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## Hardin County Water District No. 2

Your Water Professionals

# Water Resource

PWSID# 0470175

**SUMMER** 2018

### **Best of the Best:**

#### Kentucky & Tennessee's Best Tasting Water

## Hardin County Water District No. 2 was once again recognized for the Best Tasting Water.

Each year two of our associates, representing water professionals from Kentucky and Tennessee have Best Tasting Water competitions.

In 2017, the District was voted the "best tasting water" at the Kentucky/Tennessee

American Water Works
Association' annual
conference. The District
has won this award before
and we take great pride in
providing the best for our
customers.

The District will now compete nationally at the American Water Works Association annual conference this June. The District has won the Kentucky/Tennessee

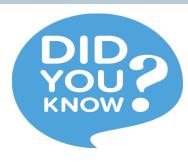


competition and went on to place in the top 5 nationally. Not only are we the best tasting water, we have some of the lowest water rates in Kentucky. Value and Best Tasting is a winning combination!

#### WATER QUALITY REPORT

What is a water quality report? The report is information regarding the contaminants the District tests and monitors in your water. The District is making this information available so you, the consumer, may have a better understanding of the measures we take to ensure that your water is safe. The District conducts routine water sampling and monitoring, along with, an ongoing flushing program to maintain quality water. The District conducts thousands of analyses each year to ensure that we not only meet state and federal standards, but exceed them in the quality of your water. A more detailed explanation and analyses results are located on page 2. Should you have any additional questions, please feel free to contact us at (270) 737-1056 or by emailing us at: questions@hardincountywater2.

### **WATER QUALITY REPORT**



By the time you begin to feel thirsty, your body has already lost more than 1 percent of its total water.

One billion people worldwide do not have access to safe drinking water.

According to the World Water
Development Report (WWDR), many
girls in developing countries cannot
attend school because they are
responsible for gathering domestic
water.

Americans empty 2.5 million plastic water bottles an hour. Each one takes 500 years to decompose.

Bottled water takes anywhere from 1,100 to 2,000 times as much energy to produce as tap water.

In most blind taste-tests, many consumers find that tap water tastes just as good or better than bottled water. Approval is even higher when tap water is served in a fancy bottle.

Combined, the total miles of pipeline and aqueducts in the U.S. and Canada is about one million miles, which is enough to circle the globe 40 times.

Nearly 53% of the population in Fiji doesn't have a clean, safe source of drinking water. Ironically, Fiji is the home of the plant that bottles Fiji Water, one of the most popular brand of bottled water in the U.S.

Source: factretriever.com

#### Do you want to help?

Millions of people are in desperate need of clean water. Please visit organizations, like Water For People, to see how you can help.

## What is the source of my water?

Water is supplied to your home through a network of pipes that originate from one or a combination of two water treatment plants; White Mills and City Springs treatment plants and the Louisville Water Company. The source of water for the City Springs Plant is a combination of surface and groundwater from the Old City Spring, Gaither Spring (Dyer Spring), and four wells, while the White Mills plant utilizes surface water from the Nolin River. Louisville Water operates a surface water treatment plant with an intake on the Ohio River, which is where the water purchased from Louisville Water comes from. In October 2003, the Kentucky Division of Water approved a Source Water Assessment and Protection Plan for Jefferson County. The plan looks at Louisville Water's susceptibility to potential sources of contamination. The plan identified spills of hazardous materials on the Ohio River 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 (areas bordering the Ohio River to the north of our intakes) land use is primarily zoned for residential and agricultural use. Therefore source water contamination risks are relatively low. Louisville Water maintains an Emergency Preparedness and Disaster Services Plan to address potential contamination risks. To view the entire Source Water Assessment and Protection Plan, contact Jeremy Raney at 502-569-3600 x2328. Hardin County Water District No. 2 has realized the susceptibility of contamination of the sources and has developed Source Water Action Plans (SWAP), which include an analysis of susceptibility of the water supply to contamination. The plans have been approved by the Division of Water and are available for inspection at Hardin County Water District No. 2's Customer Service Center located at 360 Ring Road in Elizabethtown.

