

Daily Courier 2012-09-21 Citizens suggest rainwater harvesting  
9/20/2012 9:58:00 PM

## Citizens suggest ways for Prescott area to stop depleting the aquifer: Rainwater harvesting the best chance to achieve safe yield, experts say

Joanna Dodder Nellans  
The Daily Courier

PRESCOTT - Environmental groups and local officials offered ideas Tuesday about how the new 10-year water management plan for the Prescott region can help people stop depleting groundwater supplies.

The plan will evaluate what new laws and policies might be needed to help the area stop depleting its groundwater supply, Statewide Active Management Area Director J. Scott Miller said.

The Tuesday meeting solicited public comments about how the Department of Water Resources should proceed on developing the new 10-year plan. The Prescott Active Management Area (AMA) Groundwater Users Advisory Council, a group of local elected officials and water experts that advises the Arizona Department of Water Resources on Prescott AMA issues, hosted the meeting.

Miller heard plenty of ideas from two PowerPoint presentations by the local Citizens Water Advocacy Group and a multi-state environmental group called Western Resource Advocates.



Les Stukenberg/The Daily Courier  
Citizens and officials gather at Prescott Valley Town Hall Tuesday to offer ideas on ways to achieve safe yield.

### Conservation ideas

The Daily Courier

Following is a list of more water conservation ideas that people presented at Tuesday's Prescott Active Management Area plan meeting:

- Create incentives for construction that allow rainwater to move into the aquifer instead of evaporating on pavement such as parking lots and streets.
- Encourage installation of household water fixtures, gray water systems and rainwater collection systems that conserve and reuse water.
- Tighten standards on water line leakage.
- Study and emulate other communitywide success stories such as The Cochise Water Project ([thecochisewaterproject.com](http://thecochisewaterproject.com)).
- Create conservation zones and limit wells where water conservation is especially important, such as along streams and rivers.
- Require developers to offset their water demands, like Santa Fe and San Luis Obispo.
- Create a public education program that explains the risks and costs of not reaching safe yield and/or conserving water.
- Consider revoking or putting time limits on unused Assured Water Supply certificates that landowners secured for groundwater use shortly before the state put new limits on groundwater use in 1999.

The Prescott AMA has not been making progress on the state-mandated goal to stop

depleting its groundwater supplies by 2025, what advocates call "safe yield." The Prescott AMA registered groundwater overdrafts during eight of the 11 years between 2000 and 2010. The AMA covers 485 square miles and includes Prescott, Prescott Valley and Chino Valley.

The state's "groundwater allowance" policy for water providers fosters legal depletion of aquifers, said Linda Stitzer of the Western Resource Advocates.

The local Citizens Water Advisory Group wants a more aggressive approach for the fourth 10-year management plan, its President John Zambrano said.

"It really wasn't adequate to get us on the path of safe yield," he said of the third management plan. He urged local governments to produce a united plan for safe yield. Prescott Valley Town Council member Lora Lee Nye agreed that's a good idea.

Groundwater Users Advisory Council (GUAC) member John Olsen noted that his group produced a report about the impediments to safe yield, and he suggested the state use that in producing the new plan.

"The fourth management plan is a very good focal point to cause that to happen," Prescott Valley Town Manager Larry Tarkowski added.

The three management plans have steadily increased water conservation requirements, but the new plan

must take a new look at what else the region must do to reach safe yield by 2025, Miller said. That includes evaluating what new laws and policies might help.

The public can send ideas to Arizona Department of Water Resources Public Information Officer Michelle Moreno at [mamoreno@azwater.gov](mailto:mamoreno@azwater.gov).

Tarkowski urged the state officials not to set a per-resident daily water use goal so low that Prescott Valley and Prescott can't broaden their economies that now depend too much on housing development and tourism.

"Growth is not a sustainable industry for the long term," Tarkowski said.

Prescott City Council member Steve Blair said the burden for reaching safe yield is placed too much on the Prescott AMA's only two large water providers, Prescott and Prescott Valley.

