

23. SYSTEM FLUSHING 2023 ANNUAL REPORT- FLUSHING EXPLANATION

Fleming County Water Association is a distribution system only. We purchase 100% of our water.

We purchase the bulk of our water from Greater Fleming County Regional Water Commission, (GFCRWC). This water is groundwater from wells along the Ohio River, which has many natural minerals including calcium. The water has a hardness of 265-270 on average testing.

Greater Fleming County Regional Water Commission came online in 2004, and Fleming County Water Association started purchasing water from GFCRWC. Before this source was available, Fleming County Water experienced water shortages, especially during times of drought. While GFCRWC provided an abundance of water availability, the calcium and hardness causes an issue with leaving a film and calcium build up on appliances such as coffee makers, hot water heaters, faucets, washing machines, etc. While hardness and calcium is not a health issue, it does become a nuisance for our customers. (see attached Letter from KY Division of Water in 2006).

Since 2006, the Kentucky Division of Water has required us to flush our "Dead End" Lines in our system on a MONTHLY Basis. This is checked by the Division of Water each year during inspection. This flushing helps keep the water fresher which decreases the calcium build up for our customers, especially in the outlying areas of our system. This has been a part of our normal monthly operations since 2006.

The only action we can take to reduce the water usage is to reduce the amount we flush during high sales volume months. For example, when we have a high water usage month, such as during a cold spell when customers allow their faucets to run to reduce freezing risk, or during a high usage summer month when it is hot and dry; we will reduce the amount we flush since the water usage is increased.

This flushing is necessary to provide quality water to our customers, and has been in place since 2006.



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HARD WATER CREATES A NUISANCE FOR MANY KENTUCKIANS
Not seen as a health problem

FRANKFORT, Ky. (March 27, 2006) – “Hard” water is high in dissolved minerals, specifically calcium and magnesium carbonates. It is not a health risk – calcium actually is important for healthy bones and teeth – but can be a nuisance because minerals build up on fixtures and soap and detergent don’t work as well.

Many Kentuckians depend on ground water – wells and springs – which typically is harder than surface water because it moves through rocks and soils rich in calcium carbonate. Surface waters – lakes and streams – are less susceptible but not immune and are prone to hardness in cold weather and periods of drought.

With hard water, calcium particles can form in water heaters and dishwashers. Deposits can plug strainers on dishwashers and faucets and leave a white residue on dishes and silverware. Drip-brewed coffee can have an oily film. Hard water can be “softened” at a water treatment plant, but at added cost, ultimately resulting in higher water rates.

One type of chemical – a blended polyphosphate – can change water hardness to a form that does not readily form particles. It also is a “cleaner” that will strip deposits from distribution lines. To get the distribution system acclimated to the polyphosphate, the chemical is introduced at a low level and slowly increased – a process lasting six to nine months. If the system is not properly flushed, deposits can end up in the home.

Customers can reduce hard-water problems at home by keeping the water heater temperature below 120 degrees or by installing a home water-softening unit.