Areas recognized as high concern consist of bridges, culverts, row crops, and major highways. The possibility for a potential chemical spill, or hazardous material accidentally spilling into the water source due to a vehicle accident or runoff from the nearby row crops, creates a susceptibility ranking of high. Although there are areas of high concern, the susceptibility analysis indicates that the overall susceptibility to contamination is generally moderate.

For more information about the Source Water Action Plan or how you can help to protect our water supply, contact our office at (270) 737-1056.

## Why are there contaminants in my 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). To understand the possible health effects described for many of the regulated constituents, a person would have to drink 2 liters of water everyday for a life time at the MCL (Maximum Contaminant Level) to have a one in a million chance of having the described health effects.

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.

## WATER QUALITY REPORT

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater 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 stormwater runoff, and residential uses.

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

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

## Is our water system meeting other rules that govern our operations?

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.

Do you have more questions?
Please contact Scott Clark,
Customer Service Manager
at 270.737.1056 or e-mail your question to:
sclark@hardincountywater2.org

FDA regulations establish limits for contaminants in bottled water, which must provide that same protection for public health.

## Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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).

For more information about your drinking water please call our Customer Service Department at (270) 737-1056. Este informe contiene infromacion muy importante. Traduzcalo o hable con alguien que lo entienda bien. (Translated: This report contains very important information. Translate or ask someone who understands it very well.)

#### How can I get involved?

The District Board of Commissioners meet on the third Tuesday of each month at 4:00 pm. The meetings are held at our Customer Service Center located at 360 Ring Road. Please feel free to participate in these meetings.



# Have your water bill drafted from your bank account, it saves, it's easy, & it's FREE!

EASY PAY (bank draft):   e-Bill:
I (we) hereby authorize Hardin County Water District #2 to initiate debit entries to my (our) account indicated below at the depository named below to debit the same to such account.
Name
District Acct. #
Address
City
State Zip
Phone
*Checking Acct. #
Routing #
Email
Signature
Signature
Date

\*Note: Please enclose a voided check or copy of a check for our records. Please verify your checking account number with your bank. When calling your bank let them know you are signing up for Bank Draft, because some banks will add or subtract numbers on your account for automated drafts. This will insure proper payment.

### **WATER QUALITY ANALYSES**

Hardin County Water District No. 2

AI# 1674, PWS ID# KY0470175

The data in this report, unless otherwise noted, is from 2017 and is the most recent testing done in accordance with administrative regulation 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. Unless otherwise noted, the report level is the highest level detected.

		REGULA	TED SUBSTANC	CES - TREA	TMENT PLAN	rs ·
WHITE MILLS TREA	TMENT PLANT	•				
Substances (units)	MCL	MCLG	Range of Detections	Highest Le Detected		
INORGANIC						
Fluoride (ppm)	4	4	one measure	0.5	YES	Water additive which promotes strong teeth.
Barium (ppm)	2	2	one measure	0.029	YES	Drilling waste, metal refineries, erosion of natural deposits.
Arsenic (ppm)	10	n/a	one measure	0.3	YES	Natural erosion, runoff from orchars or glass and electronics production wastes.
Nitrate (ppm)	10	10	one measure	1.8	YES	Runoff from fertilizer use, leaching from septic tanks, erosion of natural deposits.
Turbidity (NTU)	TT 100% ≤ 1.0 and 95% ≤ 0.3	n/a	100% ≤ 0.3	0.04	YES	Soil runoff
ORGANIC						
Total Organic Carbon (Removal Ratio)	TT(≥ 1.00)	n/a	1.07 - 3.51 Monthly Ratios	Lowest RAA	2.09 YES	Naturally present in the environment.

Monthly ratio is the % TOC removal achieved to the % TOC removal required. Compliance with the treatment technique (TT) is based on a running annual average (RAA) of the monthly ratios. A minimum annual average ration of 1.00 is required.

