

GET BACK TO THE TAP

Louisville Water calls its drinking water Louisville pure tap® to promote the quality, reliability and value of tap water.



Why should you get back to the tap? Louisville pure tap® is high quality, great tasting and, costing less than a penny for 66 glasses, it's a good deal. Plus, choosing tap water reduces single-use plastic bottle waste.

Louisville Water provides re-usable bottles at venues throughout the service area. Get spotted with your



Louisville pure tap® bottle and get a card to redeem a new "Why Louisville pure tap®" t-shirt. Don't have a bottle? We'll send you one for free, while supplies last. Call 502.569.3600 and ask for Public Information or send an email to puretap@lwcky.com.

WATERWORKS MUSEUM

Louisville Water is in the midst of restoring the interior of our original pumping station. Constructed between 1856 and 1860, the building housed the Cornish steam engines and boilers for the original water works. The station and the Water Tower are National Historic Landmarks. Since the engines were removed in 1910, the building has been a garage, a research institute and more recently space for the Louisville Visual Art Association. The Association relocated in late 2012 and we were honored the group recognized our partnership and commitment to the arts community.



The restoration includes structural repairs and removing layers of paint, staircases, closets and ceilings that were added over the past 60 years.

We are also highlighting our history with the installation of the "WaterWorks Museum." This permanent history display will include artifacts, photos and film that tell the history of how water has worked in this community for over 150 years.

The restoration will be complete and the museum will open in the fall of 2013. For more information, visit LouisvilleWater.com. [W](#)

THE SOURCE

Louisville Water Company is the public water supplier of Louisville Metro and parts of Bullitt and Oldham Counties. The Ohio River is the source for your drinking water. Louisville Water operates two surface water treatment plants with intakes on the Ohio River. 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



View this report online at LouisvilleWater.com.

QUESTIONS ABOUT THIS REPORT?

Contact Kelley Dearing Smith, Public Information Officer, by phone at 502.569.3695 or send an email to ksmith@lwcky.com.

CUSTOMER INPUT

Our Customer Advisory Council meets bimonthly. The Board of Water Works meets the third Tuesday of each month at 12:30pm at 550 South Third Street in Louisville.

PUBLIC INFORMATION

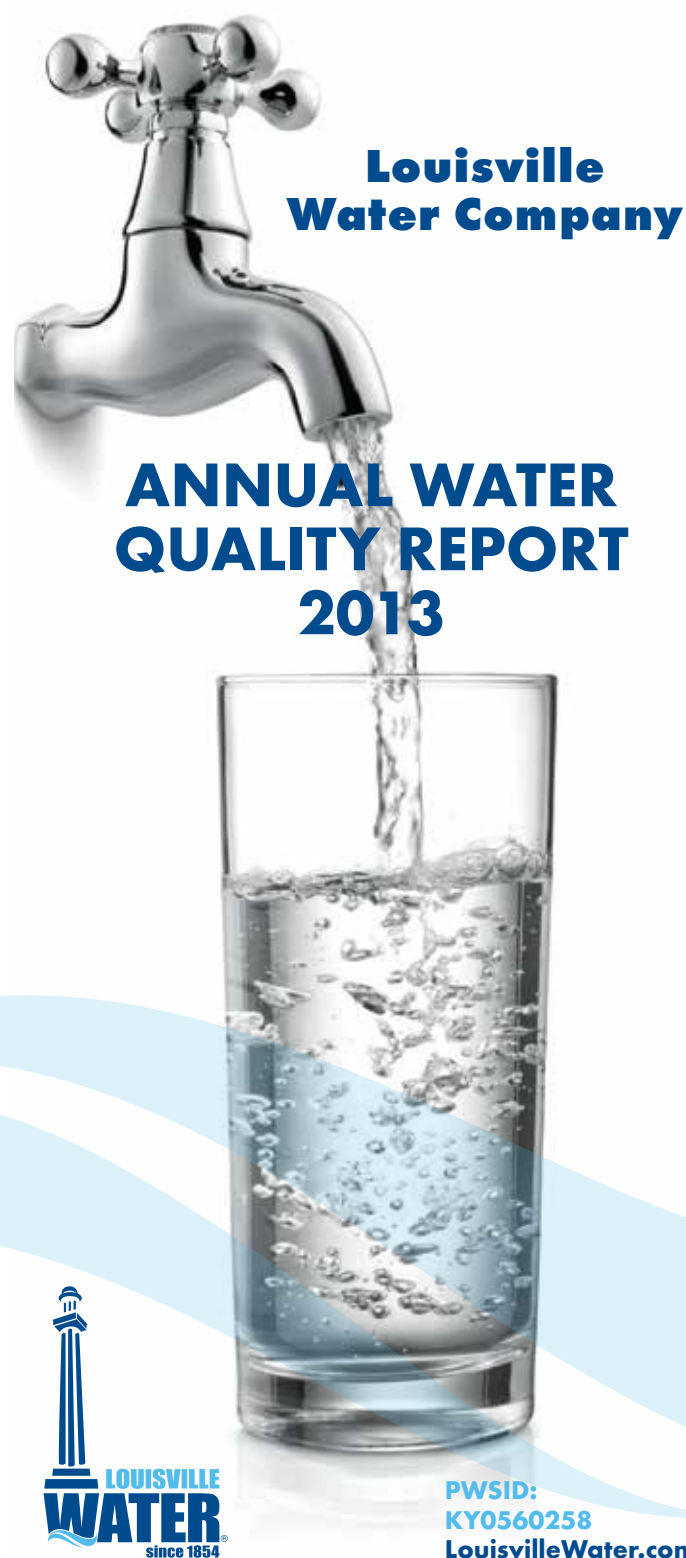
Louisville Water provides tours, education programs and guest speakers. For more information, email publicinfo@lwcky.com or call 502.569.3600.

