

PRESCOTT CITY COUNCIL
PUBLIC WORKSHOP
FEBRUARY 20, 2007

A WORKSHOP OF THE PRESCOTT CITY COUNCIL WAS HELD ON TUESDAY, FEBRUARY 20, 2007, in the Prescott Municipal Building, 201 S. Cortez Street, Prescott, Arizona.

Call to Order

Mayor Simmons opened the workshop at 2:00 P.M.

Roll Call

Present:

Mayor Simmons
Councilman Bell
Councilman Blair
Councilwoman Suttles
Councilman Luzius
Councilman Roecker
Councilman Lamerson

Absent:

None

- I. Presentation by Arizona Department of Water Resources Director Herb Guenther regarding Arizona Water Issues.

Mayor Simmons welcomed Mr. Guenther. Mr. Guenther said it was a pleasure to be at the meeting, and he had been invited by Representative Lucy Mason to share some ideas of the Statewide Water Advisory Group (SWAG), as well as other issues that are currently before the legislative process. He then introduced Representative Mason and Virginia Turner, Governor's Assistant in Northern Arizona.

Mr. Guenther gave a PowerPoint presentation, a copy of which is attached hereto as Exhibit A. He first reviewed the Annual Water Budget, noting that the State has about 8.1 maf a year and if they were to use all of that for people, they could support a population of approximately 40 million people. He said that 74% is actually used at this time for agriculture and the declining amount is being converted by the economic factors that operate in their free market system to municipal use, which is now at 20%, followed by industrial at 6%.

Mr. Guenther said that water rights in Arizona are different than in other places in the West. First, water belongs to the people of Arizona. Individuals get a right to use the water as long as they put it to beneficial use. Surface water is appropriated based on the Doctrine of Prior Appropriation which means that the first to put it to

beneficial use enjoys the most senior right; people that come later enjoy a lesser, or junior, right.

He said that groundwater is not an exclusive right, but if they own land they have a right to drill a well and tap the water under that land. The problem is that if a neighbor comes in and puts in a well, drilling deeper or putting in a bigger pump, then they can pump the other's well down and there's no legal recourse. He said that unlike New Mexico that appropriates both groundwater and surface water, Arizona does not have junior and senior rights with groundwater and to do that now would require another major adjudication.

Mayor Simmons asked how New Mexico regulates exempt wells. Mr. Guenther said that they have a series of regulations, but only as it relates to management. The priority is when the well is drilled and the historical use of when it was drilled. The year it is drilled establishes the junior/senior right.

He said that the difference in Arizona is that at some point they have to draw a legal definition which differentiates groundwater and surface water because there is a continuum and that is what the adjudication court is currently wrestling with.

In 1980, when Arizona was in significant overdraft of the groundwater resources in Central Arizona, and some degree in Pima County, there were a lot of legal battles over water rights and political efforts to complete the CAP. The Legislature adopted the 1980 Groundwater Management Act which established Active Management Areas in those locations that were significantly overdrafted in groundwater. There were five AMA's, four initial ones: Prescott, Phoenix, Tucson and Pinal. Subsequently Santa Cruz was cut out of the Tucson AMA. They were all designed under the 1980 Groundwater Act which said that the goal was safe yield.

Mr. Guenther said that when it comes to development within those AMA's, developers are required to demonstrate an Assured Water Supply. Outside the AMA's they use a Determination of Adequacy. The Assured Water Supply means that a developer must demonstrate a 100-year supply that is physically, legally and continuously available over that period time. If they don't demonstrate that, they cannot develop. Outside of an AMA the Determination of Adequacy uses the same standard, but a developer that cannot demonstrate it can still go ahead and develop. All they have to do is notice the first buyer. That leads to a dysfunctional system. It's also important to note that the actual adequate water was started before the 1980 Groundwater Act and it was a result of a consumer protection program following some unscrupulous land sales.

He said that a problem is they end up with a developer with an adequate water supply and another with an inadequate supply, and while the adequate developer may have told his purchasers that they have a 100-year supply, the other developer could actually pump that water from the other, and neither knows what they have. Also, the way that the law is now they allow for mining of groundwater down to 1200 feet outside of an AMA. The question is then what happens after 100 years when they've mined that water.

