

DRAFT

TUCSON AMA SAFE-YIELD TASK FORCE ISSUE OUTLINE 5/10/00

ISSUE: SHIFT IN CONSERVATION FOCUS TO END USERS

The municipal conservation program, which focuses on municipal water providers, is not as effective as it could be if it addressed the end users more directly. A shift in the conservation focus from regulation of water providers to target “end users” in order to increase the effectiveness of safe-yield and conservation goals is suggested.

BACKGROUND

In the agricultural and industrial conservation programs the end users are directly regulated, because each individual farm and rightholder is subject to conservation requirements. On the other hand, municipal conservation requirements are focussed on water providers, rather than their customers (with the exception of “individual users” that have special requirements).

Since the adoption of the First Management Plan in 1984, most municipal water conservation requirements have been based on the average gallons per capita per day served by a water provider to its customers. Subsequently, an optional Non Per Capita Program was developed. It is the customers of the water providers who make the ultimate decisions about the use of water, yet with minor exceptions, they are not directly regulated by the municipal conservation program. In general, water providers do not have the authority to control the behavior of their customers. The suggestion is that there be a restructuring of the conservation program to increase DWR’s responsibilities in the conservation arena and reduce the role of the municipal providers.

Although reductions in demand have undoubtedly been achieved, they are difficult to document and are frequently masked by the effects of weather and demographic factors. Average per capita usage across the AMA has varied between 163 and 196, with trends highly correlated with weather. Municipal providers that have implemented conservation programs have in some cases seen their per capita water use increase, which has caused frustration. Other providers who have made very few efforts to implement conservation have experienced reductions in water use.

The price that is now paid for groundwater in all sectors does not reflect its full value. In most cases, the price only includes energy costs, the cost of building the distribution system, and administrative costs. There is no component of the price that is a charge for the water itself. If groundwater costs reflected the cost of replacement supplies, utilization patterns would change dramatically. Most water resource managers agree that a carefully designed rate structure, which could include significant price increases, is one of the most effective tools to encourage “end users” to use water efficiently. Implementation of rate structure changes that are not associated with a cost increase, either through a pump tax or some other surcharge, is usually very difficult.

SOLUTIONS CONSIDERED

The following ideas have been considered . Additional ideas may be added to this list.

- The existing TMP Code language requiring “For municipal uses...the program in each plan shall require additional reasonable reductions in per capita use to those required in the second management period and use of such other conservation measures as may be appropriate for individual users” could be construed to mean reasonable reductions in per capita use on an AMA-wide basis, rather than on a service area (provider) basis. Although other sections of the statute may conflict with this interpretation, the intent is to focus on regulation of and/or assistance to the end user or customer, rather than municipal providers, with a stronger role for DWR in regional achievement of conservation objectives.
- DWR could substantially enhance its conservation activities to include one or more of the following: regional coordination of local water related ordinances; implementation of direct assistance programs such as rebates, audits, training programs, etc; programs to ensure a strong conservation message in rate structures; cost/benefit analysis for implementation of particular programs in particular service areas; regional education programs with a consistent message to build support for conservation activities; and direct responsibility for reductions in per capita use AMA-wide.
- Pricing mechanisms that reflect the true value of water should be developed. Any increase in revenue that results could be used to fund infrastructure for renewable supply utilization and/or regional conservation programs.
- Rate structures should be used to encourage conservation by the end user.
- A surcharge on water use to support conservation on a pass-through basis could be put on customers’ bills, potentially on a sliding scale that targets high users.
- An increase in the pump tax could be used to pay for a regional conservation program and staff administered by DWR. This pump tax could be AMA or sector-specific, and applied on a sliding scale to other sources of water as well as groundwater to ensure ongoing revenue streams to pay for conservation.
- A partnership approach between DWR and the providers would require providers to be actively involved in implementation of conservation programs that are developed with DWR assistance.

PRELIMINARY RECOMMENDATIONS

A paradigm shift in responsibility is needed from the provider to the user to achieve conservation goals. To accomplish this shift, ADWR should be responsible for coordinating water conservation programs. ADWR would collaborate with providers to revise the municipal provider conservation program (for both public and private water companies) to target end users. This could include:

- Developing and implementing statewide and regional public education campaigns and school programs with a consistent message to build support for conservation activities and motivate behavioral change.

- Researching, developing and implementing regional conservation projects that would be done in partnership with municipal providers. These programs could include direct assistance programs such as rebates, tax credits or incentives; community education programs such as workshops and training programs; regional coordination of local water-related ordinances; and/or programs to ensure a strong conservation message in rate structures.
- Consider requiring a state surcharge for high water users to encourage an understanding of the true value of groundwater earmarked for conservation programs and/or development of infrastructure. The surcharge would go directly to fund state sponsored conservation or water infrastructure development programs rather than to the general fund.
- An increase in the pump tax could be used to pay for a regional conservation program and staff administered by DWR or other programs to facilitate achievement of safe-yield. This pump tax could be AMA or sector-specific, and applied on a sliding scale to other sources of water as well as groundwater to ensure ongoing revenue streams to pay for water management activities. This recommendation was developed in the context of the municipal conservation program, and is not supported by the agriculture or mining sectors.

OBSERVATIONS

There are a number of equity issues created by having regional financing of conservation programs when it cannot be guaranteed that the benefits of such programs are distributed in direct proportion to the payments within the municipal sector. Providers in the Non Per Capita Program already pay for specified conservation programs. There may be opposition to giving DWR primary responsibility for implementation of conservation programs in the region. Having a requirement to pay for conservation through a pump tax should avoid the ACC pass-through problem for private water companies (for an explanation, see the Residual Municipal Pumping Issue Paper), since taxes presumably can be passed through to customers as a cost of doing business. A regional conservation approach might allow more flexibility to respond to systematic stresses such as drought.

It should be noted that current Groundwater Code provisions place the responsibility for conservation with the entity that owns the groundwater right. Since ADWR is not a rightholder, it may be controversial to put ADWR in the position of responsibility for the efficiency of water use without having direct control over the water right.

This shift in focus could result in a more cooperative approach between the Department and providers to achieve conservation goals. Although it is clear that an increase in the pump tax or a surcharge would require a legislative amendment, it is unclear at this time what other changes in legislation and/or the management plans would be required to implement this proposal.