

Santa Fe County Water Utility

Water Hardness

The hardness of the utility's water can vary depending on the time of year and what water sources are being utilized and mixed. The County's system is physically connected to and, at times, relies on the City's water production system. However, the vast majority of the time, the County utility is receiving Buckman Direct Diversion water originating in the Rio Grande. When BDD is not operating, the County utilizes a mix of City water utility sources.

Buckman Direct Diversion Project Water

The hardness of BDD finished water usually runs around 80 – 100mg/L

City of Santa Fe Water System

The hardness of Santa Fe's water varies based on the source of the water supply currently in use and someone's location within the boundaries of the City's water distribution system. Different pressure zones may be served by different sources at any one time. The City Well Field varies in concentration from 90-227 mg/l (5.3 -13.3 grains per gallon) while the Buckman Well Field has ranged from 16.54 to 263 mg/l (1gpg – 15.4 gpg) over the last 5 years. These concentrations are variable between individual wells. The Canyon Road Water Treatment Facility which treats surface water from the Santa Fe River exhibits the lowest concentrations for hardness. Hardness in the water from this facility has historically ranged in concentration around 25.9 to 36 mg/l or 2 grains per gallon (gpg). The water produced at the BDD facility has been tested for hardness and ranges from 3-6 grains or slightly harder than the Canyon Road Water Treatment Plant. The low hardness of our surface water supplies would usually be termed as "soft" water.

Since it is anticipated that the majority of water provided to City of Santa Fe customers in the future will come from Santa Fe's two surface water supplies, this water should exhibit less hardness than the water historically provided, even when wells are used to supplement supply. In the past, much of the water provided to Santa Fe during peak demand periods (i.e., summer months) probably originated from our well fields. Typically, our groundwater wells produce harder water than the surface waters that are treated for our drinking water supply.

Obviously, the hardness of City water often cannot be pinpointed at any one time since it is wholly dependent on the mix of source waters in use. However, when normal operational scenarios are in effect, it should be in the range of our surface water supplies (2-3 gpg) or slightly higher since those surface supplies are usually the predominate sources in use. However, in those instances where the City has to activate its groundwater wells to make up for a loss of one or both of our surface water sources, such as during the summer of 2012 due to fire-caused ash and sediment issues, hardness will be more reflective of the higher range of the Buckman Well Field and City Well Field values (approx. 13-15 gpg).

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