Mr. Guenther said that throughout the State there are numerous groundwater basins and they are diverse with regard to size, but they also are diverse with regard to the amount of water stored in them, as well as the yield. There are very large alluvial aquifers and very large sandstone aquifers and then they have hard rock aquifers. Some of the areas of the State are critical areas; e.g. Mohave County is one with the bridge being built below the dam, it is going to make Western Mohave County a bedroom community for Las Vegas. The Verde Valley is another area with significant demand for growth, significant environmental resources and riparian systems as well as endangered species. There is a lot of competing interest in the senior rights to the base flow of the Verde, most of them reside with the Salt River Project in the Phoenix area.

The Upper San Pedro is another area, with the largest military installation in the State located there. Fort Huachuca generates about \$1.5 billion to the local economy and about \$3 billion to the statewide economy every year. They have been told by the Base Realignment Committee that they need to get their water in balance or face cutbacks and relocation. At the same time, they have riparian resources in the National Riparian Management Area run by BLM, so there is a tug-of-war between growth and maintaining the riparian systems.

In the Mogollon Rim and Coconino Plateau, they are the hard rock aquifers which are very difficult to predict, but they are low volume aquifers and they likewise need to import groundwater, which leads to very expensive alternatives.

These differing needs throughout the State are what led to the concept of the Statewide Water Advisory Group. The Governor suggested that they needed to look at potential management areas and problem basins of rural Arizona where they have to go to the people and partnerships to design what their goals are and select from an array of tools to accomplish those goals. He said that the ADWR would play more of a technical support role. That led to the SWAG, which was to gather input from stakeholders and citizens on their proposals.

They started in April of 2006 meeting every two weeks, with 52 representatives from all over the State, with most of the meetings lasting four hours. It was a good exchange of information and ideas, shared problems, as well as potential solutions. He then took those proposals in October and November to rural areas throughout the State. Along with input received from those meetings, the plans were taken to the Legislature in the form of three pieces of SWAG legislation.

The first is where there is a water adequacy with local authority. It is permissive but a platting entity, such as a County or city or town, can adopt the authority to require a Demonstration of Adequacy before they will allow development, and it is optional. It would also require a notice of adequacy to be included on the plat and the authority as it stands now, amended, requires a unanimous vote of the platting authority.

Mr. Guenther then reviewed what Adequacy does and does not do. It does give the platting authority the legal authority to prevent development if they choose to adopt that authority. It does not change basic groundwater law. It does prevent new development from taking limited groundwater resources from the existing residents or those that have proved enough adequacy for their developments and it does assure that existing residents and new residents, with reasonable certainty, that they will have water for 100 years.

The second bill is the carrot bill that goes with the adequacy bill that provides for a water development fund that would provide for low-interest loans available to rural water providers in order for them to bond significant amounts of money to build infrastructure projects. The least expensive way to expand the water budget is conservation, followed by reuse, but after that they're looking at augmentation or importation. These loans would be run through the Water Infrastructure Funding Authority (WIFA) but it would be run by a prioritization of applications by a select committee established to review those loan applications.

The third piece of legislation is well impacts on contamination to prevent new wells from causing migration of a remediation plume which is already certified under the Federal law or state law to the new well creating a problem for an existing well.

The last item is that they have been working with the lower and upper basin states, all seven from the Colorado River. Arizona gets 37% of their water from the Colorado River, and it has become very intense once they found that the river is over-appropriated. The lower basin states (Nevada, Arizona, California) currently use their full 7.5 million acre foot entitlement. The upper basin states (New Mexico, Colorado, Wyoming and Utah) only use about 4.5 of their 7.5 and they're still growing. They're concerned that when they come up short by about 2 million acre foot in over-allocation, that they'll be the ones to be cut out. They've all been negotiating for the last two years trying to find ways to augment the efficiency of the Colorado River, conjunctively managing Lakes Mead and Powell, and reduce the waste of water by over-delivering to Mexico when it's ordered by agricultural interests in the lower basin.

The Final Seven-States agreement, which is awaiting some final language change, is hoped to be signed by June or July, involves the conjunction management, but it involves the creation of new water. That is nonsystem water in the Colorado that they call Intentionally Created Surplus (ICS). They also provide for wheeling of other water in the system and staged shortages for the lower division states. Because the "Law of the River" does not provide for nonsystem water he needs the authority from the Legislature to forbear the ordering of this nonsystem water because normally under the Law of the River Arizona would be eligible for 46% of surpluses and California would be eligible for 50%, Nevada 4%. Because this is no longer system water—it is a new type of water, they have to forbear if they've developed these Intentionally Created Surplus units. That is what led to the need for the last two bills which gives him the authority to forbear on that type of water.

