

MINUTES OF THE SPECIAL MEETING OF THE HONORABLE MAYOR AND CITY COUNCIL
OF THE CITY OF CHANDLER, ARIZONA, held in the Council Conference Chambers, 88 E.
Chicago Street, on Monday, September 23, 2013.

THE MEETING WAS CALLED TO ORDER BY MAYOR JAY TIBSHRAENY at 6:00 p.m.

The following members were present:	Jay Tibshraeny	Mayor
	Jack Sellers	Vice-Mayor (telephonically)
	Rick Heumann	Councilmember
	Jeff Weninger	Councilmember
	Trinity Donovan	Councilmember
	Kevin Hartke	Councilmember
	Nora Ellen	Councilmember

Also in attendance: Rich Dlugas, City Manager; Pat McDermott, Assistant City Manager; Marsha Reed, Assistant City Manager; Kay Bigelow, Acting City Attorney; Marla Paddock, City Clerk; Dave Siegel, Municipal Utilities Director; David Bigos, Mayor & Council Asst.; Gregg Capps, Water Resource Manager; Doug Toy, Water Regulatory Affairs Manager; John Knudson, Sr. Utilities Engineering Manager

Mr. Siegel introduced his staff and commended their work together as a team. He outlined the highlights of his presentation:

1. Statewide movement of Water Rights
2. Water demand estimates
3. Acquisition costs
4. Total Dissolved Solids (TDS)
5. Central Arizona Project (CAP) Cost Increases

Mr. Siegel referenced an acre foot of water is equal to 325,851 gallons of water. Enough water for three average sized homes for a year. Mr. Siegel reported that water supply is not a problem.

Mr. Siegel reviewed the Groundwater Management Act (GMA) Provisions: Prohibits new agricultural lands, new developments must use renewable water resources, safe-yield goal, limits new well pumping, mandatory water conservation, assumed agricultural will phase out. He said Chandler received its new Assured Water Supply designation in 2010 which is valid until 2025. In 2025, build-up and any major industrial expansion will need to be accounted for.

Mr. Siegel explained the term "safe-yield" to be only pumping out what you have recharged. It is not the same as a sustainable aquifer.

Mr. Siegel said 94% of groundwater pumped requires surface water replacement or recharge. He reported slightly over 500,000 acre feet have been stored underground of which 200,000 acre feet was ADWR (Arizona Department of Water Resources) phase in credits.

The City has purchased and recharged about 300,000 acre feet. It has been determined that 500,000 acre feet will be needed for the next 100 years for drought protection.

Mr. Siegel explained the current recharge methods. He reported there are now 10 or 12 ASR (aquifer storage & recovery) wells located at Tumbleweed Park and at Ocotillo Plant on Old Price Road and staff is looking at purchasing sites for more of these types of wells. He noted these are different than the basins that are at the Wetlands at Oasis Veterans park.

He explained a map that showed Chandler sitting on what looks like pictorially as the edge of a "bathtub" of water (a large aquifer). He noted that while recharge does occur around Luke Air Force Base, focus is made to recharge in the east valley area due to the issues of sustainable aquifers.

Mr. Siegel noted that there is positive recharge occurring in the east valley until around 2027. He cautioned that if conditions remain status quo, an increasing deficit will occur.

Councilmember Weninger asked what happens when a drought occurs. Mr. Toy responded the wells can support a drought over many decades.

Chandler's Joint Surface Water Treatment Plant located in Gilbert provides off project water in Chandler and for redundancy. Mr. Siegel said he and Mr. Knudson are meeting with staff from the Town of Gilbert on Monday to meet the new Public Works Director and to also talk about future expansion.

Councilmember Donovan asked if the Town of Gilbert was on board with future plans. Mr. Siegel said expansion has been pushed out as far as possible in the CIP (Capital Improvement Program). Chandler could proceed with their expansion, but at a higher cost.

Mr. Siegel explained the 25 wells today would provide 63 million gallons of capacity. Build-out will need to be at 72 million. He pointed out that wells do experience issues and gave the example of the well on Pecos and Alma School that is currently being re-drilled.

Mr. Siegel said a new pressure zone was created to stabilize the system pressures. The differences in pressure are due to elevation changes. He noted the higher pressure zone (I-10 and Chandler Boulevard) and the lower zone area (near Basha High School). In response to questions, Mr. Siegel said his preference on pressure is around 75.

An optimization project including the booster pump stations was completed to gain greater efficiencies and has saved approximately \$800,000 between 2010 and 2011.

Buildout Water System Redundancy:

Mr. Siegel reported the Average Day Demand at build-out will be 87.7 mgd (million gallons/day). Currently it's about 54 mgd.

Build-out Capacity for wells is 74 mgd, and that will be 11-12 mgd short of the average day demand.

