

Dealing with drought: part one

By Ray Wright

Editors Note: This is the first article, in a series from the Rio Grande Water Conservation District intended to help Valley producers make decisions about water.

There is no doubt that 2002 will be remembered as the summer of our Discontent. The lovely but arid fall gave way to the snowless winter. The highly anticipated spring snowstorms never appeared; rather, spring brought dry winds. So we approach summer facing a drought of a magnitude never seen in the developed San Luis Valley. As I write this on another 80-degree day with 30 mph winds, I suspect most of you have already been affected to some degree; those irrigators with only ditch water have already watched their prospects disappear, several rural residents have had their house wells go dry, and those with sprinkler irrigation watch as their well production begins to fall off in early June. Ranchers face selling their herds or purchasing expensive feed, both unpleasant choices. It is a discouraging scenario with three months of summer yet to come.

I'm afraid it may be more discouraging in the long term. The Rio Grande Water Conservation District has monitored groundwater storage in the unconfined aquifer for more than 25 years. If we compare what happened to groundwater levels in 1977 based on this year's information, we will have widespread water shortages even from our irrigation wells. The aquifer levels will be drawn down to levels not seen in the last 25 years. The refilling of these aquifers is not a quick process, either. In order to refill a reservoir you need to put more water in than you withdraw, simple as that. After 1977 we did manage to rebuild the groundwater but it took a series of very wet years and a spill at Elephant Butte Reservoir in New Mexico, which allowed the State of Colorado to divert all of the water of the Rio Grande and Conejos River for three years running. We cannot count on this type of wet cycle appearing to save us, in fact if the current dry cycle continues this drought stands to substantially impact the Valley's economy, its environment and its people.

Surviving this drought is going to take a lot of effort and cooperation. Farmers will need to employ a new level of risk management never before needed. The decisions about what to plant, when to plant, how much to plant and where, will all run into one constant question: "Do I have enough water?"

In order to help Valley producers make these decisions the Rio Grande Water Conservation District has decided to begin a series of newspaper articles on dealing with drought. We will, over the coming months, ask various local experts to provide information on a variety of topics. This information will, we hope, be valuable in aiding our water users in their water use and risk management decisions. Topics such as current season water conservation, deficit irrigation, recharge practices and financial strategies will be addressed. In addition we will be posting the District's groundwater measurements on the Internet so interested individuals can see what the water table is doing in their area. Look for it soon on www.agro.com.

The District has directed its engineer, Allen Davey, to begin a study of the irrigation well in the Valley. We hope that the result will be a simple-to-use guide to available water where a producer could locate his wells on a Valley map, determine his

own static water table and easily calculate whether sufficient recoverable water was present to allow him to plant a crop with confidence. We hope to have this study available to the public in the fall.

There are things, which irrigators should be doing now. Monitor your own water tables; located an unused well on your property and keep a log of water levels. If you have sprinklers, be sure to have an accurate pressure gauge and pay attention to it. Pressure drop is a reliable indicator of dropping well production. If you notice significant pressure drops it may be time to explore all of options. There is a lot of summer left.

The sky is not falling, but our water supplies are. The duration of the drought is not up to us, but our response is. I believe that the people of the Valley will respond as they always do to crisis and work together to mitigate the effects of this drought as best they can. The Rio Grande Water Conservation District is committed to doing our part in providing reliable, scientifically based tools to aid in making intelligent decisions. Let's all work to get through this thing intelligently so that in another 40 years or so we can say, "I remember back in ought two...."

Ray Wright is president of the Rio Grande Water Conservation District.