The management plan also should require residential well owners, Verde River irrigation ditch users and small rural water providers to do their part, Blair said.

"Put teeth in the plan across the board equally," he said.

The state does not regulate residential wells, which make up most of the water use in Chino Valley.

"We're an undisciplined lot," said Chino Town Council Member Carl Tenney, a GUAC member. "But we do need to learn how to conserve."

Several people said the development of large-scale rainwater harvesting facilities will be key

to any successful effort to reach safe yield locally.

The Upper Verde River Watershed Protection Coalition, a coalition of local governments, has initiated a pilot project to test ways to harvest rainwater on a large scale and direct it back into the aquifer in Chino Valley.

"That's going to be the best bet to get to safe yield," Tenney said.

"We have huge potential," agreed Doug McMillan, a retired civil engineer who helped design the pilot project. He calculated that increasing rainwater recharge by just one percent would cover the current annual Prescott AMA groundwater depletion rate. He estimated 98 percent of local rains end up evaporating or being used by plants.

Granite Creek below Prescott is a perfect place to direct rainwater to recharge the aquifer because of its deep permeable sand deposits, he said.

Prescott's two dams now hold back much of the natural recharge from the creek bed below, he added.



## Reader Comments

*Posted: Friday, September 21, 2012*

Article comment by: **@ Bill Williams**

Keep your liberal communist government out of my backyard and out of my wells.

*Posted: Friday, September 21, 2012*

Article comment by: **to Bill Williams**

Bill. that is great what they are doing over in New Mexico. Do you think they would be willing to send some of that water over our way? You do know of course that we are not all total dimwits over here in Arizona, it just turns out that Salt River Project owns the right to any water sitting behind a dam. Thanks to the help of some local people we let share our water, we are continually fighting to keep SRP from claiming ownership to our groundwater as well.

*Posted: Friday, September 21, 2012*

Article comment by: **Bill Williams**

at Pepperdappler:

Jay, we need some regulation on private wells. The ADWR reports 230,000 wells exist throughout Arizona and when the economy was good, the state was seeing about 7,000 new wells sunk per year. But ADWR only sunk three monitor wells in the Little Chino Aquifer in the past decade. It claims it does not have a budget to sink any more in the Prescott area. Private well owners have to follow state or county regulations, get permits, and sanitary approval, and well drillers have to file reports about their well casings and depth, but nothing is uniform and quality varies greatly from one report to another. Now, Jay, you don't want unscrupulous people building "bad" wells that end up polluting, do you?

*Posted: Friday, September 21, 2012*

Article comment by: **Individuals can choose rainwater harvesting**

Thanks to the Daily Courier's coverage, some local homeowners are already way ahead of the game on rainwater harvesting:

[http://www.dcourier.com/main.asp?Search=1&ArticleID=106385&SectionID=74&SubSectionID=114&S=Rainwater harvesting](http://www.dcourier.com/main.asp?Search=1&ArticleID=106385&SectionID=74&SubSectionID=114&S=Rainwater%20harvesting) is a great idea!

*Posted: Friday, September 21, 2012*

Article comment by: **Ron R Harvey**

Why do we pump drinking water only to flush it down the toilet?

*Posted: Friday, September 21, 2012*

Article comment by: **Too sweet a deal to stop now!**

The latest ADWR testing shows that monitoring wells below the dams prove that recharge is happening without flow release from the lakes (reservoirs). This means that the lakes don't need to be continuously drained to meet recharge specifications. The City couldn't care less about the Lakes. Too busy following orders from the commander in chief while he strives for a perfect order. And, there is no way you are going to spoil the sweet deal that Prescott Creeks has with ADEQ for the big bucks to do nothing right and no way you can spoil the sweet deal that ADEQ has with EPA to do nothing well. It is the continuous government dependency while planting trees that suck up water. The E. coli count now in Watson Woods is higher than when Prescott Creeks was formed. Throw the bums out and let Parks and Rec. dept have its way. Millions of dollars wasted on testing and studies and not one improvement. Off with their heads!