Mr. Guenther said that it is the first time in 84 years that they have all been on the same page.

Councilman Lamerson said that he is concerned with the City's letter of adequacy with regards to the Big Chino and what legislative authority they have to do, and the Doctrine of First Appropriation. He said that the City is looking at spending several hundred million dollars to build a pipeline to a water ranch and to plan for the importation of water for various different uses, not excluding safe yield. The problem he's having at this time is going ahead and spending or agreeing to spend this money if in deed the letter of adequacy and Doctrine of First Appropriation is going to be compromised by other activities, whether inside our outside of the Prescott AMA, and the State hasn't reserved the water that Prescott was told they could go get.

Mr. Guenther replied that the risks are several under the existing law. The first is that existing people in the basin, plus those planning to develop in the basin, will compete with the City of Prescott for that water supply. Because Prescott is taking water from the Big Chino and moving it from outside of an AMA into an AMA, that would not normally be considered as part of the evaluation of total dedicated water use that currently exists in the Big Chino. Prescott needs to be considered in the total set aside, before those that have chosen to prove adequacy within the Big Chino basin.

He said that the second thing is existing pumpers, especially production well pumpers, are going to continue to utilize that water and the question is, "what is the total available water within that basin for the adequate users (historical users plus those who come in for adequacy determination)?"

The third, and perhaps most important threat to everyone, is the inadequate developer that goes in and doesn't have to jump through any hoops and starts pumping water that Prescott and others have set aside through an adequacy program.

The last threat of the Big Chino supply is if the pumping were to cause some impact on an appropriated right in the Verde River. That could be down the road some, but that is more of a legal issue than it is regulatory one.

Councilwoman Suttles said that the Prescott AMA has been told that they have to reach safe yield and she sees that there are other AMA's within the State. She asked if these other AMA's are individually trying to do their own thing of importing water, or if they were trying to do something jointly. She said that they're all in the same situation.

Mr. Guenther said that they are challenged. He said that the other AMA's have the good fortune of having the Central Arizona Project as part of their portfolio and as such they are importing water. To some degree they are different than the Prescott AMA. Even though the Prescott AMA was established in 1980 it did not become an issue until 1999 when they made a determination that they were out of safe yield

and what happened then was that everybody that was out there rushed to the application window and tried to get their plats approved. That put an added grandfathering burden on being able to come back to safe yield. Most of the AMA's that are safe-yield goal oriented are not schedule to be in safe yield in 2025. They're just getting started on the fourth management plan to make some adjustments, but there are several issues that have come to rise.

First, the flood of development applications and final plats that came in with the determination of not being in safe yield. Then, they have not had the money to purchase grandfathered rights that are the initial AMA's or up in Prescott, which is a very important component of achieving safe yield. Good public policy would dictate that they have an adequate water supply, not only for 100 years, but indefinitely to support a population, or someone else will have to do so under a crisis management situation and find replacement water.

Councilwoman Suttles said that no one wants to look at this under a crisis management situation. Prescott has found a water ranch to try and import water. She asked where they find the answer of how much they will need to import before they continue to get this water into the Prescott AMA. Mr. Guenther said that is the magic line—the benefit cost and risk analysis that they'll have to undertake as a legislative body representing the area. All he can say is it is a very complicated hydrogeology that they have in the area of the base flow of the Verde River. They have three basins involved, the largest of which is not contributing the majority of the water, the carbonate aquifer known as the Upper Verde Aquifer Subbasin. Then there is the Little Chino, the smaller basin within the AMA, but it has very limited size and capacity, and has been approaching overdraft for a number of years. Then there is the largest volume of water, but also the largest contributor to the base flow, the Big Chino Aquifer. It is a fairly rich aquifer, thought to contain about 155 million acre feet, but it also contributes between 80 and 86 percent to the base flow of the Verde River.

