



WESTERN RESOURCE
ADVOCATES

October 26, 2012

Via E-mail

J. Scott Miller
Statewide AMA Director
Arizona Department of Water Resources
3550 N. Central Avenue
Phoenix, AZ 85012

Dear Scott,

Western Resource Advocates (WRA) appreciates the continuing opportunity to comment on the Prescott AMA Fourth Management Plan (4MP) process. We are a non-profit environmental law and policy organization with offices in six western states whose mission is to protect the West's land, air and water. In Arizona we work statewide and in the Verde River and San Pedro River watersheds to promote water management policies that lessen impacts to rivers including water conservation programs that reduce groundwater pumping.

Following are additional comments that primarily reiterate those submitted in writing on April 9th (attached for your convenience) and at our presentation to the Prescott GUAC on September 18th. However, these comments provide more detailed suggestions that we hope are helpful as ADWR develops the Prescott AMA 4MP.

Planning for Safe-yield - Augmentation and New Approaches

The safe-yield challenges facing the Prescott AMA are well documented. In its "Prescott AMA Assessment" (January, 2011), ADWR states that *"...with the current authorities, it will be almost impossible to meet the management goals, and may over time move us farther away."* To meet these challenges, Prescott AMA communities have been engaged in conservation and planning efforts for some time. Prescott's conservation actions were recognized by WRA in our "Arizona Water Meter" report (October, 2010), which ranked the City the highest among 15 Arizona communities for its conservation achievements. The Prescott GUAC Safe-yield subcommittee identified impediments and opportunities for achieving safe-yield in a November, 2006 report. More recently (March, 2010), the Upper Verde River Watershed Protection Coalition Safe-yield task force recommended public education and a Prescott AMA replenishment district as safe-yield strategies.

COLORADO • 2260 BASELINE ROAD, SUITE 200 • BOULDER, CO 80302 • 303.444.1188 • FAX: 303.786.8054 • EMAIL: info@westernresources.org
NEVADA • 204 N. MINNESOTA STREET, SUITE A • CARSON CITY, NV 89703 • 775.841.2400 • FAX: 866.223.8365 • EMAIL: info@westernresources.org
NEW MEXICO • 409 E. PALACE AVENUE, SUITE 2 • SANTA FE, NM 87501 • 505.820.1590 • FAX: 505.820.1589 • EMAIL: info@westernresources.org
UTAH • 150 SOUTH 600 EAST, SUITE 2AB • SALT LAKE CITY, UT 84102 • 801.487.9911 • EMAIL: utah@westernresources.org

Despite these efforts and management plan requirements the Prescott AMA overdraft continues to grow. Clearly, additional actions and tools are needed if the AMA is to achieve its management goal. WRA recommends that the 4MP, envisioned by ADWR to be more “a plan” to achieve safe-yield, thoroughly evaluate and recommend additional mechanisms to move the AMA to safe-yield. Ideally, this evaluation would be the starting point for a local/regional cooperative water resource planning process that could build from the work of the Safe-yield subcommittee and others and result in implementable and effective actions. An ADWR-initiated and supported effort would be particularly effective in sustaining this process. Potential mechanisms could include:

- Augmentation incentives that encourage non-recoverable stormwater and effluent recharge, and low impact development design. Low impact development (or Green Infrastructure) slows the flow of urban stormwater, directing it to planted areas where it both irrigates and recharges the aquifer
- Programs that encourage strategic groundwater recharge such as incentives for recharging in areas with the most hydrologic or environmental benefit
- Evaluation of existing effluent use incentives that allow higher application rates. Effluent is recognized as a valuable resource and incentives may no longer be appropriate
- Evaluation of an effluent cut to the aquifer to augment groundwater supplies. The amount of the cut could vary depending on the location of recharge and associated aquifer benefit
- Consideration of new well drilling limits or additional well drilling standards in “sensitive” areas, including for exempt wells
- Incentives, BMPs or other approaches that connect water use to land use policies; e.g. encourage high efficiency development in certain areas or set higher water efficiency standards for new development in AWS review. Some Western communities have addressed new development demand by implementing “water demand offset” programs whereby new development offsets its demand by replacing inefficient fixtures in existing development or use other strategies that meet their water management objectives

In addition to the current overdraft, the municipal sector’s large assured water supply groundwater allowance perpetuates overdraft and could potentially result in future physical availability problems. The Prescott AMA Assessment states *“In essence, because of the limited access to alternative supplies, the Municipal sector in the Prescott AMA has a disproportionately large (AWS) groundwater allowance when compared to the other safe-yield AMAs”*. This impediment was also recognized by the Prescott GUAC Safe-Yield Subcommittee that observed *“Access to groundwater in the PrAMA has been over-allocated, allowing the aquifer to be legally overdrafted”*. We recommend that the consequences of “legal overdraft” be discussed in the 4MP as well as strategies to address it. This will likely require additional authorities including rule changes or incentives.

Though controversial, the September 12, 2012 AMWUA Phoenix GUAC recommendation that ADWR should consider revocation of certificates of assured water supply if there has not been a substantial capital investment in the development within a reasonable number of years deserves investigation. In the Prescott AMA, pre-declaration certificates and certain subdivisions platted and given a groundwater allocation at the time of declaration, represent additional groundwater mining without a replenishment obligation.

