2025

ANNUAL WATER QUALITY REPORT

CONSUMER CONFIDENCE REPORT

ISSUED MAY 2026

Morehead Utility Plant Board
WATER
GAS
STORM WATER
SEWER
March 1950

2025

ANNUAL WATER QUALITY REPORT

In this issue

Water Resources

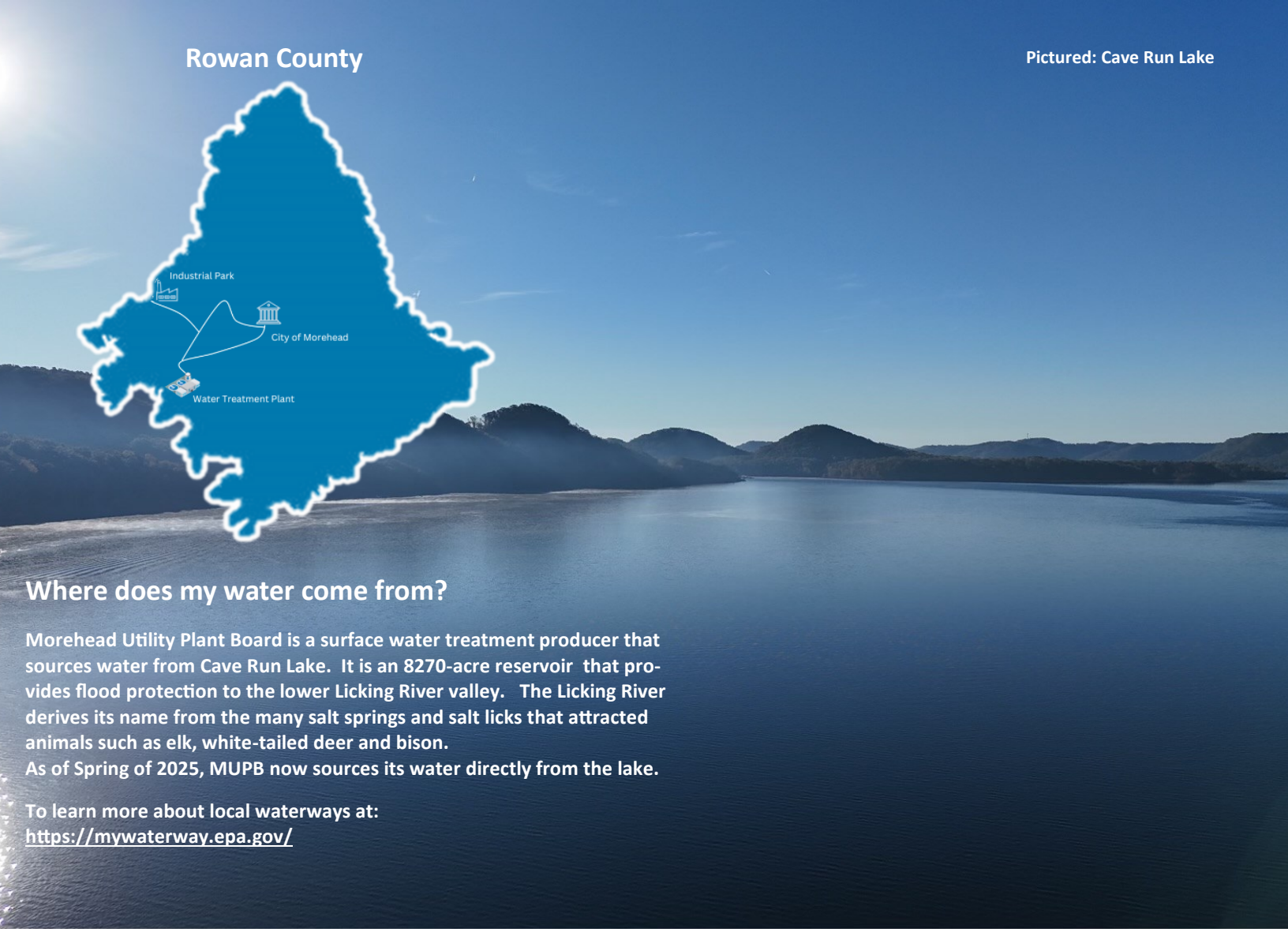
For more information contact:

Morehead Utility Plant Board:
mupb.com
606-784-5538

U.S. Environmental Protection Agency:
epa.gov/ccr
(800) 426-4791

Safe Drinking Water Hotline:
1-800-426-4791

Kentucky Division of Water:
eec.ky.gov/Environmental-Protection/Water/Drinking/Pages/information-for-consumers.aspx



Where does my water come from?

