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 $10,000,000,000,000.

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.

North Nelson Water District

Water Quality Report 2018

Water System ID: KY0900323
General Manager: Colin S. Cissell
502-348-8342
CCR Contact: Colin S. Cissell
502-348-8342
northnelsonwaterdistrict@yahoo.com

Mailing address:
P.O. Box 25
Cox's Creek, KY 40013

Meeting location and time:
5555 Louisville Rd, Cox's Creek, KY
Third Monday each month at 7:00 PM

This report is designed to inform the public about the quality of water and services provided on a daily basis. Our commitment is to provide a safe, clean, and reliable supply of drinking water. We want to assure that we will continue to monitor, improve, and protect the water system and deliver a high quality product.

Water Purchased From Bardstown

(serves most of northern Nelson County)
Bardstown treats surface water from Sympson Lake. Areas of high concern consist of row crops, bridges and culverts, urban and recreational grasses, an airport and an active landfill. The potential for hazardous material accidentally spilling into the water source gives these sites the Susceptibility Ranking of High. However, the overall Susceptibility Ranking for Bardstown's water source is Moderate. The completed plan is available for inspection at the Lincoln Trail Area Development District in Elizabethtown, KY.

Water Purchased From Louisville

(Crescent Hill TPA serves Bullitt County, Spencer County, and extreme northern Nelson County)
LWC treats surface water from the Ohio River. A Source Water Assessment Plan for Jefferson County identified spills of hazardous materials and permitted discharges of sanitary sewers as the highest contamination risks. In Jefferson County, land use in the protection area is primarily zoned for residential and commercial use, with only a few industrial sites. In Oldham and Trimble Counties land use is primarily zoned for residential and agricultural use. Therefore source water contamination risks are relatively low. To view the entire Source Water Assessment and Protection Plan contact Jeremy Raney at 502-569-3600 x2328.

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).

Information About 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. 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.

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 by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. Copies of this report are available upon request by contacting our office during business hours.

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.

	Allowable Levels	Source	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity
Turbidity (NTU) TT * Representative samples of filtered water	No more than 1 NTU* Less than 0.3 NTU in 95% monthly samples	L= B=	0.07 0.3	100	No	Soil runoff

Regulated Contaminant Test Results — Louisville (L) Bardstown (B)

Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Barium [1010] (ppm)	2	2	B=	0.02	0.02 to 0.02	2018	No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	L= B=	0.7 0.8	0.7 to 0.7 0.8 to 0.8	2018	No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	L= B=	1.2 1.1	1 to 1.2 1.1 to 1.1	2018	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
2,4-D [2105] (ppb)	70	70	L=	0.3	BDL to 0.3	2018	No	Runoff from herbicide used on row crops
Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	L= B=	1.40 2.41	1 to 1.97 2.02 to 3.23	2018	No	Naturally present in environment.

*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average must be 1.00 or greater for compliance.

Source Water Contaminants (untreated water)

Cryptosporidium [oocysts/L]	0 (99% removal)	TT	B=	5 (positive samples)	24 (no. of samples)	2018	See Note Below	Human and animal fecal waste

Cryptosporidium is a microbial pathogen found in surface water. Cryptosporidium was detected in 5 samples of 24 collected from the raw water source for Bardstown water system. It was not detected in the finished water. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Cryptosporidium must be ingested to cause disease and it may be spread through means other than drinking water.

Unregulated Contaminants (UCMR 4)		average	range (ppb)			date
Manganese	L=	1.6	0.6	to	2.4	2018
HAA6Br	L=	5.33	0.94	to	12.39	2018
HAA9	L=	27.54	3.48	to	60.03	2018

In 2018, Louisville Water Company (PWSID: KY0560258) sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by USEPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that this data is available. If you are interested in examining the results, please contact Kelley Dearing-Smith at 502.569.3695 or Louisville Water at 550 South Third St., Louisville KY 40202.

Regulated Contaminant Test Results — North Nelson Water District

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	0.02 (90^{th} percentile)	0 to 0.03	Jul-16	No	Corrosion of household plumbing systems
Chloramines (ppm)	MRDL = 4	MRDLG = 4	1.79 (highest average)	1.05 to 3.6	2018	No	Water additive used to control microbes.
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.79 (highest average)	0.5 to 1.75	2018	No	Water additive used to control microbes.
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	51 (high site average)	13 to 54 (range of individual sites)	2018	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	48 (high site average)	15.3 to 53.1 (range of individual sites)	2018	No	Byproduct of drinking water disinfection.

Quality On Tap!
Our Commitment Our Profession

This report will not be mailed unless requested. Additional copies will be available during normal business hours. Please call our office if you have any questions.