4MP Comments

Joanna Nadeau (University of Arizona Water Resources Research Center)

Suggestions in Anticipation of a Draft of the Fourth Management Plan (4MP)

For the Prescott Active Management Area

1. **Importance of Planning and Cooperative Water Management**
   If the 4MP is envisioned as "a plan" to achieve the safe-yield goal, it should contain a planning chapter that includes evaluation of AMA conditions and recommendations of what potential actions are needed. Ideally, this chapter would serve as a starting point for a local/regional cooperative water resource planning process to develop implementable safe-yield strategies. To ensure its inclusion, the Department should initiate a cooperative process and provide technical support to communities within the AMAs.

   The plan would also benefit from development of meaningful new regional approaches to address overdraft that could include strategic groundwater recharge, dedication of a portion of recharge to the aquifer, and a sub-area management program to address environmentally sensitive areas, areas of rapid groundwater decline, and other management objectives.

2. **Importance of Considering Environmental Connections**
   By working towards the goal of safe yield, the AMA will make progress towards augmenting groundwater and bringing it to levels where river and riparian ecosystems can benefit. Where they exist, connections between groundwater levels and riparian or aquatic ecosystems should be considered as plans are revised and policies are developed. Currently there is a spatial disconnect between recharge and recovery, and considering these connections will help protect groundwater-connected ecosystems. In addition, new policies could limit recovery of stored water outside the area of hydrologic impact in areas where there is already significant drawdown.

   In cases where significant overdraft has occurred or where there are groundwater-connected ecosystems, the AMA could consider the strategy of requiring larger cuts to the aquifer than are currently defined, ensuring that more water remains in the aquifer. Similarly, to allow communities greater control over the future of underground storage, AMAs should promote the strategy communities have to purchase and retire groundwater credits.

3. **Conservation**
   There is still potential for water conservation to help achieve safe yield goals, and further messaging aimed at conservation can assist in making those gains. Conserve to Enhance (C2E), a concept developed at the UA WRRC, is a mechanism helping people see that individual actions can result in environmental benefits. C2E can motivate additional conservation by stimulating people's inherent interest in the environment as the reason for making changes in their water

use. For the goals of the AMA management plans, implementing C2E programs could encourage additional water conservation behavior.

Thank you for your consideration of these comments. Please do not hesitate to contact me with any questions. I look forward to seeing the draft plans soon!

Regards,

Joanna B. Nadeau
Research Analyst
University of Arizona Water Resources Research Center