Jesse Dutcher, Utility Director 2004
November 2, 2017
Wellhead Protection Network
Water Department
City of McCook
City owns 73 acres around the wells.

Both wells have a total depth of 71 feet.

Flow by slowing or speeding the well motor.

Well VFD are controlled from the plant with the SCADA, operator can select.

Well will pump around 1,000 GPM.

Both wells will be drilled in 2005 as part of the Water Treatment Plant Project.

Wells 9 & 10
- VFD Controlled by SCADA, capacity 450 GPM
- Total Depth 83 feet
- Uranium 42.9 ug/l
- Arsenic 1.0 ug/l
- Nitrate + Nitrite 6.31 mg/l
- Constructed 1948

• Well 4:

- VFD Controlled by SCADA, total capacity 400 GPM
- Total Depth 80 feet
- Uranium 38.0 ug/l
- Arsenic 9.74 ug/l
- Nitrate + Nitrite 5.24 mg/l
- Constructed 1936 Relined 1995

• Well 3:

• Wells 3 & 4
VFDP controlled by SCADA

Total depth: 92 feet

Production 400 Bpm

Uranium: 27.4 ug/l

Arsenic: 11.6 ug/l

Nitrate/Nitrite: 4.8 mg/l

Completed 1958

Well 6
daily 5,879,000 mgd June 28, 2012
post WTP, annual 844,857,000 2012 Gallons (2012)
Historic Highs 2000 total pumping 1,133,596,000 pre WTP

withdraw 1,222,750,000 Gallons per year
over 3 million Gallons. The City has a permit from NE Dept of Natural Resources to
in 24 hours. Daily averages for winter 800,000 Gallons and summer days averaging
1,953,044. The peak day for the year was on July 26 with 4,913,000 Gallons pumped
in 2016 McCook pumped 712,861,000 Gallons of water, with a daily average of

dlitraining aquifer of the Republican River

abuuluvial aquifer of the Republican River
- High Service Booster Pumps
- Hypochlorite Disinfection, production of Sodium Hypochlorite
- Plant flow control
- Well stop and start
- Regeneration
- Plant SCADA controls the vessel

McCook WTP
52 miles of water main ranging in size from 3 inch to 24 inch

- 3,600 service lines and meters

...responsibility of the owner.

The service pipe is the line that extends from the curb stop to the house and that is the street. The service pipe is the pipe that runs from the curb stop to the curb stop located at the edge of the street. The pipe which is the pipe that runs from the curb stop to the curb stop located at the edge of the service line is responsible for the water mains is responsible for the supply.
Main leaks sometimes

Water Main Repair

Utilities repay the help
lending a hand.
Public works staff
with waste water and
become a group effort.

By do snow removal.
Billing and Meters

• 3,600 connections over the counter credit/debit card use averaging $11,500 per month.
• Average 80 Phone notifications per month.
• 60% radio read meters (1,800) with 2,000 Web based payments averaging $6,000 per month.