The Role of Conservation

Conservation should be an important part of any deficit reduction strategy, particularly in areas where water supplies are limited such as the Prescott AMA. The Arizona Water Meter report found that system-wide per capita use reductions of more than 10% between 2003 and 2008 were common. In fact, Prescott's per capita use declined by 18% during this period and there is no evidence that further reductions are unachievable.

We appreciate that the proposed new GPCD Program methodology incorporates portions of the third management plan component GPCD approach into the calculation of the minimum target - we believe the fundamentals of the third management plan methodology still make sense. However, it is unclear how setting a target at one standard deviation reflects conservation effort. For example, according to our most recent information, Prescott is already meeting its 4MP target. We recommend that the Department consider a GPCD program based on a reasonable expectation of additional demand reduction rather than a statistical evaluation of historic use.

Since both large providers in the PrAMA are currently regulated under the Modified Non-Per Capita Conservation Program (and only Prescott has the option of being regulated under the total GPCD Program), the lack of readily measureable program standards and ADWR's ability to monitor and evaluate the program given its staffing level is a concern. WRA recommends that ADWR continue to develop meaningful indicators of program effectiveness that could include enhanced reporting and a mid-planning period program effectiveness evaluation. In addition, we encourage consideration of additional mandatory BMPs, tailored to individual water providers, with measureable water savings, i.e. more fixture, structural water conservation measures rather than education and awareness measures.

The municipal distribution system requirements for "lost and unaccounted for water" have remained constant through multiple management periods. The American Water Works Association (AWWA) recommends that the "unaccounted for water" percentage should not be used as an indicator of loss reduction; for example, the percentage of lost and unaccounted for water can be reduced through improvements in billed metered consumption (revenue water) while the volume of water loss is unchanged. Accurate customer metering is important for consumers to receive correct usage information that may support conservation actions, but to reduce unnecessary pumping, a focus on reducing real losses (e.g. transmission and distribution main leaks) is needed. For this reason we encourage an evaluation of the current distribution system requirements in the AWWA M36 manual to establish an appropriate standard for non-revenue water loss.

Municipal conservation programs are often underfunded, resulting in less than desired implementation levels and program consistency. WRA recommends that the 4MP include a

conservation assistance program pursuant to A.R.S. § 45-567(A)(7) that supports both regional and individual municipal conservation programs that have measurable demand reductions.

“New” Supply – Reuse, Recycle and Capture

Stretching existing water supplies through effluent reuse, water recycling and rainwater/stormwater capture reduces groundwater pumping and meets non-potable needs with non-potable water supplies. In addition to wastewater effluent that is currently used, graywater and recycled industrial wastewater, and even condensate from commercial air-conditioning units, can meet a variety of non-potable needs. Passive and active rainwater harvesting practices (including low impact development design) can yield non-potable water for residential, non-residential and neighborhood scale landscape irrigation. Larger scale rainwater/stormwater capture must be carefully evaluated for environmental and water resource implications. We recommend that the 4MP encourage reuse, recycling and rainwater capture through incentives, municipal BMPs or additional new industrial requirements and that these efforts be supported through the conservation assistance fund.

Contribution to Safe-Yield - Exempt Wells and Other Users

As the largest water use sector in the Prescott AMA and the only sector subject to replenishment requirements, municipal water providers carry almost all the responsibility to meet safe-yield. This approach is inequitable and unsustainable. Exempt well demand is increasing and is estimated to be more than 12% of the municipal groundwater demand. Existing industrial users, unused industrial rights and new industrial permits also represent groundwater withdrawals not subject to a replenishment obligation.

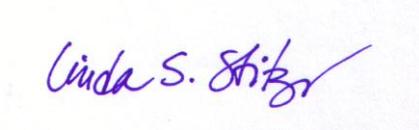
To address their contribution to overdraft, we recommend that the 4MP include an evaluation of a replenishment obligation or additional (or new) conservation and reuse requirements for industrial users.

Although sufficient funding for this purpose is a challenge, we also recommend that a program for the purchase and retirement of industrial (Type 2) grandfathered rights pursuant to A.R.S. § 45-567(A)(8) be evaluated in the 4MP. Agricultural pumpage has declined significantly since 1985 and most assessment scenarios show further significant declines and/or a switch to reclaimed water use. Nevertheless, an agricultural purchase and retirement program may also be appropriate for certain agricultural grandfathered rights (e.g. where pumping contributes to rapid groundwater decline).

Exempt well demand is difficult to address due to the lack of regulatory authorities. However, demand reduction strategies that work for municipal users are also appropriate for domestic well owners. WRA recommends that the 4MP support conservation programs for domestic well users in its conservation assistance program and encourage the implementation of local programs focused on well owners with the highest conservation potential located in “sensitive” areas.

Thank you for considering public comments and your efforts to improve the management plan given limited staffing levels. We look forward to continuing to work with ADWR and the GUAC as the Prescott management plan is developed. Please let me know if you would like to discuss our comments further.

Sincerely,



Linda Stitzer
Arizona Sr. Water Policy Advisor
Western Resource Advocates
linda.stitzer@westernresources.org
(520) 488-2436

cc: Sandra Fabritz-Whitney, Director, Arizona Department of Water Resources
Tom Buschatzke, Assistant Director, Arizona Department of Water Resources

Attachment