OLTY ORDINGO TOP	ATREENT DI ANI	_				
CITY SPRINGS TRE	ATMENT PLAN	T				
Substances (units)	MCL	MCLG	Range of Detections	Highest Le Detected		e Likely source of contamination
INORGANIC						
Fluoride (ppm)	4	4	one measure	0.5	YES	Water additive which promotes strong teeth
Barium (ppm)	2	2	one measure	0.045	YES	Drilling waste, metal refineries, erosion of natural deposits.
Nitrate (ppm)	10	10	one measure	0.9	YES	Runoff from fertilizer use, leaching from septic tanks, erosion of natural deposits.
Turbidity (NTU)	TT 100% ≤ 1.0 and 95% ≤ 0.3	n/a	100% ≤ 0.3	0.04	YES	Soil runoff
ORGANIC						
Total Organic Carbon			1.0 - 2.67 Monthly		\/50	
(Removal Ratio)	TT(≥ 1.00)	n/a	Ratios	Lowest RAA	1.57 YES	Naturally present in the environment.

Monthly ratio is the % TOC removal achieved to the % TOC removal required. Compliance with the treatment technique (TT) is based on a running annual average (RAA) of the monthly ratios. A minimum annual average ration of 1.00 is required.

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. Hardin County Water District No. 2 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 ANALYSES

Hardin County Water District No. 2

AI# 1674, PWS ID# KY0470175

Substances (units)	MCL	MCLG	Range of Detections	Highest Level Detected	Compliance Achieved	Likely source of contamination
NORGANIC						
Fluoride (ppm)	4	4	one measure	0.7	YES	Water additive which promotes strong teet
Nitrate (ppm)	10	10	1.0 - 1.3	1.3	YES	Runoff from fertilizer use, leaching from septic tanks, erosion of natural deposits.
Furbidity (NTU)	TT $100\% \le 1.0$ and $95\% \le 0.3$	n/a	100% ≤ 0.3	0.08	YES	Soil runoff
ORGANIC						
Гotal Organic Carbon Removal Ratio)	TT(≥ 1.00)	n/a	0.72 - 1.85	Lowest RAA 1.42	YES	Naturally present in the environment.
Monthly ratio is the % TOC reaverage (RAA) of the monthle					treatment tech	nique (TT) is based on a running annual
RADIONUCLIDES						
Combined Radium (pCi/L) measured as Radium-226	_				VE0	
<u>\$</u> 228)	5	0	one measure	1.3	YES	Erosion of natural deposits
Gross Alpha (excluding Radon and Uranium) (pCi/L)	15	0	one measure	BDL	YES	Erosion of natural deposits
	F	REGULATE	D SUBSTANC	ES - DISTRIBUT	ION SYSTE	VI
Substances (units)	MCL	MCLG	Range of Detections	Highest Level Detected	Compliance Achieved	Likely source of contamination
Fotal Trihalomethanes (ppb) Stage 2 DBPR)	80	n/a	19 - 49	39 (LRAA)	YES	Byproduct of drinking water disinfection
laloacetic Acids (ppb) Stage 2 DBPR)	60	n/a	18 - 49	37 (LRAA)	YES	Byproduct of drinking water disinfection
Chloramines (ppm)	MRDL = 4	MRDLG=4	1.1 - 3.99	2.28 (RAA)	YES	Water additives used to control microbes
otal Coliform Bacteria % positive)	5%	0	N/A	1.21%	YES	Naturally present in the environment
		REGUI AT	ED SUBSTAN	CES - AT CUSTO	MERS TAP	
Substances (units)	AL	MCLG	Range of Detections	90th Percentile		Likely source of contamination
Copper (ppm) samples exceeded AL	AL 90% ≤ 1.3	1.3	0.0105 - 0.271	0.126	YES	Corrosion of household plumbing systems
ead (ppm) I samples exceeded AL	AL 90% ≤ 15	0	2 - 27	8	YES	Corrosion of household plumbing systems

#### **CRYPTOSPORIDIUM**

Lead and copper results are from 2015 and the most recent required testing done in accordance with the regulation.