Morehead Utility Plant Board is a surface water treatment producer that sources water from Cave Run Lake. It is an 8270-acre reservoir that provides flood protection to the lower Licking River valley. The Licking River derives its name from the many salt springs and salt licks that attracted animals such as elk, white-tailed deer and bison.
As of Spring of 2025, MUPB now sources its water directly from the lake.

To learn more about local waterways at:
https://mywaterway.epa.gov/

Frequently Asked Questions

Does MUPB have hard or soft water?

During the past year, MUPB has reported an average water hardness of 53 milligrams per liter (mg/L) (equal to 3.10 grains per gallon, 1 grain = 14.255 mg/L). This reported level is considered "soft" water.

What about fluoride?

The Morehead Utility Plant Board Treatment Plant treats water from the Licking River. Fluoride is a natural occurring element but the Plant adjusts the fluoride levels in the water to an optimal level required by the CDC for oral health. To obtain more information about fluoridation visit https://www.cdc.gov/fluoridation/index.html

Does my service line contain lead? Service Line Inventory Information:

To address lead in drinking water, EPA requires that all community water systems develop and maintain an inventory of service line materials. We have completed a service line inventory (SLI) and it is available for review at our office or online at www.mupb.com/water-treatment-plant/ Scroll to the bottom of the page and click on "Water Service Line Inventory" under the "Compliance" heading.

What is a boil water advisory?

A boil water advisory means your tap water may be unsafe to drink. It is issued when there's a chance harmful bacteria or other microbes may have entered the water supply. This can happen due to water main breaks, loss of water pressure, treatment plant issues, or natural disasters. Pay close attention to updates from your utility via websites or social media or call the office with any questions.

Where can I find previous reports?

For previous reports, include year. Example: tapwaterinfo.com/2024/moreheadupb

About Your Drinking Water

The following information is not meant to alarm or scare you . It is meant to make you aware. The exact wording shown below is required by state regulations.

Our water source is surface water from the Licking River. Activities and land uses upstream of the source water intake can pose potential risks to your drinking water. These activities, and how they are conducted, are of interest to the entire community because they potentially affect your health and the cost of treating your water. An analysis of the susceptibility of the raw water supply to contamination indicates that the susceptibility potential is generally moderate. There are a few areas of high concern near the raw water withdrawal site. Farming sites located in the area present the possibility of impact from the application of pesticides and fertilizer. Bridges and major roadways also pose a threat to the source in the event of an accidental spill. Other sites of medium concern include a marina, a fish hatchery, the presence of an underground storage tank and a small grocery/gas station, and a manufacturing industry. The complete Source Water Assessment is available for inspection at the Water Treatment Plant.

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791). 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 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 can 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.

What about lead in my drinking water?

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 water system is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact your local water system. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead.

We are required to annually provide information about the health risks from lead in drinking water to schools and child care facilities. All elementary schools, secondary schools, and child care facilities are eligible to be sampled for lead by our water system. Contact our office for scheduling or to learn results of previous sampling

Lead Sample Results Availability Information:

We are required to periodically sample water from the customer taps to determine lead and copper levels. EPA sets the lead action level at 0.015 mg/l (15ppb). For a water system to be in compliance, at least 90% of tap water samples must have lead levels below this limit. This report contain the 90th percentile and range of our most recent sampling. The individual results for each location sampled can be reviewed at our office.

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/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).

