

# Chandler's Water

In January, the City of Chandler completed the drilling of its 5<sup>th</sup> well. All of the city's wells pull water from the Carrizo-Wilcox aquifer. This aquifer extends from the Rio Grande in South Texas northeastward into Arkansas and Louisiana, providing water to all or parts of 60 counties. Municipal and irrigation pumpage account for about 35 percent and 51 percent, respectively, of total pumpage. The largest metropolitan areas dependent on ground water from the Carrizo-Wilcox aquifer are Bryan-College Station, Lufkin-Nacogdoches, and Tyler.

The following is a list of Chandler's wells:

Well #	Gallons per minute capacity	Depth
#1	150 gpm capacity	520'
#2	150 gpm capacity	520'
#3	180 gpm capacity	520'
#4	500 gpm capacity	520'
#5	150 gpm capacity	710'

In December 2011, Chandler had 1,256 water connections. The State requires 200 gallons of ground storage per connection thus requiring 251,200 gallons of ground storage. The City currently has a 420,000 gallon capacity in ground storage resulting in a 168,800 gallon surplus. This surplus will accommodate an additional 844 connections.

Elevated storage is also required by the State at a rate of 100 gallons per connection, thus requiring 125,600 gallons in elevated storage. The City currently has 350,000 gallons in elevated storage resulting in a surplus of 224,400 gallons. This surplus will accommodate an additional 2,244 connections.

In terms of well capacity, the State requires .6 gpm per connection thus requiring 754 gpm of well capacity. The existing 5 wells in the City have a capacity of 1,130 gpm. The City has a surplus well capacity of 376 gpm. This will **offset the loss of any one of Chandler's wells**, except for well #4, should a failure occur or will accommodate an additional 627 connections.

The average annual growth in active water accounts between the years 2004 to 2011 was 14.4 connections a year resulting in an average percent change of 1.2%. Assuming an increased growth of 25 active meters a year and the limitation of the well capacity, the city of Chandler can meet the State minimum standards for 25 years without an additional well. However, additional wells will continue to be developed in the city to accommodate all future



developmental needs

	DEC							
YEAR	2004	2005	2006	2007	2008	2009	2010	2011
Active Water Accounts	1155	1185	1209	1225	1218	1205	1236	1256
# change	NA	30	24	16	-7	-13	31	20
% change	NA	2.6	2.0	1.3	-0.6	-1.1	2.6	1.6