

MINUTES OF THE SPECIAL MEETING OF THE CITY COUNCIL OF THE CITY OF COTTONWOOD, ARIZONA, HELD JUNE 18, 2013, AT 4:00 P.M., AT THE CITY COUNCIL CHAMBERS BUILDING, 826 NORTH MAIN STREET, COTTONWOOD, ARIZONA.

CALL TO ORDER AND ROLL CALL

Mayor Joens called the special meeting to order at 4:00 p.m. Roll call was taken as follows:

COUNCIL MEMBERS PRESENT

Diane Joens, Mayor
Karen Pfeifer, Vice Mayor
Jesse Dowling, Council Member
Terence Pratt, Council Member
Randy Garrison, Council Member
Tim Elinski, Council Member

COUNCIL MEMBERS ABSENT

Ruben Jauregui, Council Member

STAFF MEMBERS PRESENT

Doug Bartosh, City Manager
Marianne Jiménez, City Clerk
Steve Horton, City Attorney
Tom Whitmer, Water Resources Administrator

PRESENTATION BY REPRESENTATIVES OF THE UNITED STATES GEOLOGICAL SURVEY (USGS,) ARIZONA WATER SCIENCE CENTER, REGARDING THE RESULTS OF THE NORTHERN ARIZONA REGIONAL GROUND WATER FLOW MODEL SCENARIO RUNS FOR THE VERDE VALLEY

Mr. Whitmer stated the U.S. Geological Survey initiated a comprehensive groundwater study at the request of ADWR and the Yavapai County Water Advisory Committee back in 2000. The conceptual model report was completed in 2005 and they immediately went into developing a groundwater flow model which was completed in 2011. They were requested by the Verde River Basin Partnership to run three different scenarios on the groundwater flow model that was developed as part of that effort. On April 11 of this year they presented the findings of those three model runs and they were here to present the presentation they made in April.

Jim Leenhouts, the Director of the Arizona Water Science Center in Tucson, stated the USGS was a small bureau in the federal government organized into different groups of scientists; geologists, hydrologists, and biologists. He, Brad Garner, and Bob Hart represented the water group of USGS in Arizona. USGS is an agency dedicated to doing science. Their mission is to develop scientific information using unbiased methods for the betterment of decision makers to better manage the resources. Brad would present the results of the study to develop a groundwater budget for the middle Verde area.

Brad Garner, Hydrologist with the Flagstaff USGS Water Science Center, gave a PowerPoint presentation on the groundwater flow model. He stated the Verde River was flowing today even though there had been very little rain because it was fed by base flow which comes from springs and seeps. Humans can change base flow, which was one part of the study they completed. Base flow can change in direct ways from pumping water or diverting water from a river, or by extracting ground water using wells. The change of base flow attributable to human stresses, namely ground water pumping, was simulated in the model. Developing groundwater resources to meet human needs has raised questions about the effects of groundwater withdrawals by pumping on the area's rivers and streams, particularly the Verde River. USGS hydrologists used a regional groundwater flow model to simulate the effects of groundwater pumping on streamflow in the Verde River. The study found that streamflow in the Verde River between 1910 and 2005 has been reduced as the result of streamflow depletion by groundwater pumping, also known as capture. Additionally, using three hypothetical scenarios for a period from 2005 to 2110, the study's findings suggest that streamflow reductions will continue and may increase in the future.

Mr. Garner answered questions from the Council regarding the model during his presentation.

At the conclusion of the presentation Mr. Whitmer stated the model was based on long term averages and models did not have the ability to capture single events or extended periods of events such as floods or droughts. The model was not exact, but was a great tool for showing trends based on long term averages.

Lawrence Matthews, from Page Springs, stated this was the second time he attended this presentation. He thought it was weak in the sense that the Paulden gage had not been in existence that long. He was concerned about what was going on in the big Chino, and Prescott/Prescott Valley's plans to pump that water out of there into those two cities.

Andrew Groseta asked what the Clarkdale and Camp Verde flow was from 1910 until now.

Mr. Garner stated there were tables in their report that show all those water budget values. The Clarkdale gage was 44,000 acre feet per year, and he believed it was about 88,000 acre feet per year of base flow at the Camp Verde gage as a long-term average, which varied and the model showed that to vary.

Mayor Joens stated the City Council has committed to protecting the Verde River. She then read an excerpt of an editorial by John Dougherty titled "Modeling—Picture Perfect or Abstract Art." It helped her put modeling into perspective. It was the best information we have right now and she wished that WAC hadn't reduced their funding because these were the kinds of studies that funding paid for. There was a lot more to know and we need more information. She appreciated what the USGS had done and asked how can we continue to search for the answers to how we can protect our river and provide for the needs of people. We did not have the answers yet, and will continue to seek them. She thanked the USGS representatives for coming and presenting the information.

ADJOURNMENT

Vice Mayor Pfeifer moved to adjourn. The motion was seconded by Council Member Garrison, and carried. The special meeting adjourned at 5:37 p.m.

Diane Joens, Mayor

ATTEST:

Marianne Jiménez, City Clerk

CERTIFICATION OF MINUTES

I hereby certify that the attached is a true and correct copy of the minutes of a special meeting of the City Council of the City of Cottonwood held on June 18, 2013. I further certify that the meeting was duly called, and that a quorum was present.

Marianne Jiménez, City Clerk

Date