About the Annual Water Quality Report

Water Quality Monitoring

This report provides water quality information compiled during 2025, with details about where your water comes from, what it contains, how it compares to Federal and State standards. MUPB routinely monitors the distribution system for drinking water constituents of concern. Last year, in addition to many other water quality tests, MUPB conducted 263 tests for total coliform bacteria. The Kentucky Division of Water requires that no more than two of the water samples collected per month may test positive for total coliform. MUPB was in compliance for the entire year.

Storage Facility Inspections

MUPB's water storage and distribution system includes 106 miles of pipeline and 8 tanks. Annual tank inspections are conducted for safety and sanitation compliance by a third party inspection firm. Every three years, each tank is taken offline to receive a detailed interior inspection, undergo a robust interior cleaning, and receive repairs as needed. MUPB also conducts system-wide flushing two times per year and dead-end line flushing monthly as a preventive measure against disinfection byproducts and stagnant water.

Certified Operators

MUPB is both a water producer and distribution municipality and our operators are certified by the State of Kentucky in treatment and distribution of this vital resource. The Kentucky Division of Water makes certain that adequate and proper training have been given to each operator to ensure that they are qualified and capable to perform their duties. Operators are required to recertify every two years through continued education programs. The competency of our operators is critical for the protection of public health, safeguarding the environment and to ensure its sustainability for future generations.

Water Quality Statement

We are pleased to report that during the calendar year 2025, the results of testing of your drinking water complied with all state and federal drinking water requirements. For your information, we have compiled the following tables in this report showing testing of your drinking water during 2025.

Partnering for Regional Growth and Progress

Ribbon Cutting for new 12 MGD Membrane Water Treatment Plant

Pictured:

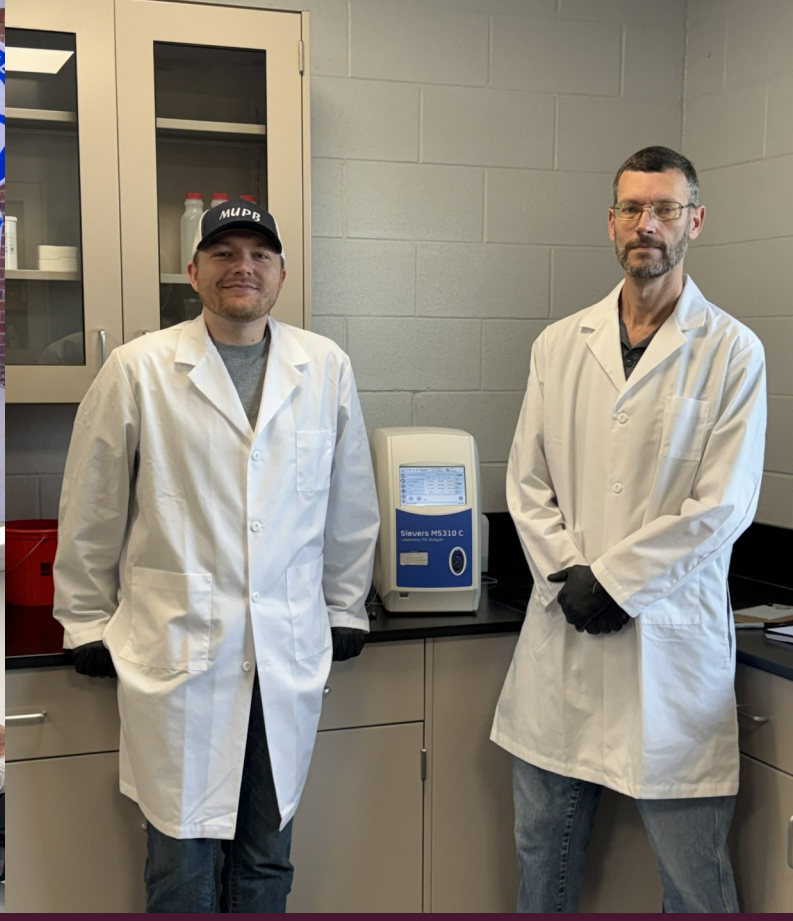
Pipe gallery of new Ultra Filtration Membrane water plant

In early 2025, MUPB brought online our brand new water treatment plant. This $60 million investment has been a meaningful endeavor that will benefit the region with a more resilient and sustainable water supply. With the state of the art technologies deployed in the new plant, we will be ready for future changes in water quality regulations and water demand.

