



ADWR DISCUSSION OF YAVAPAI COUNTY WATER ISSUES

Exportation of water from the Big Chino sub-basin to the Prescott Active Management Area (PrAMA) and development within the Big Chino itself threaten both the groundwater supply in the Big Chino and the sub-basin's only outlet, the Verde River. Because current laws do not afford adequate protection for either groundwater or surface water, the Arizona Department of Water Resources (ADWR) is severely limited in its ability to remedy this situation.

During the February 2009 hearings on the appeal of ADWR's decision on the City of Prescott's request for modification of Assured Water Supply, an internal ADWR document was entered into evidence. This document shows ADWR staff concerns about the Big Chino groundwater and the Verde River. The document, which follows, can also be accessed online on the Office of Administrative Hearings' Web site: <https://portal.azoah.com/oedf/documents/08A-AWS001-DWR/>.

During the second round of hearings on April 15, 2009, Assistant ADWR Director Sandra Fabritz-Whitney testified to the document's origin. (Her complete testimony can be found on page 43 of the 04-15-09 transcript.) She stated, "The reason the document was created was because we were having discussions in the Department about options for the Big Chino sub-basin . . . I don't recall who actually wrote it. I may have been part [sic] of an author or [it] maybe have been our attorney or even a hydrologist. I don't recall." Mark McGinnis, attorney for the Beverly Appellants, asked "But it was prepared in sort of the regular course of the Department's business; is that right?" Fabritz-Whitney replied, "That is correct."

The document makes two major points:

1. "The lack of any requirement to demonstrate water adequacy combined with no required responsibility to consider impacts to other water users when a new well is drilled or replaced leaves the groundwater supply for the 3 Prescott AMA [Active Management Area] cities and the headwaters of the Verde River at risk."
2. The authors of the document recommend as the current best option to protect the groundwater supply and the Verde River headwaters the immediate creation of an AMA for the Big Chino.

Read the full document on the following two pages.

Discussions Yavapai Issues
April 16, 2008

Problem

- Big Chino sub-basin is currently under populated yet is poised to provide a significant portion of the water supply for the 3 cities of the Prescott AMA: Prescott, Prescott Valley and Chino Valley.
- Big Chino sub-basin groundwater also contributes an estimated 80% of the flows for the Verde River headwaters.
- The current and committed demand for water uses in the Big Chino (identified through final approved plats and including exempt well uses) is about 28,000AF/year. Current agricultural use is estimated at 7,900 AF/year. The proposed volume of groundwater allowed for transportation into the Prescott AMA through the exemption in 45-555 is approximately 24,000 AF/year. Over 100 years, the total for these current, committed and proposed uses is about 6 million AF.
- Current estimates of groundwater in storage center on 10 million acre-feet. Annual natural and incidental recharge is estimated at 30,000 acre-feet. Clearly, there is a deficit and groundwater “mining” will only get worse.
- Yavapai County has not adopted a water adequacy ordinance made possible by passage of S.B. 1575 last session, and with the current make-up of the Board of Supervisors, is unlikely to do so. This means new subdivisions may build and be approved without a 100 years water adequacy report.
- Currently, there are no requirements to consider the impact of drilling new wells on existing water users, including surface water users.
- The lack of any requirement to demonstrate water adequacy combined with no required responsibility to consider impacts to other water users when a new well is drilled or replaced leaves the groundwater supply for the 3 Prescott AMA cities and the headwaters of the Verde River at risk.

Options

- **DO NOTHING.** This option leaves the water supply available in the Big Chino to market forces (i.e. what development would occur) and the Prescott AMA cities invest in this water supply at their own risk that it may be pumped away by other competing demands. The Verde River headwaters will be affected by uncontrolled groundwater pumping in the Big Chino sub-basin, but the level of impact and the timing of occurrence are unknown.
- **LOBBY HARD FOR WATER ADEQUACY.** A change in the composition of the Yavapai County Board of Supervisors might allow for a unanimous decision to require a demonstration of water adequacy before new development is approved. Because water adequacy determinations must consider the current and committed demands of others in assessing water adequacy for new development, this would at least provide for some level of water management in this groundwater sub-basin and would protect the water supplies relied on by the Prescott AMA cities.
- **SEEK LEGISLATION REQUIRING DEMONSTRATION OF WATER ADEQUACY FOR NEW DEVELOPMENT IN BASINS OR SUB-BASINS WHERE GROUNDWATER MAY BE TRANSPORTED TO AN AMA.** This would secure the same benefit as the option listed above without having to secure a unanimous vote of the Board of Supervisors. It would, however, require 31 and 16.
- **WAIT FOR THE ADJUDICATION TO DETERMINE SUB-FLOW ISSUES FOR THE VERDE RIVER.** The Superior Court has made a determination that the Verde River

needs its own sub-flow analysis and that simply using the scheme approved for the San Pedro River would not be appropriate. ADWR intends to begin work on this in July 2009, but realistically, it will be 10 years before the Court will have an approved scheme.

- **CREATE AN ACTIVE MANAGEMENT AREA IN THE BIG CHINO.** While the most difficult and politically challenging, this option will at least provide a spectrum of water management in the area, including assured water supply requirements with allowable pumping depths, groundwater rights, well impact analysis and mandatory conservation requirements. It will allow the Department to assess proposed well locations for any impacts to other water users including surface water users. A proposed management goal might be “to preserve to the extent feasible the existing supply of groundwater for future municipal and industrial uses and to prevent unreasonably increasing damage to land and all water users from new groundwater uses from wells.” It could prevent the water situation from getting worse. The ADWR director has authority to administratively create an active management area in the state for a groundwater basin that is at risk, and “active management practices are necessary to preserve the existing supply of groundwater for future needs.” As a first step, the director must establish the Big Chino as a separate groundwater BASIN; it cannot be a sub-basin and be an AMA. Both processes require a public hearing prior to a final decision.

Recommendation

- Create an AMA in the Big Chino. To do so in a way that minimizes the opportunity to do more harm through a “rush to plat process” and the time for political shenanigans, we recommend establishing the Big Chino as a separate groundwater basin and proposing the Big Chino as a new AMA be done simultaneously. We also recommend that changes to the well spacing rules and assured water supply rules for this new AMA be done initially through an emergency rulemaking so that they would be effective immediately upon the director’s designation of the Big Chino as an AMA. As well, we recommend that a management plan for the new AMA be prepared prior to the director’s designation so that the process for adopting the plan can begin as soon as the AMA is designated. The Governor would need to appoint a Groundwater Users’ Advisory Council soon after the AMA is designated to allow it to consider the proposed management plan.
- ADWR estimates it would take 12 months to complete the necessary technical work involved in establishing the Big Chino as a separate groundwater basin, preparing the hydrologic reports supporting designation as an AMA, preparation of a management plan and rule modifications for the new AMA.
- ADWR estimates the time required for the public process from the initial announcement to director designation to be about 100 days. The current time period for a preliminary plat to reach final plat status in Yavapai County is at least 120 days.
- We don’t underestimate the difficulties in this recommendation; while SRP, the conservation community and the Prescott AMA cities would most likely support the recommendation, there are those who will not. ADWR does not believe this is a “cure” for the water future in this area, but we do believe it will keep things from getting worse.