ACCOUNT SERVICES

Access your account online at LouisvilleWater.com and by phone at 502.583.6610 or toll free at 888.535.6262. To speak with a Customer Care Representative, please call during business hours, Monday-Friday, 8am - 7pm. Be sure to have your account number handy.

WALK-IN CUSTOMER SERVICE

| | |
|--|--|
| Monday - Friday 8am - 5pm Corporate Headquarters 550 South Third Street Louisville, KY 40202 | Monday - Friday 8am - 1pm & 1:30pm - 4pm Bullitt County Office Shepherdsville Govt. Center 634 Conestoga Parkway Shepherdsville, KY 40165 |
|--|--|



Download our free mobile application from louisvilleky.gov/mobile apps.



Find us on Facebook at LouisvilleWater.com and at Loupuretap.com.



Follow us on Twitter at LouisvilleWater.com and at Loupuretap.com.



PWSID:
KY0560258
LouisvilleWater.com

ABOUT YOUR DRINKING WATER

Louisville Water Company's Annual Water Quality Report informs you about your drinking water—Louisville pure tap®. Louisville Water prepares this report to meet Environmental Protection Agency (EPA) requirements under the Safe Drinking Water Act Amendment. Scientists in our EPA-certified laboratory conduct over 200 tests a day to ensure Louisville pure tap® is safe and high quality. It's important for you to know that your drinking water meets and surpasses the EPA's strict health standards.

Louisville Water provides Louisville pure tap® to over 850,000 people in Louisville Metro and parts of Bullitt, Nelson, Oldham, Shelby and Spencer counties every day.

RIVER TO FAUCET

Louisville Water has two treatment plants on the Ohio River. Each day, the B.E. Payne Water Treatment Plant, the first plant to have a combined tunnel and collector-well system to draw river water through the riverbank—also known as riverbank filtration, can supply up to 60 million gallons of Louisville pure tap®. The Crescent Hill Filtration Plant can supply up to 180 million gallons of Louisville pure tap®. The drinking water travels through a network of underground pipeline to your tap.

MODERNIZING THE CRESCENT HILL FILTRATION PLANT

The four-year project to rebuild the 103-year old Crescent Hill Filtration Plant is nearing completion. Renovation includes upgrading the rapid sand filters, installation of a filter cleaning system and water storage tank, renovation of the softening basins and installation of an on-site chlorine generation facility. As we rebuild the plant, we are looking ahead to the next 100 years. Specifically, evaluation of riverbank filtration as the next advanced treatment solution for the plant is underway.

address potential contamination risks. Contact Keith Coombs at 502.569.3682 to view the Source Water Assessment and Protection Plan.

Louisville Water also draws water through the aquifer with riverbank filtration wells at the B.E. Payne Water Treatment Plant. The Kentucky Division of Water approved Louisville Water's Wellhead Protection Plan (WHPP) in 2004. The goal is to safeguard groundwater feeding into the wells from contamination within the Wellhead Protection Area (WHPA) in Prospect. Louisville Water continually updates the plan. New residents and businesses in the WHPA receive information about the WHPP and educational materials. The information is also available at LouisvilleWater.com. [W](#)

BEYOND THE TAP

The Louisville pure tap® to GO unit can be spotted at many local outdoor events. This drinking water station was developed by Louisville Water engineers to provide ice-cold drinking water at the pull of a handle. Louisville Water taps its infrastructure and pulls Louisville pure tap® from the water main. Then, the water travels through a cooler with coils and ice that chills the water. Pull the handle, fill a bottle or cup and enjoy! It's ideal for events with 500 or more participants.