Pictured:

MMRC Industrial Park including

Maysville Community and Technical College: Rowan Campus in foreground



Heartfelt thanks to our Board and Staff for their unwavering dedication, tireless perseverance, and shared vision in bringing this vital water treatment facility to life—ensuring safe, reliable water for our community today and safeguarding a healthier, more sustainable future for generations to come.

Pictured:

New 12 MGD Membrane Treatment Plant
Beautiful Rowan County backdrop of the Daniel Boone National forest

Consumer Confidence Report—New Plant Data (Mar 26-Dec 31,2025) and Distribution System Data

Primary Standards—Mandatory Health-Related Standards

Regulated Contaminant Test Results — Morehead Utility Plant Board—PWSID KY1030292

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of detection	Date of Sample	Violation	Likely source of contamination
Inorganic Contaminants							
Barium [1010] (ppm)	2	2	0.017	0.017 to 0.017	Jul-25	No	Drilling Wastes; metal refineries; Erosion of natural resources
Fluoride [1025] (ppm)	4	4	0.84	0.84 to 0.84	Jul-25	No	Water additive which promotes strong teeth
Disinfectants / Disinfection Byproducts and Precursors							
Total Organic Carbon (ppm) (measured as ppm but reported as a Ratio)	TT*	N/A	N/A** (Lowest Avg)	1.13 to 1.94 (Monthly Ratios)	2025	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.							
** Compliance with TOC removal is determined on a Running Annual Average and not enough data has been generated yet to determine compliance at our new plant; however, every month our removal ratio has exceeded the minimum necessary to meet compliance							
Chlorine (ppm)	MRDL = 4	MRDLG = 4	1.00 (Highest Average)	0.56 to 1.45	2025	No	Water additive used to control microbes
HAA (ppb) (Stage 2) [Haloacetic acids]	60	N/A	35 (high site average)	19 to 42 (range of individual sites)	2025	No	Byproduct of drinking water disinfection
TTHM (ppb) (Stage 2) [Total Trihalomethanes]	80	N/A	65 (high site Average)	27 to 61 (range of individual sites)	2025	No	Byproduct of drinking water disinfection
Household Plumbing Contaminants							
Copper (ppm) Round 1 sites exceeding Action Level = 0	AL = 1.3	1.3	0.241 (90th percentile)	0.003 to 0.481	May-25	No	Corrosion of household plumbing systems
Copper (ppm) Round 2 sites exceeding Action Level = 0	AL = 1.3	1.3	0.173 (90th percentile)	0.003 to 0.393	Aug-25	No	Corrosion of household plumbing systems
Lead (ppb) Round 1 sites exceeding Action Level = 1	AL = 15	0	2 (90th percentile)	0 to 49	May-25	No	Corrosion of household plumbing systems
Lead (ppb) Round 2 sites exceeding Action Level = 0	AL = 15	0	0 (90th percentile)	0 to 4	Aug-25	No	Corrosion of household plumbing systems

We are only required to test for some contaminants periodically, so the results listed in this report may not be from the previous year. Only detected contaminants are included in this report. For a list of all contaminants we test for please contact us. Copies of this report are available upon request by contacting our office.

Water System ID: KY1030292 Manager: Holly McGrath-Rosas
CCR Contact: Holly McGrath-Rosas Phone: 606-784-5538
Mailing Address: 135 South Wilson Ave, Morehead, KY 40351
Meeting Location and Time: MUPB Office, Last Monday of January, March, May, July, September, and November at 12 noon

In planning for future needs of the community, MUPB constructed a brand new, state-of-the-art treatment plant capable of producing up to 12 million gallons per day. This plant will serve our region for decades to come. We began using this plant on March 26, 2025. In this report there are two tables of data to show compliance: one for our previous plant for January-March 26, 2025 as well as a table showing compliance for the new plant beginning on March 26, 2025

Glossary Terms and abbreviations that may be found in this report.