Mr. Guenther said that because the base flow is supported by these basins discharging to the Verde River, eventually pumping of those basins in excess of historic pumping would lead to a reduced flow of the Verde River. The question is when that will occur and to what degree it will impact the base flow. As far as a long-term supply, the risk analysis should take into account the eventuality of the impact and when that occurs, they'll have a legal challenge because of the senior water right, but then it's going to be who is causing the impact. In his opinion, sooner or later it will be necessary to import additional water supplies into this area in order to sustain the growth that is anticipated. Mr. Guenther said that there are a lot of other communities that share Prescott's concerns.

Councilman Blair asked about the past irrigation flows and the pumping that took place back in the 60's and 70's. Mr. Guenther said that there are numbers that represent the historic pumping, based on acreage irrigated since the wells are not metered. He said that they have the numbers but they didn't have the observation wells in order to record the impact on the aquifer as far as drawdown and recovery. The base flow of the Verde River has not been stable over time, although the most

stable is at the Paulden Gauge (where the variation is between 22 and 27 cfps). It is hard to separate the pumping impacts from the climate impacts (period of drought) because they don't know how long it takes for the climate or pumping to impact the measurements. Suffice it to say that if they are pumping in the historic areas of the production wells in the Big Chino, for agriculture, a lot of that has been reduced over time, either because people have purchased ranches or it was no longer economically beneficial to ranch or farm. The demands, based on the applications they have, on the Big Chino show that they will be significantly increasing the demand on the aquifer above and beyond the historic use of agriculture.

Councilman Blair asked if the numbers take into account the recharge possibilities. Mr. Guenther said that natural recharge in that particular basin is about 2% of the average precipitation; the rest runs off. If they're going to export the water, then they don't have the benefit of the return flow or the ability to use that effluent in the area of the location.

Councilman Blair said that what he is having a problem with is that Prescott has been mandated by ADWR to reach safe yield by 2025, and they know that they have a legislative right to import water from the Big Chino. He said that he also understands that there is a CVCF Ranch out there that is owned by someone that doesn't care about the needs of Prescott, and how it would effect their community. He added that they're also being mandated by the Federal Government on arsenic. He said that he believes it is wrong that someone could come in and pump the water out from under them.

Mr. Guenther said that there are a lot of things wrong with the existing system because it doesn't work, but the safe yield goal, although it is a shared goal, is for the benefit of the City more than anything else because if they mine that groundwater into extinction, they won't have a water supply in the future. The penalty for not reaching safe yield would be that they would probably go into reorganizing a fifth or sixth management plan and work collectively with the City to establish tools that will help over a period of time beyond that to reach safe yield and find additional water resources that will offset the need to mine that groundwater.

Councilman Blair asked how he, as the Director of the Arizona Department of Water Resources, can allow a big development to come in and put in wells if he knows that the City is in a struggling position, and knowing that they have a legislative right to pump that water. Mr. Guenther replied that they don't have the authority to say no to them, if they are within the process. He said that there is an order of priority established by complete and correct applications for water, but that is currently thought to exist only within the use zone of the area. When they're exporting water to the AMA, they need to make some adjustments legislatively in order to make sure that the water they have applied for is counted, already committed water in the basin. Then they hold their place in line, but then they have to get rid of the guy that comes in with no adequacy that doesn't have to go through any hoops and pumps

everybody's water. That is where Yavapai County is going to have to be one of the first to get the adequacy legislation through.

Councilman Blair said that is the part that bothers him more than anything, and it should bother the citizens, if they're working hard to make sure that they (1) protect the Verde River; and (2) transport water to reach safe yield and have adequacy for our own municipal water supply, but yet they could have the rug pulled out from them any given minutes after they've spent \$100 million.

Mr. Guenther said that another thing they may want to consider would be an irrigation nonexpansion area in the Big Chino.

Councilman Luzius said that the way he understands it is that even though they have the legislative right to pump the water, and they're allocated 8417 acre feet between them and Prescott Valley, by doing that they could still create some effect on the flow of the Upper Verde. Mr. Guenther said his sense is that it is a possibly, but again it is a matter of time and volume. There is nothing magic going on underground so his assumption is that if they start using more water than the historical uses they're going to impact the flows.

