## NEED FOR BIG CHINO WATER YEARS AWAY

Presentation to Prescott City Council, October 28, 2008 From the Citizens Water Advocacy Group Delivered by Howard Mechanic, Chair of the Public Policy Committee

Many people assume we need Big Chino water soon -- both to continue Prescott's growth and to reach Safe Yield. However, it is now clear this assumption is incorrect. In fact, there is a good chance we won't need Big Chino water until 2025 for either Safe Yield or to continue growth.

While it would be nice to reach Safe Yield in a few years; that simply isn't going to happen. It is highly unlikely the area will achieve Safe Yield much before 2025, even though we need to develop a plan relatively soon. In addition, with home construction stagnant and Prescott poised to get a new water allocation, it may be quite a while before we will need Big Chino water for new homes.

In the last ten years, since the area was declared out of Safe Yield, Prescott's City Councils have allocated 200 acre-feet per year for new development. This amount of water has been enough to satisfy the new demand, and there usually has been some water left unallocated at the end of each year.

On August 28, 2008, Prescott had 1840 acre-feet in its alternate water supply portfolio. The 1840 acre-feet provide enough water for nine years' water allocations. Note that of Prescott's existing 1840 acre-feet alternate water supply portfolio 1296 acre-feet would provide enough water to build homes on all remaining non-watered lots within our city limits at existing densities.

Prescott recently applied to the Arizona Department of Water Resources (ADWR) for authority for an additional assured water supply. The applied-for water is in two parts. One part is based on water to be imported from the Big Chino. The other part is for 1672 acre-feet of alternate water based primarily on recharge credits. Prescott's staff and consultants have verified that because of past recharge activity, Prescott is entitled to this quantity of new water. Although ADWR received many objections to Prescott using Big Chino water as an assured water supply, not one objection was received regarding the application for the 1672 acre-feet. This could add another eight years of water allocations, taking Prescott to 2025, with a total possible population of approximately 76,000 (which includes all home sites that have water rights, including the 1998-1999 "Plat Rush" lots). Since there is a good chance that ADWR will rule soon on this application, the Citizens Water Advocacy Group (CWAG) believes it is in the best interests of our citizens for Prescott to wait for the ruling before rushing ahead with the Big Chino pipeline. Why approve pipeline construction when we might not need the water until 2025?

Home construction has dropped considerably, and is expected to remain below projections for at least a few years (many experts say it will take at least five years to return to "normal"). However, all of the computations used above are based on the "normal" yearly water allocations. Times have changed. We need to consider whether our previously-planned schedule for Big Chino water needs to be changed.

## SAFE YIELD

We should not ignore our responsibility to reach Safe Yield by 2025. Prescott's Reasonable Growth Initiative, passed in 2005, requires all effluent from developments in large annexation areas go to Safe Yield. We should also apply all water saved through conservation to Safe Yield. We have 17 years to implement other components of a Safe Yield plan.

As mentioned above, of the alternate water available now and applied for, 1296 acre-feet is needed to serve all vacant non-watered lots in the city limits at existing densities. The bulk of the rest could go to annexed areas covered by provisions in the initiative. Approximately 2000 to 2500 acre-feet will be available to serve annexed areas (including the already annexed Fann area). Assuming new construction will devote less water to exterior use (as is the trend), Prescott can estimate an effluent amount around 65% of the developments' water use. So using the available and applied-for alternate water supplies, Prescott could expect to contribute approximately 1300 to 1600 acre-feet per year to permanent recharge to help our AMA reach Safe Yield.

In addition, if the city establishes a policy that all water conservation savings will be allocated to Safe Yield, then the amount of water we pump in the AMA can be reduced considerably. An achievable goal by 2025 of a 22% per capita water reduction (as in Prescott consultant Herb Dishlip's Safe Yield scenario) would be a major step towards Safe Yield. In September, Prescott Water Management Analyst, Connie Tucker, reported that in just the last four years Prescott has already achieved a 7% reduction in groundwater use per residential unit. In 2025 we may have 70,000 people (33,000 homes) dependant on both AMA groundwater and recharged water. If those homes and associated non-residential use have a reduced demand 22% below the .35 acre-feet per home that ADWR allows, the reduction in pumped water will be 2541 acre-feet per year.

Just the above two measures could contribute a total of over 3800 acre-feet towards Safe Yield. Prescott's share of our AMA's 11,000 acre-foot overdraft is

still undetermined. If we need to contribute more, and find we need to import more water to do it, we have until 2025 to do our part.

## **ALTERNATIVES**

There are other alternatives to the Big Chino Pipeline to extend our water supply. One is enhanced water conservation measures for new development and another is using or recharging more rainfall.

What if Prescott implemented strong water conservation measures for new developments such as those now being discussed in Chino Valley? Such measures state that city-provided potable water can only be used for exterior landscaping if there is an equal amount of recharge provided. Under such a provision, developers could build more than twice the number of homes on the same amount of available water. The available 1840 acre-feet and the applied-for additional 1672 acre-feet could provide for more than 34 years' water allocations -- possibly taking us to a total population of nearly 100,000. Even less strict measures could produce additional years of new growth.

It is unclear how much new usable water could be obtained through a program of use or recharge of rainfall. It is also unclear whether a large-scale rainwater catchment program is economically feasible. The Upper Verde Watershed Protection Coalition has committed to examining this augmentation opportunity to determine how it may fit into our future water portfolio.

The pipeline has been termed a "bridge" to get Prescott and Prescott Valley to a long-term sustainable water supply. Such a supply (possibly from the Colorado River, as is now being considered by a Bureau of Reclamation study) will not be available soon. But if we can get to 2025 without Big Chino water, then we may be able to skip the Big Chino "bridge" and go directly to a sustainable long-term supply. We need to wait for the study results (expected in about three years) which will help us define what we need for a sustainable water budget.

CWAG believes these and other options should be considered as alternatives to the Big Chino pipeline.

According to a Central Arizona Partnership report, Prescott Valley has enough water to grow until 2031. Considering the growth capability of both communities and the financial, legal and environmental issues surrounding the pipeline, CWAG believes it would be prudent to resolve these issues before committing to the Big Chino project. Specifically, the communities would have time to complete a Habitat Conservation Plan, which would resolve the legal and environmental challenges.

The above analysis shows that water from the Big Chino may not be needed until 2025 and possibly not at all. In addition, the economy is down. Current new construction impact fees could not cover their share of the annual debt service for the pipeline. We therefore need to move cautiously and prudently, and seriously consider other alternatives first.

## CWAG is requesting that the City:

- 1. Establish a working group of staff, council representatives and members of the public to determine the probability that we will need Big Chino water five years from now, ten years from now, and fifteen years from now.
- 2. Examine what reasonable alternatives we have to enhance our water supply, and compare their costs/benefits to Big Chino water.
- 3. Not commit to construct the pipeline, or expend sizable funds in furtherance of the project, until the above two tasks are completed and after ADWR issues its rule on Prescott's pending application for assured water based on recharge credits.