

Faucet Factoids
By Heidi Bell, City Manager

Have you ever wondered where the water in your kitchen sink comes from? Or how the water becomes safe to drink?

The water in Donald comes from a local aquifer located 100's of feet below the surface. The City has two large wells that draw from the aquifer. The wells house two large pumps, mainly one is being used. It is pumping nearly around the clock drawing up 180 gallons of water per minute. As the pump is pulling the water up through the well, the water works its way through a process called sand separation. This is to separate water from rocks and tiny dirt particles that make up the underground. As the water reaches the surface pipes direct it into a meter so that the public work's employees can monitor the amount of flow. The amount of flow signifies that the system is working properly.

From here the pipes direct the water into a mixture of potassium permanganate and it is pushed into one of three large mixing tanks. This part is really interesting. Donald's water is termed as "hard water". Hard water indicates that the water is rich in minerals and has absolutely no health concerns. Many other cities draw their water from local rivers or waterways but in Donald we don't rely on surface water resources. Back to the process; the potassium and permanganate are added to the water to "soften" the water. The combination actually attracts the iron and manganese and subtracts it from the water. Isn't science fascinating?

After the "softening" process pipes direct the water into the distribution system. The beginning of this system is an enormous tank that pressurizes the water; meaning when you turn on your facet (at the same time someone across town flushes) that the water pressure is equal at all connections. Water demand ranges throughout the day. The water that is pumped and treated but not needed gets stored in the giant tanks outside of the plant. These resources can be utilized for droughts or emergencies. Isn't on demand access to clean water a wonderful city service?