ONLINE

You can connect with us in a variety of ways online. Find out what we have to offer, where you can find us in the community, fun facts, experiments with water, and more.

LouisvilleWater.com
Louisvillepuretap.com

[Facebook.com/LouisvilleWater](https://www.facebook.com/LouisvilleWater)
[Facebook.com/Loupuretap](https://www.facebook.com/Loupuretap)

[Twitter.com/LouisvilleWater](https://twitter.com/LouisvilleWater)
[Twitter.com/Loupuretap](https://twitter.com/Loupuretap)



Regulated Contaminants - Substances subjected to a Maximum Contaminant Level (MCL), Action Level (AL) or Treatment Technique (TT). These standards protect drinking water by limiting the amount of certain substances that can adversely affect public health.

REGULATED SUBSTANCES - TREATMENT PLANTS

| Substance (units) | MCL | MCLG | Crescent Hill Filtration Plant (CHFP) | | | B. E. Payne Water Treatment Plant (BEP) | | | Compliance Achieved | Typical Source of Contamination (for more details, visit www.epa.gov/safewater/hfacts.html) |
|-------------------|-----------------------------|------|---------------------------------------|------------------------|---------------------|---|------------------------|---------------------|---------------------|--|
| | | | CHFP Average | Highest Level Detected | Range of Detections | BEP Average | Highest Level Detected | Range of Detections | | |
| INORGANIC | | | | | | | | | | |
| Fluoride (ppm) | 4 | 4 | 0.99 | 1.09 | 0.83 - 1.09 | 0.98 | 1.10 | 0.84 - 1.10 | YES | Additive that promotes strong teeth. Fertilizer & aluminum factories. Erosion of natural deposits. |
| Nitrate (ppm) | 10 | 10 | 1.0 | 1.1 | 0.8 - 1.1 | 0.2 | 0.3 | 0.1 - 0.3 | YES | Runoff from fertilizer & leaching from septic tanks. Erosion of natural deposits. |
| Turbidity (NTU) | TT 100% ≤ 1.0 and 95% ≤ 0.3 | n/a | 0.05 | 0.09 (100% ≤ 0.3) | 0.02 - 0.09 | 0.05 | 0.11 (100% ≤ 0.3) | 0.03 - 0.11 | YES | Soil runoff. |

ORGANIC

| | | | | | | | | | | |
|--------------------------------------|-------------|-----|------|-------------------------------|-------------|------|-------------------------------|-------------|-----|--|
| Atrazine (ppb) | 3 | 3 | BDL | 0.24 | BDL - 0.24 | BDL | BDL | BDL | YES | Runoff from herbicide used on row crops. |
| Total Organic Carbon (Removal Ratio) | TT (≥ 1.00) | n/a | 1.35 | Lowest RAA Removal Ratio 1.30 | 0.65 - 1.93 | 1.00 | Lowest RAA Removal Ratio 1.00 | 1.00 - 1.00 | YES | Naturally present in the environment. |

Total Organic Carbon (TOC) occurs in source waters from natural substances such as decayed leaves and animal wastes. It can combine with chlorine used in disinfection to form disinfection byproducts. TOC is measured in parts per million (ppm) but compliance with the treatment technique (TT) is based on a running annual average (RAA) of the monthly ratios of the percent TOC treatment removal compared to the required removal. A minimum annual average ratio of 1.00 is required. In 2012, Louisville Water Company met the TOC treatment technique requirement.

REGULATED SUBSTANCES - DISTRIBUTION SYSTEM

| Substance (units) | MCL | MCLG | Annual Average | Highest Level Detected | Range of Detections | Compliance Achieved | Typical Source of Contamination (for more details, visit www.epa.gov/safewater/hfacts.html) |
|--|-----------------------------|-----------|----------------|------------------------|---------------------|---------------------|--|
| Total Coliform Bacteria (% positive) | ≤ 5% positive samples/month | 0 | 0.03% | 0.36% | 0 - 0.36% | YES | Naturally present in the environment. |
| Total Trihalomethanes (ppb) (Stage 1 DBPR) | 80 | n/a | 15.4 (RAA) | | 9.9 - 22.2 | YES | Byproduct of drinking water disinfection. |
| Haloacetic Acids (ppb) (Stage 1 DBPR) | 60 | n/a | 8.8 (RAA) | | 7.4 - 10.6 | YES | Byproduct of drinking water disinfection. |
| Total Trihalomethanes (ppb) (Stage 2 DBPR) | 80 | n/a | | 31.4 (LRAA) | 14.9 - 32.6 | YES | Byproduct of drinking water disinfection. |
| Haloacetic Acids (ppb) (Stage 2 DBPR) | 60 | n/a | | 23.3 (LRAA) | 4.8 - 27.9 | YES | Byproduct of drinking water disinfection. |
| Chloramines (ppm) | MRDL = 4 | MRDLG = 4 | | 2.7 (RAA) | 1.2 - 3.4 | YES | Water additive used to control microbes. |

