroleum factories; Discharge from chemical factories
cis-1,2-Dichloroethylene (ppb)	70	70	ND	NA	NA	2019	No	Discharge from industrial chemical factories
o-Dichlorobenzene (ppb)	600	600	ND	NA	NA	2019	No	Discharge from industrial chemical factories
p-Dichlorobenzene (ppb)	75	75	ND	NA	NA	2019	No	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene (ppb)	100	100	ND	NA	NA	2019	No	Discharge from industrial chemical factories
Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source	
Inorganic Contaminants								

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Copper - action level at consumer taps (ppm)	1.3	1.3	.101	January to June 2019	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper - action level at consumer taps (ppm)	1.3	1.3	.081	July to December 2019	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	2	January to June 2019	1	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	2	July to December 2019	1	No	Corrosion of household plumbing systems; Erosion of natural deposits

Total Coliform: There was no detectable coliform found in the City’s water during 2019. The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. 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 by newspaper, television or radio.

Harmful Algal Blooms: Harmful algal blooms are caused by high concentrations of certain types of algae that can produce toxic compounds. These blooms can cause sickness and death in humans, pets and livestock who come in contact with, or drink the water, and also can result in hypoxia (low oxygen) in water bodies, which can kill fish and other wildlife. Oregon Health Authority has developed temporary sampling rules that require drinking water systems in the state using certain surface water sources, such as those prone to harmful algae blooms, to routinely test for cyanotoxins that these blooms produce, and notify the public about the test results. We are pleased to advise that the City of Monroe had zero positive results for harmful algal blooms in our source water in 2019.

Violations and Exceedances
<p>TTHMs [Total Trihalomethanes] 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 system, and may have an increased risk of getting cancer.</p> <p>Test results from January 1, 2019 through December 31, 2019 show our system exceeded the standard, or maximum contaminant level (MCL), for TTHM. The standard for TTHM is 0.080 and is determined by averaging all the samples collected at the sampling location during the 12 month period. The level of TTHM averaged 0.085 from samples taken January through December 2019.</p> <p>To lower the TTHM levels, the City is adjusting its operations to move more water throughout its distribution system. This includes monitoring the storage tank levels and instituting a quarterly fire hydrant flushing program. In addition, better sampling methods have been introduced to ensure consistent, high quality samples are taken at each location.</p>

Be Involved: We want our valued customers to be informed concerning your water utility. If you want to learn more, please attend any of our Public Works Committee Meetings. Meetings are scheduled as needed. All residents are most welcome to attend!

Please contact Monroe City Hall at 541-874-5715 for questions or more information.