Maximum Contaminant level (MCL) - the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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. MCLG's 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. MRDLG's 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 2000 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

Other Contaminants

Source Water Contaminants (untreated water)

Cryptosporidium [oocysts/L]	0	TT (99% Removal)	0 (Positive Samples)	9 (No of Samples)	2025	No	Human and animal fecal waste

MUPB tested for Cryptsporidium (Crypto) in our source water and none was detected in the 9 samples analyzed in 2025. The organism is found in surface waters and comes from animal and human waste which enter the watershed. Crypto is eliminated by an effective combination including sedimentation, filtration, and disinfection.

Other Constituents

Turbidity (NTU) TT * Representative Samples	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation	Likely source of Turbidity
Turbidity is a measure of the clarity of the water and not a contaminant	No more than 1 NTU* / Less than 0.3 NTU in 95% of monthly samples	0.092	100	No	Soil runoff

New Plant Data	Average	Range of Detection
Fluoride (added for dental health)	1.0	0.68 to 1.15
Sodium (EPA guidance level = 20 mg/L)	8.2	8.15 to 8.15

New Plant Data	Maximum Allowable Level	Report Level	Range of Detection	Date of Sample
Chloride	250 mg/l	7.4	7.4 to 7.4	Jul-25
Copper	1.0 mg/l	0.011	0.011 to 0.011	Jul-25
Corrosivity	Noncorrosive	-1.6	-1.6 to -1.6	Jul-25
Fluoride	2.0 mg/l	0.84	0.84 to 0.84	Jul-25
Iron	0.3 mg/l	0.106	0.106 to 0.106	Jul-25
Manganese	0.05 mg/l	0.025	0.025 to 0.025	Jul-25
Odor	3 threshold odor number	3	3 to 3	Jul-25
pH	6.5 to 8.5	7.18	7.18 to 7.18	Jul-25
Sulfate	250 mg/l	19.8	19.8 to 19.8	Jul-25
Total Dissolved Solids	500 mg/l	72	72 to 72	Jul-25

Secondary contaminants do not have a direct impact on the health of consumers. They are being included to provide additional information about the quality of the water

Your drinking water has been sampled for a series of unregulated contaminants. Unregulated contaminants are those for which EPA has not established drinking water standards. There are no MCLs and therefore no violations if found. The purpose of monitoring for these contaminants is to help EPA determine where the contaminants occur and whether they should have a standard. MUPB began sampling for these contaminants in 2025, but so far none have been detected. As our customers, you have a right to know that these data available. If you are interested in examining the results, please contact our office during normal business hours.

Glossary (continued)

Parts per quadrillion (ppq) - one part per trillion corresponds to one minute in 2,000,000,000 years, or a single 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 the 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.
This report will not be mailed. Copies are available in our office. If you would like to receive a copy by mail, please contact our office.

Consumer Confidence Report—Old Plant Data Jan - March 26, 2025

Primary Standards—Mandatory Health-Related Standards

Regulated Contaminant Test Results — Morehead Utility Plant Board—PWSID KY1030292

Contaminant [code] (units)	MCL	MCLG	Report Level	Range of detection	Date of Sample	Violation	Likely source of contamination
Inorganic Contaminants							
Barium [1010] (ppm)	2	2	0.019	0.019 to 0.019	Mar-25	No	Drilling Wastes; metal refineries; Erosion of natural resources
Fluoride [1025] (ppm)	4	4	0.91	0.91 to 0.91	Mar-25	No	Water additive that promotes strong teeth
Nitrate [1040] (ppm)	10	10	0.261	0.261 to 0.261	Feb-25	No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits

Other Constituents

Turbidity (NTU) TT * Representative Samples	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation	Likely source of Turbidity
Turbidity is a measure of the clarity of the water and not a contaminant	No more than 1 NTU* / Less than 0.3 NTU in 95% of monthly samples	0.185	100	No	Soil runoff

