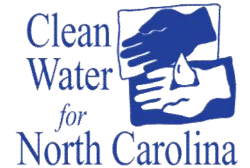


pH

Recommended Safety Standards

NC groundwater: 6.5-8.5

EPA drinking water: 6.5-8.5



❖ What is pH?

The pH scale determines how acidic or basic your water is based on a scale of 0 to 14. Neutral water is considered to be “normal” and within the range of 6.5 to 8.5. Acidic water is lower on the scale (<6.5) and basic water is higher on the scale (>8.5).

❖ How does the pH of my well water change?

Hard water, which has a high mineral content, is usually more basic (alkaline), resulting in a higher pH. Minerals reduce the amount of acid in the water because they act like a buffer. Soft water, a lower mineral content, is usually more acidic, resulting in a lower pH.

❖ What are the health effects of too acidic or basic water?

Hard water (more basic) is not a health risk. However, consequences of hard water include mineral buildup and decrease in function of detergents and soaps. If there is an extensive amount of buildup within the pipes, the pipes' diameter may be reduced.

Acidic water is more corrosive and soft, thereby allowing the leaching of metals from fixtures and pipes. Contaminants of concern would be lead, copper, and zinc. For further reading on the health effects of irregular pH, please visit

https://www.watersystemscouncil.org/download/wellcare_information_sheets/potential_groundwater_contaminant_information_sheets/9709284pH_Update_September_2007.pdf.

❖ Who is most affected by acidic or basic water?

The main target for lead toxicity is the nervous system, both in adults and children. Children are more vulnerable to lead poisoning than adults. Iron's health effects are based on aesthetics and not safety concerns. Aesthetics include odor, taste, and color.

Hard water is only really considered harmful for plumbing maintenance. However, individuals with circulatory/heart issues should consult a physician about adding softeners to the water to reduce water hardness.

❖ How do I know if my well water has irregular pH?

If your well was installed before July 2008, call your local environmental health office and ask for the well program or contact Clean Water for North Carolina if you are unsure of the appropriate point of contact for your area.

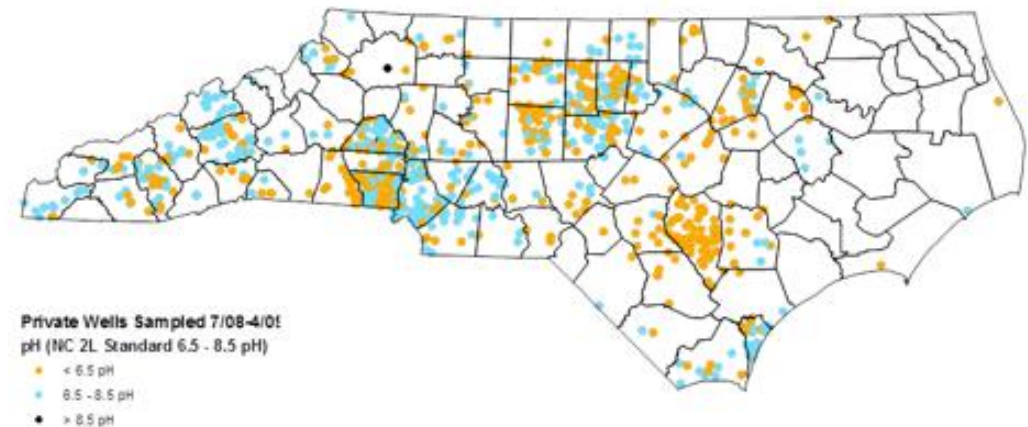
Still have questions or concerns?

Call Clean Water for North Carolina.

Asheville office: 800-929-4480, amanda@cwfn.org

Durham office: 919-401-9600, hope@cwfn.org

Website: <http://www.cwfn.org>



23.5% of samples collected during routine sampling of new private drinking water wells between July 1, 2008 and April 30, 2009 exceeded NC groundwater standards for pH.

Source: State Public Health Laboratory results of private drinking water wells sampled at the wellhead between July 1, 2008 and April 30, 2009.