

Flushing Private Plumbing After A Water Outage

Charlotte Water (CLTWater) is repairing a water pipe nearby. Once water service is restored, crews will flow hydrants in the area to reduce water discoloration.

Steps to Restore Water Service:

- Please run cold water first from outside spigots/hose bibs closest to the properties meter (typically near entrance to a public road).
- If water isn't clear after 15 minutes, please run water for several more minutes. If the problem continues, contact 311 or 704-336-7600 and select water emergency to report discolored water. If it is after hours, there will be an option to report a water emergency after the after-hours message.
- Once cold water runs clear, proceed with checking cold water throughout the property starting at fixtures closest to the water source/meter. These could include:
 - o Sinks
 - o Toilets
 - o Water features
 - o Showerheads
 - o Water fountains
- Check automatic ice machines to see if ice appears discolored. If so, please discard.
- Check water filters and ice filters to see if they need to be replaced.
- When cold water runs clear throughout the unit, slowly test hot water.
 - o If your hot water is not clear, please contact building maintenance or a licensed plumber to assist.
- Check private plumbing for leaks.

Buildings with pumps to serve higher floors:

It is possible that pumps may switch into 'safe mode' if water pressure drops. Maintenance staff may need reset pumps after confirming incoming pressure from CLTWater meter.

You can also learn more about water quality at

<https://charlottenc.gov/Water/WaterQuality/Pages/WaterQuality.aspx>

What is in the cloudy, discolored water?

Very fine sediment from mineral deposits settles out of the water and accumulates in the bottom of the pipes. During a water main break or outage, these mineral deposits are dislodged and can cause cloudy, discolored water.



Restoring Service After A Multi-Day Outage and Long-Term Planning

If you are not familiar with your building's plumbing, consider hiring a plumber to assist you with flushing.

1. Inspect and map out your facility's water system, including location where water enters the facility and all water-related devices and connections (e.g. drinking fountains, toilets, showers, irrigation systems, water heaters, water treatment devices, kitchen and bath faucets, ice machines, decorative fountains, cooling towers, hot tubs, pools, hose bibs, eye washes, etc.).
2. Remove, isolate or bypass devices like treatment units, cooling systems, irrigation systems, etc.
3. Take steps to prevent backflow or the siphoning of contaminants into plumbing (e.g., close valves separating irrigation systems from building plumbing, disconnect hoses attached to faucets, etc.).
4. Make sure that all drains are open to prevent flooding.
5. Organize flushing to maximize the flow of water. Open several outlets simultaneously to flush the service line and then flush outlets individually starting near where the water enters the facility.
6. Run water through all outlets (e.g., hose bibs, faucets, showerheads, flushometers, etc.), while removing aerators when possible. Typical durations in existing protocols range from 10 to 30 minutes for each outlet.
7. Flush the cold-water lines first and then the hot water lines. Also make sure to drain and flush all systems or appliances that store water (e.g., hot water tanks). For small buildings, the hot water tank can be drained directly; otherwise, it can require up to 45 minutes to fully flush a typical 40-gallon hot water tank. You can detect if flushing was adequate when the hot water tap runs cold.
8. Flush until air is purged from lines and discolored/cloudy water dissipate (typically entrained air will give water a whitish, milky appearance).
9. Replace all point-of-use filters, including the filters in refrigerators.
10. Ensure hot water storage tanks are set at temperatures that prevent the growth of Legionella bacteria (at least 120°F and ideally >140°F). Follow manufacturer recommendations. Also, when applicable, follow all other Legionella prevention guidance that have been identified by CDC, such as decorative fountain cleaning, hot tub maintenance, and cooling tower maintenance.
11. Develop a water management plan. Maintain records of flushing details, such as dates/times of flushing, approximate volume of water flushed, the sequence of flushing steps, and a list of appliances,

tanks, and treatment systems that were cleaned/flushed. If another round of flushing is needed at a future date, records could help optimize the flushing process for your building.

- Large buildings have a variety of places where water is stored. At a minimum, they should all be identified, drained, and flushed with clean cold water, after the building cold water service is properly restored. These include, but are not limited to:
 - Drinking water (cold water) storage
 - Hot water storage
 - Hot water recirculating loop(s)
 - Humidifiers
 - Ice machines
 - Cooling towers