*Posted: Friday, September 21, 2012*

Article comment by: **Jay Pepperdappler**

Private wells do not need regulated. Water from private wells is set directly back into the aquifer through a septic and leach field system. This eliminates loss through evaporation or displacement. The city on the other hand loses water through the sewer system by evaporation and displacement.

*Posted: Friday, September 21, 2012*

Article comment by: **Question... Just What Is The Current Safe Yield**

Safe Yield, Safe Yield, Safe Yield we hear this term so often!.... The state of Arizona has decreed that by 2025 the Prescott AMA must be at Safe Yield with our water supply. I think that they were trying to get it to be sustainable... not use more water than is produced / recharged into the Prescott AMA by winter storms and summer monsoons each year. The simple question is... at this point in time, how close are we

to this Safe Yield goal? How much water is recharged into the aquifer each year? (It is a tiny percentage of each year's precipitation, most of the water transpires from the thirsty plants and evaporates from the surface shortly after the actual precipitation) How many gallons are percolated into the water table below as a result of rain and snow each year to refill the aquifer that we use for our production wells? I have never heard any politico, hydrologist, water manager, or anyone express this value. We DO know that we are far away from Safe Yield at this point in time. Our production wells and their aquifers are rapidly going down, down, down! Prescott's wells are falling a couple of feet per year. Prescott Valley's wells at a much faster rate!

Not knowing what current Safe Yield is, is like running a race and not knowing where you are in relation to the finish line. How close are we anyway? I think that this Safe Yield should be expressed in the water terminology of Gallons "Consumed" (from the aquifer) Per Capita Per Day (GPCD) yeah, I don't know what happened to the second "P" either! This number will give the average citizen some idea as to what their daily water consumption is now, compared to what must be consumed in the future. Logically, the more people there are, the smaller amount each gets of the sustainable "water pie" that lies beneath our feet\* figure that our individual piece of the current Safe Yield water pie is around thirty five gallons GPCD. However I am a novice in these matters. I am sure that real PhD level hydrologists, or even the city's water managers, could come up with a much more accurate accounting using their greater knowledge and understanding of our situation. Please... would someone step forward and tell us water users exactly how much water we in the cities should extract / consume each day, at this time, to reach this elusive "Safe Yield" goal? How do we calculate into the equation the thousands and thousands of individual (outside of the city boundaries) wells that have unlimited free access to the aquifer? Exactly how close to the 2025 goal are we anyway? What will we have to do to reach this goal?

\*(or more accurately Chino Valley's feet, we are sucking vast amounts of water from beneath this CV's rapidly diminishing aquifer, thank you CV! Sorry about those dry wells out there on the edges).

*Posted: Friday, September 21, 2012*

Article comment by: **Corps of Engineers Army Engineer**

Grassland expansion needs to be priority for the creeks. The planting of trees and water dependent plant is counter to collecting water for the Prescott reservoirs. The monies being wasted on watershed grants could be reassigned to actual watershed and lake capture improvements. We need to stop the 'self funding' boondoggle put forward by the Creeks group.

*Posted: Friday, September 21, 2012*

Article comment by: **Edward Abbey may just have been right, eh?**

Some communities, from liberal Flagstaff to conservative Orange County, CA, are utilizing "treated" effluent to recharge aquifers.

Tangy!

*Posted: Friday, September 21, 2012*

Article comment by: **Bill Williams**

Why doesn't someone take a little drive over to Albuquerque and ask them how they remarkably figured out how to recharge the aquifer over which flows the Rio Grande River as it flows north to south through town or drive up on the hillsides of Albuquerque where they built small little dams that catch rain water that would normally gush through arroyos, canyons, and down through the concrete of the city, wasting away. You see 15 years ago Albuquerque figured this all out their little check dams hold back those gushers and let the water seep into the aquifer. Try to stop figuring it out on your own and go see the

experts who do it.