



FAQ – WATER HARDNESS

Q: WHAT IS WATER HARDNESS?

A. Water hardness is the measurement of the naturally occurring calcium and magnesium minerals dissolved in water. The more calcium and magnesium in the water, the higher the hardness is. According to the US Geologic Survey, more than 85 percent of the United States has hard water. Historically, mineral-laden water was called “hard” because the minerals made it difficult (“hard”) to lather soap.

Q. WHERE DO THE HARD WATER MINERALS COME FROM, AND WHY HAS IT CHANGED?

A. Flood damage to our water intake facilities in Left Hand Canyon forced us to use water stored in two reservoirs. This stored water has a higher mineral content than our usual creek flow source.

Q: WILL THESE CHANGES TO OUR WATER HARDNESS BE PERMANENT?

A. The flooding has produced changes to our water supply, some of which we may not even be aware of for some time. At this time we anticipate that the hardness level in our water supply should start decreasing once we are able to access water directly from Left Hand Creek. However, there have likely been changes to the creek due to scouring during the flood and we are already seeing more sediment being transported downstream than in the recent past. It may take some time for the overall level of hardness to return to what would have been “normal” prior to the flood. We will continue to monitor the creek water at this time and even more so when the repairs to the intake structure are complete and will post additional information as it becomes available.

Q. IS HARD WATER SAFE?

A. Yes, hard water is safe for drinking, cooking, and other household uses. Hard water can be nuisance in terms of creating white residue and making it harder to create soap lather, but it is not dangerous. Calcium and magnesium are essential nutrients that do not pose a public health hazard. The Colorado Department of Public Health and Environment and the Environmental Protection Agency do not require water departments to treat or reduce water hardness. In fact, the National Research Council states that hard drinking water generally contributes a small amount toward total calcium and magnesium human dietary needs.

If you observe white deposits in baby bottles, these spots are caused by calcium. This is the same calcium used in milk formulas specially formulated for babies and these deposits do not make the water unsafe.

Q. HOW DOES HARD WATER IMPACT MY LIFE?

A. Hard water minerals may result in the following:

- More soap or detergent may be needed to produce a good lather.
- Cooking utensils, baby bottles, coffee pots, and glassware may be coated with white film or spots from the calcium and magnesium.
- More soap scum or film on glass shower doors and walls, bathtubs, sinks, and faucets.
- Build up of minerals in humidifier, dishwashers, coffee makers and clothes washers.
- Industrial plants may experience additional residue buildup.



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Q. WHAT CAN I DO ABOUT HARD WATER?

A. Here are some helpful hints for dealing with hard water.

- Leave a squeegee in the shower to clean the walls and shower door after each use.
- Remove hard water deposits from glass and plumbing fixtures using distilled vinegar and a soft cloth.
- For plugged shower heads, fill a plastic bag with vinegar and attach it to the shower head with a rubber band and let it sit overnight.
- Use distilled water for steam irons and automobile batteries (if applicable) to extend their life.
- Some manufacturers recommend using citric acid crystals to remove the deposits from hard water: fill the detergent cup with citric acid crystals; run the dishwasher through a normal cycle; rinse thoroughly by running the dishwasher through another cycle without the crystals but with a full cup of detergent. Generally, this should be done with an empty dishwasher. Citric acid crystals are available at some drug stores and most grocery stores in the canning or spice section, and may be available from the manufacturer. Be sure to check the manufacturer's specifications and recommendations for your dishwasher before first.
- Consult the manufacturer's recommendations for all appliances including dishwashers, clothes washers, humidifiers, and coffee makers for hard water remedies.
- For bathroom cleaning, laundry, or kitchen applications use detergents that include a phrase like "works in hard water" on the label.
- For industrial plants using boilers, please consult a specialist in boiler-water treatment who is familiar with your process.

Q. SHOULD I CONSIDER GETTING A WATER SOFTENER?

A. It is really a matter of personal preference. Be sure to research any water softener product you consider. The softening process replaces the calcium and magnesium compounds with sodium, which can impact individuals with sodium-restricted diets. Also, softened water tends to be more corrosive than hard water and can corrode your pipes and household plumbing fixtures. Often the soft water is not recommended for watering plants, lawns and gardens due to the high sodium content. The high sodium content can also adversely impact wastewater treatment processes and the environment.

Q. HOW CAN I CONTACT THE LEFT HAND WATER DISTRICT?

A. If you have any questions or concerns, please contact the District office at 303-530-4200, or email waterquality@lefthandwater.org.