## Buffalo Trail Water Association 2022 Water Quality Report

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Meetings:	Water Association Offic	ee / 1st Tuesday each month at 7:00 pm		

We purchase drinking water from Western Fleming County Water District and Maysville Utility Commission. Their sources of water are surface water from the Licking River and the Ohio River, respectively. A source water assessment has been completed for both surface water sources. The susceptibility of these sources to contamination is moderate for the Licking River and high for the Ohio River, mainly due to a threat of chemical spills. Land use within the protection areas of each river are mainly residential, but does contain agricultural, recreational and light industrial activities. There is potential for spills and polluted runoff from areas of row crops and urban and recreational grasses which introduce the potential for herbicide, pesticide, and fertilizer contaminants. Under certain circumstances activities within the watershed could release contaminants and thereby pose potential risks to your drinking water. These activities and how they are conducted are of interest to our customers because they potentially affect public health and the cost of treating your water. The complete source water assessment may be reviewed at the Buffalo Trace Area Development District office.

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 may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The 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 may 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, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater runoff, agriculture or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, stormwater runoff, or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas production or mining activities). In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water to provide the same protection for public health.

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/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).

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 local public 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.

## Some or all of these definitions may be found in this report:

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.

Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present.

Not Applicable (N/A) - does not apply.

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, (µg/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000.

Picocuries per liter (pCi/L) - a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.

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

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect. The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved

available upon request by co	ntacting our	office durin	g busi	ness hours.			1	e, may be mor	5		
<u> </u>			-		810275)	B=	= Western l	Fleming Co	unty Wat	er District	
<b>Regulated Contaminar</b>	nt Test Re	sults									
Contaminant [code] (units)	MCL	MCLG	Source	Report Level Range of Detection		Date of Sample Violation		Likely Source of Contamination			
Inorganic Contaminan	ts	-		-				-			
Barium			A=	0.032	0.032	to	0.032	Jan-22	No	Drilling wastes; metal refineries;	
[1010] (ppm)	2	2	B=	0.02	0.02	to	0.02	May-22	No	erosion of natural deposits	
Fluoride			A=	0.73	0.73	to	0.73	Jan-22	No		
[1025] (ppm)	4	4	B=	0.85	0.85	to	0.85	May-22	No	Water additive which promotes strong teeth	
Nitrate			A=	0.785	0.785	to	0.785	Jan-22	No	Fertilizer runoff; leaching from	
[1040] (ppm)	10	10	B=	0.303	0.303	to	0.303	Jan-22	No	septic tanks, sewage; erosion of natural deposits	
Disinfection Byproduc	ts Precurs	sor									
Total Organic Carbon (ppm)			A=	1.33	1	to	1.65	2022	No		
(report level=lowest avg.	TT*	N/A	B=	1.52	1.13	to	4	2022	No	Naturally present in environment.	
range of monthly ratios)											
*Monthly ratio is the % TOC r	emoval achie	eved to the %	TOC 1	emoval requ	ired. Annu	al av	erage must be	1.00 or greater	for complia	nce.	
Other Constituents	1			1				1	1		
Turbidity (NTU) TT *Repersentative samples	Allowable Levels		Source	Highest Single Measurement		Lowest Monthly %	Violation	1	Likely Source of Turbidity		
Turbidity is a measure of the			A=	0.22			100	No			
clarity of the water and not a contaminant.	arity of the water and not a Less than 0.3 NTU in		B=	0.066		100	No	Soil runoff			
	95% month	nly samples									
	- TE - + D		<b>.O TI</b>	RAIL WA	ATER AS	SSO	CIATION	(KY08100	46)		
Regulated Contaminar											
Disinfectants/Disinfect	MRDL	1	1	1.51	1				1		
Chlorine (ppm)	= 4	MRDLG = 4	BT	1.51 (highest average)	0.98	to	1.84	2022	No	Water additive used to control microbes.	
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	BT	51	27 to 72 (range of individual sites)		2022	No	Byproduct of drinking water disinfection		
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	BT	(average) 63	26	to	89	2022	No	Byproduct of drinking water disinfection.	
			<u> </u>	(average)	(range o	of ind	ividual sites)				
Household Plumbing C	ontamina	nts									
Copper [1022] (ppm)	AL =		1	0.102							
sites exceeding action level	AL = 1.3	1.3	BT	(90 <sup>th</sup>	0.009	to	0.281	Sep-20	No	Corrosion of household plumbing systems	
0				percentile)						-,	
Lead [1030] (ppb) sites exceeding action level	AL =	0		0 (90 <sup>th</sup>	0				No	Corrosion of household plumbing	

		Average	<b>Range of Detection</b>		
Fluoride (added for dental health)	A=	0.9	0.39	to	1.14
r noriue (added for dental nearth)	B=	0.9	0.34	to	1.08
Sodium (EPA guidance level = 20 mg/L)	A=	20.7	20.7	to	20.7
Soutum (Er A guidance level = 20 mg/L)	B=	7.37	7.37	to	7.37

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.