Surface Water Treatment Capacity is 60 mgd at the Chandler main facility and will be 24 mgd at Santan Vista for build-out.

Councilmember Heumann asked how that shortfall will be made up. Mr. Siegel said the estimated peak at build-out is 122 mgd. During the summer, in the peak time, if the Pecos Water Plant went down, the demand could not be met. If that occurred, a request would be made for emergency declaration prohibiting landscaping irrigation. In addition, well water would be used.

Mr. Knudson noted the summer peak "moment" is a 6:04 a.m. at 130 mgd.

Mr. Siegel, in explaining Chandler water sources, said 6% of the demand is pumped from wells; the rest from Colorado River/CAP water and Salt & Verde River water.

In response to a question, Mr. Siegel said in the Gila River Indian Community Settlement, they receive 14 million gallons of gray water from us; and we receive 8 million of CAP water.

Mr. Siegel said a 2012 update was made to the Water Master Plan. A new factor that came into play in 2011 was the use of water for cooling towers and data centers. Another issue is build-up.

In regards to future water allocations, Mr. Siegel displayed a map of the Price Road Corridor with the demands of each property noted and the amount of gallons per acre allocated for each parcel based on the Master Plan. He said the issue is if more allocation is needed.

The Mayor clarified that the cooling towers need either a lot of water or a lot of electricity to cool.

Mr. Siegel reported that the cost of acquiring water was increasing.

He explained wells are important to Chandler for redundancy and as part of the production system. There is over 500,000 acre feet stored. More wells are being drilled with the goal of meeting the 74 mgd at build-out. He noted the problem is that a well can fail and require rehab at any time. He said in the past, it's been a challenge to acquire and place wells in south Chandler but Mr. Knudson has been very successful in locating them.

Mr. Siegel spoke of the concerns of TDS (total dissolved solids) or salt. Sources of salt included water softeners, cooling towers and surface water sources. He noted that California has banned water softeners.

To help manage this issue he suggested permitting cooling towers with limitations and limiting use of wells that have high salt. He noted the only way to eliminate salt once in the system is reverse osmosis. The issue then becomes disposing of the brine stream.

In regards to CAP Cost Increases, Mr. Siegel said a 1% water rate increase will generate \$495,000. He noted last year the CAP increase was approximately \$400,000 and absorbed in the budget.

Councilmember Heumann stated the challenge is when companies locate to be studious about evaluating the limits of the water as part of the economic development plan as is done with job creation, etc.

Councilmember Weninger added it was important for residents to not subsidize the purchase of water at a higher rate.

Councilmember Heumann asked if Chandler was one of the cities with the lowest use per capita. Gregg Capps responded that residential is about 124 gallons per capita per day which is lower than some.

The Mayor cautioned that once a project receives zoning, water needs to be provided. He suggested an ordinance that would require heavy water users would need an additional permit.

Councilmember Hartke asked if users could partner or require them to secure their own water. Acting City Attorney Kay Bigelow said she and Doug Toy have been discussing how they could marry the expected water amounts to some sort of permitting that could be discussed at the time of zoning.

RECESS: The meeting was recessed at 7:03 p.m. and reconvened at 7:57 p.m.

Ms. Bigelow explained that the allocation for water categories, Municipal Utilities staff take the master plan and chart out historical uses for the types of uses on the master plan. If you are going to build in the range of the normal use of the water used that is indicated and stipulated then that is acceptable. If more is needed, an amendment to the zoning would be needed in order to use that extra intensity and water. She noted there would be changes needed to the utility and the zoning ordinances. Staff is working toward bringing a proposal forward.

Councilmember Heumann asked how complicated it would be to proceed.

Mr. Toy said one of the concerns was some of the broad categories for land use and how to determine that range and not be over restrictive. He said staff is discussing conceptual policy and implementation.

Councilmember Heumann agreed there were several limited resources: land, job creation with highest and best use, and resources/water.

Councilmember Hartke asked that staff continue to pursue water conservation measures. He noted that AMWUA has a goal of 100 gallons of water per person per day and Chandler is not close at 124 gallons. In addition, he encouraged the aggressive pursuit of water purchases.

Mayor agreed that there are some water conservation incentives that could be reviewed and increased if necessary.

Councilmember Heumann said that the water conservation staff does a great job, but urged continuous messaging and education on timing of watering, etc.,

Adjournment: The meeting was adjourned at approximately 8:15 p.m.

ATTEST: _____
City Clerk

Mayor

Approved: October 21, 2013

CERTIFICATION

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the special meeting of the City Council of Chandler, Arizona, held on the 23rd day of September 2013. I further certify that the meeting was duly called and held and that a quorum was present.

DATED this _____ day of October, 2013.

City Clerk