REGULATED SUBSTANCES - AT CUSTOMER'S TAP


| Substance (units) | AL | MCLG | Highest Single Result | # Results Exceeding AL | 90th Percentile | Range of Detections | Compliance Achieved | Typical Source of Contamination (for more details, visit www.epa.gov/safewater/hfacts.html) |
|-------------------|--------------|------|-----------------------|------------------------|-----------------|---------------------|---------------------|--|
| Copper (ppm) | AL 90% ≤ 1.3 | 1.3 | 0.53 | 0 | 0.24 | BDL - 0.53 | YES | Corrosion of household plumbing systems. Erosion of natural deposits. |
| Lead (ppb) | AL 90% ≤ 15 | 0 | 29.0 | 5 | 12.0 | BDL - 29.0 | YES | Corrosion of household plumbing systems. Erosion of natural deposits. |

Lead and copper results are from 2011 and the most recent required testing done in accordance with the regulation. All samples were taken at customer's taps meeting lead and copper plumbing and water holding time criteria. Fifty-two (52) sites were tested, five (5) samples exceeded the Action Level for lead; zero (0) exceeded the Action Level for copper.

Cryptosporidium: Louisville Water monitors the Ohio River for *Cryptosporidium*, a tiny intestinal parasite often found in surface waters. *Cryptosporidium* can cause flu-like symptoms if ingested. In 2012, Louisville Water analyzed 24 Ohio River samples. We detected low levels of *Cryptosporidium* in three samples with levels ranging from 0 oocysts/L to 0.381 oocysts/L. These detections were within ranges typically measured in the Ohio River. Louisville Water optimizes its treatment processes to help ensure removal.

ENHANCING WATER TREATMENT

The Kentucky Division of Water allowed Louisville Water a one year extension to fully implement the Long Term 2 Surface Water Treatment Rule (LT2) for the Crescent Hill Filtration Plant. This new water quality regulation required Louisville Water to add two additional treatment barriers. The company chose to do three based on our history of exceeding regulations. Louisville

Water now has three treatment barriers in place, which meet the LT2 requirements. The extension allowed time to complete the third treatment barrier. 

MESSAGE FROM THE EPA

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 Drinking Water Hotline at 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, which 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; and

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


*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 and Center 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 Drinking Water Hotline at 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 at 800.426.4791 or at <http://www.epa.gov/safewater/lead>.

PREVENTING TOOTH DECAY

The Kentucky State Health Department requires all public water suppliers serving more than 1,500 people to fluoridate drinking water at a level of one part per million (ppm),

to prevent tooth decay. According to the EPA and the US Department of Health and Human Services, the goal of fluoride treatment is to add enough fluoride to prevent tooth decay while avoiding the unwanted health effects from too much fluoride. 



Smile Kentucky! promotes drinking fluoridated tap water for a healthy smile. Louisville Water is a community partner of Smile Kentucky! Learn more at SmileKentucky.com.

ADDITIONAL WATER QUALITY DATA

Alkalinity (as CaCO₃) - 73 mg/L
pH - 8.2 Standard Units (SU)
Calcium (as Ca) - 48 mg/L
Magnesium (as Mg) - 7 mg/L
Sodium (as Na) - 33 mg/L
Sulfate - 74 mg/L
Bicarbonate (as CaCO₃) - 73 mg/L
Chloride - 38 mg/L
Hardness (as CaCO₃) - 144 mg/L (8.4 grains/gallon)

Data is an average of Crescent Hill Filtration Plant and B.E. Payne Water Treatment Plant.

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 pamphlet contains important information about your drinking water. Please have this information translated.)

TABLE DEFINITIONS

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

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

DBPR: Disinfection By-Products Rule.

L: Liter.

LRAA: Locational Running Annual Average.

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.

mg/L: Milligrams per liter or parts per million, ppm.

MRDL: Maximum Residual Disinfectant Level. 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.

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 disinfectants to control microbial contaminants.

n/a: Not applicable. Does not apply.

NTU: Nephelometric Turbidity Unit. A measure of the clearness or clarity of water. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

ppb: Parts per billion or micrograms per liter, µg/L.

ppm: Parts per million or milligrams per liter, mg/L.

RAA: Running Annual Average.

TOC: Total Organic Carbon.

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

µg/L: Micrograms per liter or parts per billion, ppb.