

CITY OF TROY
Public Water System ID# 2290041
WATER QUALITY REPORT

June 2022

We're pleased to present to you this years Water Quality Report. This report is designed to inform you about the quality and services we deliver to you everyday. Our goal is to provide you with a safe and dependable supply of drinking water.

During recent years we have sampled for over 80 different chemicals and have found very little contamination. Contamination is anything other than pure water. We sample total coliform bacteria monthly as an indicator of microorganisms that should not be present. The table below lists all the drinking water contaminants that we detected during the 2021 calendar year or in our most recent test noted. 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 a health risk. More information about contaminants and potential health effects can be obtained by calling our office at 835-2742 or the U.S. Environmental Protection Agency's (EPA's) Safe Drinking Water Hotline (1-800-436-4791)

Your drinking water sources are both from groundwater and surface water. The City has three active groundwater wells, Duthie Park Well, Big Meadow Well and Twin Creeks Well, and a slow sand treatment plant that treats water from Big Meadow Creek.

DEFINITIONS

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions.

Parts per million (ppm) or milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or micrograms per liter ($\mu\text{g/L}$) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter ($p\text{Ci/L}$) - Picocuries per liter is a measure of radioactivity in water.

Running Annual Average (RAA) - The average of sample analytical results for samples taken during the previous four calendar quarters

Maximum Contaminant Level - 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.

Maximum Contaminant Level Goal - The "Goal" (MCLG) is 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.

NTU: Nephelometric Turbidity Unit- is a standard unit to measure water clarity.

TEST RESULTS

-Regulated	MCLG	MCL	Our Water	Sample date	Violation	Typical source of contamination
Total coliform Bacteria						
	0	2	0	monthly	yes	Naturally present in the environment and are used as an indicator that other potentially-harmful bacteria may be present.
Nitrate as N (ppm)						
Duthie Park Well	10	10	1.080	12/2021	no	Runoff from fertilizer use. leaching from septic tanks, sewage, Erosion of natural deposits
Big Meadow Well	10	10	1.46	12/2021	no	
Twin Creek well	10	10	0.000	12/2021	no	
Big meadow Cr TP	10	10	4.95	12/2021	no	
Lead (ppb)						
Sample 1	0	15	3	08/2018	no	Corrosion of household plumbing systems Erosion of natural deposits
Copper (ppb)						
Sample 1	1300	1300	403	08/2018	no	Corrosion of household plumbing systems Erosion of natural deposits. Leaching from wood preservatives.
Alpha/Radiation (pCi/L)						
SSF	0	15	.396	01/2019	no	Erosion of natural deposits
Duthie Park Well	0	15	.826	01/2019	no	
Big Meadow Well	0	15	0.000	01/2019	no	
Twin Creek well	0	15	1.540	01/2019	no	
Fluoride (ppm)						
						Erosion of natural deposits. Water additive which promotes strong teeth. Discharge from fertilizer and aluminum factories.
Duthie Park Well	4	4	.220	02/2014	no	
Big Meadow Well	4	4	.204	02/2014	no	
Big Meadow Cr TP4	4	4	.000	02/2020	no	
Twin Creeks well	4	4	.260	01/2019	no	
Barium (ppb)						
Big Meadow Cr TP2		2	0.014	02/2017	no	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
Twin Creeks Well	2	2	0.003	01/2019	no	
Chromium (ppb)						
Big Meadow Cr TP	100	100	.000	02/2017	no	Discharge from steel and pulp mills. Erosion of natural deposits.
Twin Creeks Well	100	100	.000	01/2019	no	
Big meadow well	100	100	.000	01/2019	no	
Duthie park well	100	100	.001	01/2019	no	
Turbidity (ntu)						
	N/A	1.0	.5	daily	no	Natural Erosion
	TT	100%	78%		*no	

-Disinfection Byproducts (µg/L)

	MCL	Range (high-low)	RAA	Typical Sources
Total Trihalomethanes (TTHMs)	80	0-33.5	8.375	Chlorine Byproduct
Haloacetic Acids (HAA5s)	60	0-26.3	6.575	

*All of the City of Troy's surface water is treated by our slow sand filtration plant and disinfected. Slow sand treatment processes are required to have less than 1 NTU 95% of the time. Our NTU's range from .2 to 1.0 during the year. However, during the year treated water turbidity levels sometimes exceed 1.0 NTU in greater than 5% of samples (collected daily). On a case-by-case basis the Idaho Department of Environmental Quality has approved alternative higher turbidity limits for water treated by our slow sand filter, based on the determination that there is no significant interference with disinfection at the higher turbidity level. The City of Troy has done numerous bacteriological tests during high turbidity periods, in addition to our monthly-required tests. Our slow sand filter is removing 100% of coliform bacteria before our disinfection process. Our disinfection process exceeds State and Federal requirements.

Compliance Violations

- 1) **Failure to monitor for Total Coliform 01-12 2021.**
All Samples taken before and since have been no coliform detected.

TT-Treatment Techniques are required processes intended to reduce the level of a contaminant in drinking water. Turbidity is a measurement of cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites.

Sources of drinking water, both tap water and bottled water originates as surface water from rivers and lakes or as ground water from springs and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material. Water picks up wastes from both human and animal activities. Surface water must be carefully filtered and disinfected to remove bacteria, viruses, and protozoa. Ground water is usually filtered naturally.

Your drinking water comes from ground water and surface water. We have 3 wells; they are located in 1.Duthie Park. 2.Big Meadow Well, north of McKeehan road, and 3.Twin Creeks Well ¼ mile east of Troy on Hwy 8. They produce about 60% of our water. The other 40% of your water comes from surface water. Your surface water comes from the Big Meadow drainage and is stored in an 8.4 million gallon reservoir located on Moscow Mountain. The water is transported through a pipeline to a slow sand filtration water treatment plant located at Big Meadow road and Umbarger road. After treatment, the water is pumped approximately 3 miles to town.

EPA ensures that tap water is safe to drink by writing regulations that limits both natural and man made contaminants. We treat our water according to both Idaho and EPA's regulations. Interstate bottled water is regulated by the U.S. Food and Drug Administration.

Contaminants that may be present include:

Microbial contaminants, such as bacterial, viruses, and protozoa are very small living creatures that may be natural and harmless, or harmful if originating from septic systems, agricultural livestock operations or wildlife.

Inorganic compounds, 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 agriculture, urban storm water runoff, and residential issues.

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

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Source Water Assessment:

A source water assessment for all of the Cities' sources potential risk to contamination is available online at the following website:

<http://www.deq.idaho.gov/water/SWARReports/InternetQuery.cfm>, or available upon request from the city.

Health information

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 and Prevention (CDC) guidelines on appropriate means to lesson the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791 or <http://www.epa.gov/safewater/hotline/>.

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 Safe Water Hotline at 1-800-426-4791 or <http://www.epa.gov/safewater/hotline/>.

Lead informational statement (Health effects and ways to reduce exposure)

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 Troy 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 drinking 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 Water Hotline or at <http://www.epa.gov/safewater/lead>.

Our City Council meets: the 2nd and 4th Wednesday of each month at City Hall at 5:00 PM. If you have any questions please call City Clerk at 835-2741.