Councilman Luzius said that the other question refers to the inadequate supply of someone else taking their water and there is nothing they could do about it; Mr. Guenther said that was correct. Councilman Luzius said that there is talk about communities north of the area tapping into the Colorado River, and he asked if there was any feasibility of that concept. Mr. Guenther said that there is the feasibility of purchasing and retiring existing agricultural rights that are senior, or there is Indian settlement water that is available, both in the Colorado River Indian tribes and in Central Arizona that would probably be available for long-term leases. He said that the River is currently over-allocated based on the Compact of 1922, but they still have the right to 7.5 million acre feet and a lot of those senior rights, for instance down in Southern Arizona, agricultural rights and senior rights on Indian water rights, would be available and those would supersede or be more senior than the SRP rights. Mr. Guenther thanked Councilman Luzius for his participation in all of the SWAG meetings.

Councilman Roecker said that it sounds like most of their issues need to be resolved by the Legislature, ADWR is doing everything they're supposed to be doing based on the law as it is written, and the Legislature needs to rewrite some things. He liked the comments about the issue of exempt wells and how they impact the AMA, and what he sees as a way of looking at those AMA's.

Mr. Guenther said that there are about 97,000 exempt wells in the state of Arizona, and of that, 20,000 are in Yavapai County. An exempt well is one that pumps less than 35 gallons per minute, usually considered a domestic well, but very few families would use anything near 35 gallons per minute 24/7. The problem is they don't know how much less and that is why they're trying to get more accurate information to put into the model. Metering all exempt wells would not be logistically feasible. They are looking for volunteers that would allow the State to put meters on

their wells to be read, to obtain more accurate information. He believes that is a program that can happen, and needs to happen. As far as putting limits on those wells, it is a cherished private property right.

Councilman Roecker asked if any pumping the City may do out at the Big Chino would be balanced against historic pumping in the Big Chino. Mr. Guenther said that is one of the components they used to determine what availability they have under the exemption for water transfer, but it is not the only one. He said that the distribution of where the wells would be located is a question that has not been fully answered. Councilman Roecker asked if there was a timetable that would bring them to some solid conclusion regarding those questions. Mr. Guenther said that they are expediting as quickly as possible, but they would like to get a complete, correct application from the City. Councilman Roecker said that would be coming very soon.

Mr. Guenther said that they will work with the City to expedite whatever is necessary in order to get the information to the City, and also the limitations on where the wells would have to be located spatially, as there are a lot of players in that, not the least of which is the Salt River Project.

Councilman Roecker said that they want to have everything, to be able to balance the economy and still be assured that they're not going to do any damage to the Verde River. They have to find that balance and he thinks they can if they keep working at it.

Councilman Roecker asked about the level of success of conservation efforts. He's been told on a number of occasions that the only real way to get people to conserve water is to charge them a substantial amount of dollars to make them think about not wasting the water and using it more judiciously. Mr. Guenther said that they have just established the first statewide conservation office in the history of Arizona and the idea is to go out and help all providers develop conservation plans and drought plans. They're not sure if they're going to get funded this year, but they are off to a fighting start since last year. The concept is to develop a conservation ethic all over the state that gives people ideas on what they can do. They are also still improving the conservation planning for metropolitan areas. They're looking at Best Management Practices for urban use and reuse.

Mr. Guenther said that he and Representative Mason have been working together regarding the insecurity of the set aside of the Big Chino, and there are several things that they would like to work on together. Adequacy is one step, but being able to take the committed uses and set those aside from the estimated volume of water is going to be critically important to help protect that resource.

Mayor Simmons asked if the modeling factors in the fact that the modern day usage has a high percentage of recharge from the standpoint that recharge facilities are involved, wherein the 60's and 70's recharge was not an element. Mr. Guenther said that it was considered, both natural recharge and artificial, incidental and purposeful recharge activities. They also look at that when they are building the

water budget for a Determination of Adequacy. They try to be conservative in their estimates.

Mayor and Council members thanked Mr. Guenther and Representative Mason for bringing the presentation to the Council, and also for taking this to the Legislation, and also thanked Ms. Turner for attending from the Governor's Office. Mr. Guenther said that they were free to contact him at any time.

Representative Mason said that she wanted to let them know that the bills in the Legislature are moving along, and those that came through the SWAG process are coming along well. She asked that they all follow along with the three SWAG bills, three in the House and three in the Senate.

II. Adjournment

Mayor Simmons ADJOURNED the Workshop at 2:43 p.m.

ROWLE P. SIMMONS, Mayor

ATTEST:

ELIZABETH A. BURKE, City Clerk