In 2017, Hardin County Water District No. 2 monitored for the presence of cryptosporidium in the source water for both City Springs and White Mills Treatment plants. The results indicated low levels of cryptosporidium in 1 sample out of 9 collected at City Springs and in 2 samples out of 9 collected at White Mills. In 2017, Louisville Water analyzed 6 samples from the Ohio River and detected low levels of cryptosporidium in 2 out of 6 samples. Levels ranged from 0 oocysts/L to 0.190 oocysts/L. Cryptosporidium is a tiny intestinal parasite often found in surface waters which can cause flu-like sypmtoms if ingested. Hardin County Water District No. 2 and Louisville Water optimizes the treatment process to help ensure removal.

#### **DEFINITIONS**

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.

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.

MRDL – Maximum Residual Disinfection Level: the highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG – Maximum Residual Disinfectant Level Goal: 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 disinfectant to control microbial contaminants.

TT – Treatment Technique: a required process intended to reduce the level of a contaminant in drinking water.

AL – Action Level: the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Picouries per liter (pCi/L) – a measure of the radioactivity in water.

PPM - Parts Per Million

PPB - Parts Per Billion

NTU - Nephelometric Turbidity Unit

RAA – Running annual average

LRAA - Locational running annual average

BDL – Below Detection Levels: Laboratory analysis indicates that the contamiant is not present.

## 24/7 PAYMENTS

### Payment Options To Meet Your Needs.

#### **Automated Telephone Service**

Hardin County Water District No. 2 has an automated telephone line. Just by calling 270-737-1056 you can do the following:

- Get account balance and last payment information
- Make payments using electronic checks, credit and debit cards.
- Or speak to one of our customer service professionals.

#### Access your information online

Hardin County Water District No. 2 now offers online account information and bill payment. You may now go online to:

- · Get your account balance
- View your payment history
- View your bill details
- Request services
- And pay your bill using electronic check, debit and credit card It's fast and easy!



#### **HELPFUL HINTS**

## Ways to use water and other ingredients instead of harsh chemicals

We all know that harsh chemicals and the environment are not a good mixture. Those chemicals can also be hard on your septic system and can be quite costly. Here are some helpful tips that are better for the environment and your wallet.

- All-Purpose Cleaner: Mix 1/2 cup vinegar and 1/4 cup baking soda (or 2 teaspoons borax) into 1/2 gallon water. Store and keep. Use for removal of water deposit stains on shower stall panels, bathroom chrome fixtures, windows, bathroom mirrors, etc.
- Bathroom mold: Mold in bathroom tile grout is a common problem and can be a health concern. Mix one part hydrogen peroxide (3%) with two parts water in a spray bottle and spray on areas with mold. Wait at least one hour before rinsing or using shower.
- Disinfectant: Mix 2 teaspoons borax, 4 tablespoons vinegar and 3 cups hot water. For stronger cleaning power add 1/4 teaspoon liquid soap. Wipe on with dampened cloth or use non-aerosol spray bottle. (This is not an antibacterial formula. The average kitchen or bathroom does not require antibacterial cleaners.)



## **LOUISVILLE WATER**OUR NEXT SOURCE IS IN PLACE

Hardin County Water District No. 2 accepted bids in February 2016 for two projects that combined make up the Louisville Water Connection project. The purpose of the Louisville Water connection is to provide the necessary infrastructure to move large volumes of water from the Louisville Water Company (LWC) into the heart of the HCWD#2 system. The additional water will supplement the existing supplies for the District and help provide adequate volumes for current and future demands.

The first of the two projects consist of 42,000 feet of 24" ductile iron transmission main that stretches from the Rolling Fork River on Hwy 434 to an existing 24" connection on Shepherdsville Road. The pipeline project attracted 14 bidders with the low bid coming in at 6 million dollars from Hubert Excavating. Hubert Excavating began construction in June of 2016.