Old Plant Data	Average	Range of Detection
Fluoride (added for dental health)	0.8	0.6 to 0.93
Sodium (EPA guidance level = 20 mg/L)	8.6	8.64 to 8.64

Old Plant data Secondary Contaminant	Maximum Allowable Level	Report Level	Range of Detection	Date of Sample
Aluminum	0.05 to 0.2 mg/l	0.08	0.08 to 0.08	Mar-25
Chloride	250 mg/l	10.8	10.8 to 10.8	Mar-25
Color	15 Color Units	5	5 to 5	Mar-25
Copper	1.0 mg/l	0.003	0.003 to 0.003	Mar-25
Corrosivity	Noncorrosive	-1.46	-1.46 to -1.46	Mar-25
Fluoride	2.0 mg/l	0.84	0.84 to 0.84	Mar-25
Odor	3 threshold odor number	3	3 to 3	Mar-25
pH	6.5 to 8.5	7.68	7.68 to 7.68	Mar-25
Sulfate	250 mg/l	22.6	22.6 to 22.6	Mar-25
Total Dissolved Solids	500 mg/l	97	97 to 97	Mar-25

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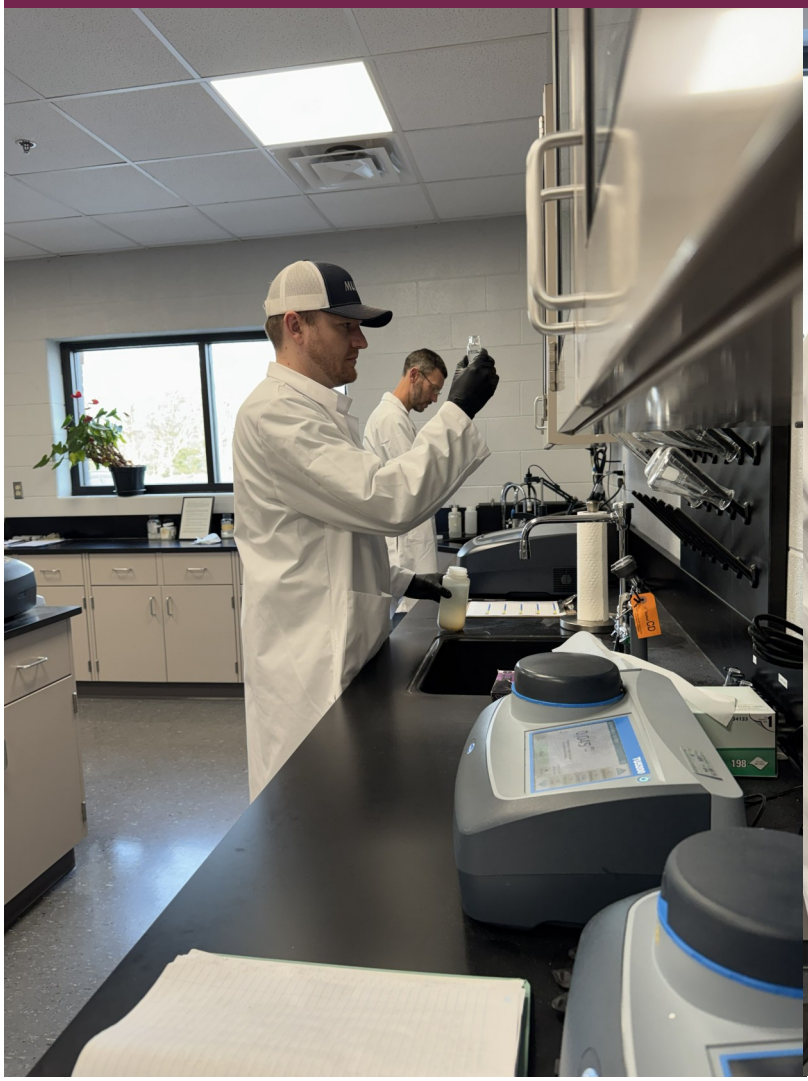
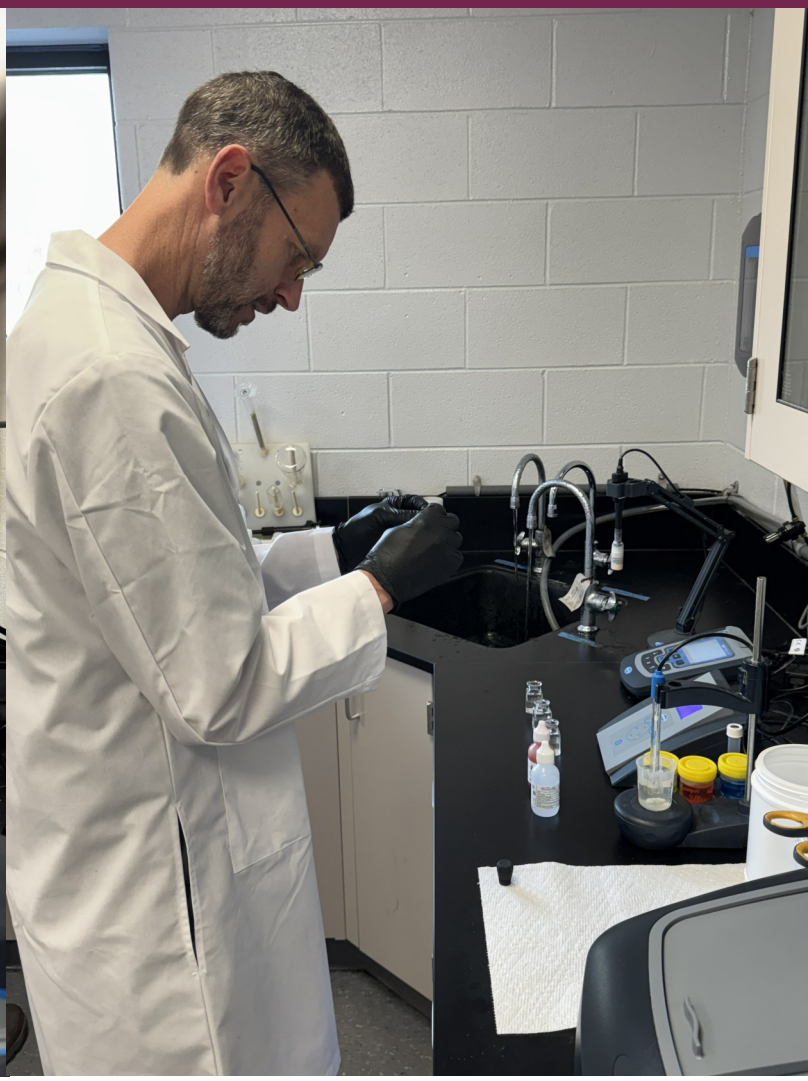
No matter the setting—in the lab or out in the field—our Team meets every environment with resilience, skill, and purpose.





Report any spills, illegal dumping or suspicious activity to the Kentucky Department of Environmental Protection, Emergency Response Branch: 1-800-928-2380

About MUPB

Since 1950, MUPB has been delivering drinking water to the people of Morehead and Rowan County. Throughout that time we have grown into a regional supplier to 7 counties via wholesale purchasers such as Rowan Water, Inc and Bath County Water district. We sell directly to approximately 3500 customers while are wholesale purchasers reach approximately 8000 customers. This results in nearly 40,000 people served in the region.

MUPB employees 45 professionals across its operations which includes staffing for Administration, Drinking Water Treatment, Sewage Treatment, and Water/Sewer/Gas/Storm Maintenance segments.

Our drinking water assets include 8 tanks totaling 4.8 million gallons of storage capacity. A new 12 MGD ultrafiltration water plant. 106 miles of water mains and 8 pumping stations.

Thank you for taking time to read the 2025 Water Quality Report for the Morehead Utility Plant Board. We are proud to be your regional water provider and if you have any questions about this report, your drinking water, or service, please contact MUPB Customer Service Monday to Friday 8 a.m. to 3 p.m. at 606-784-5538.

Morehead Utility Plant Board
135 South Wilson Ave
Morehead, KY 40351
www.mupb.com