The second project consist of a pump station located on Hwy 434 nearly two miles south of the Rolling Fork River. Once completed the pump station will have a pumping capacity of 5 million gallons per day with a future capability of pumping 10 million gallons per day. This project attracted 7 bidders with the lowest bid coming in at 1.57 million dollars from Dugan & Meyers Construction Company. Construction of the pump station also began in June of 2016.

The pipeline and pump station were both put into service at a ceremony in May of 2017. The original Letter of Intent was signed in 2008. The entire effort took 9 years of work to complete. Now, as our community continues to grow, future water demand will be met by increasing volumes purchased through the Louisville Water Connection.

In 2017, the Louisville connection accounted for 8% of overall water volume. This percentage will grow to about 18% by 2021.

Despite the cost of the project and the fact that LWC water prices are higher than the District's cost of production, the District has maintained the same residential water rates since 2007. Currently, the District's water rates are 26% below the State Public Service Commission average. These prices will need to adjust in the future as more water is purchased from LWC.

Until then, the District will still provide the Best Tasting Water in Kentucky at low prices, and have plenty of capacity to meet the demands of the future.

### **GROWING**

## To meet the needs of our community.

October 31, 1997 seems like a lifetime ago when the District relocated our offices from the small, outgrown office on Bardstown Road to our current location here at 360 Ring Road. Very few employees still remain and remember the lack of space and antiquated facilities we once thought was normal. In 1997 the District had 11,000 connections and 30 or so employees. Back then, most thought that 360 Ring Road would be a long, lasting if not permanent location.

Fast forward to 2018. The District now has over 28,000 connections and a staff of 80 employees. With great foresight, the Board of Commissioners seized the opportunity to buy an existing building directly across from our current location in 2016. This building and acreage is capable of housing our entire operation and has additional room for growth well into the future. The District is working with an architectural firm to help us maximize the size to better serve our customers.

24/7 Payment Options
Check them out at:
www.hardincountywater2.org



# 5 amazing ways water affects the brain

#### Your brain will work faster

Your brain needs the right amount of hydration to work correctly. The cells in this organ need a delicate, precise balance between water and other elements to work like it should.

#### You'll increase your concentration

People don't usually notice dehydration. However, your brain is the first to realize this. You lose your attention. Your brain conserves its resources. Your memory loses its agility. It becomes more difficult to concentrate and you don't react as quickly to stimuli.

#### It helps balance your mood and emotions

Your emotions aren't only effected by seeing water. Your emotional world is also affected by drinking water. This happens very easily: you increase your brain's temperature, get rid of toxins and dead cells.

#### Drinking water will help you sleep better

Even if it's just half a glass, drinking it before going to bed helps you get a much healthier sleep. Water increases the blood flow to your brain. This increases your brains oxygenation and hydration. It also calms your brain.

#### Your memory will improve

No matter how slight your dehydration is, it instantly causes reduced cognitive agility: this makes it harder to memorize things and make long term memories

Source: steptohealth.com

# LOOK FOR LEAKS Saving our most valuable resource

Earn a credit on your bill, details inside



The District is looking....for leaks. We have technicians that are checking our main lines and visiting meter boxes as part of a District wide effort of leak investigation. Water leaks, even the smallest, add up quickly. The District has surveyed approximately 1/3 of the system and will continue this effort until all the District's 1000 miles of line and 28,000 services are surveyed. So far, the majority of leaks found around meter boxes have been customer leaks. We notify these customers so they

can make repairs and lower their water bill, but we also need your help. We are asking customers to be on the lookout for water leaks. Leaks can show up almost anywhere (in your front or back yard, along the road or in the middle of a field). We ask that, if you are out during your normal activities and see either water on top of the ground or a very soft spot of ground, please give us a call. More importantly, you will have done your part in conserving our most valuable resource. Together we can make a big difference.



Visit us on the web at:
www.hardincountywater2.org



WATER QUALITY REPORT INSIDE