

**Water and Wastewater: Infrastructure, Supply and Planning Study,
Phase I, Final Report, May 2009**

Comments from Priscilla Robinson, February, 2010.

This report has many strengths and some outstanding weaknesses.

The sections describing the infrastructure and systems are very clear and easy to follow. The engaged reader should have no trouble grasping them. Particularly outstanding is the population section. The multiple possibilities and the forces that drive them are made very clear to the reader. The reader is helped to understand that predictions are difficult. Especially about the future.

The section on the water portfolio brings the reader face to face with the primary flaw in the entire report. The decision to limit the discussion to the City and County seems to have been, unfortunately, extended to pretending the water use data and water portfolios of other entities is irrelevant to long term planning for the region. While Pima County Wastewater is a regional entity, Tucson Water is not. Nowhere in the document is this made clear.

While it is absolutely true Tucson Water has done a very good job, quite possibly the best in the State, of planning for future supply including planning to take and either use or store, ALL of its CAP allocation as fast as possible. Equally impressive is a realistic plan to pay for this huge project. Nevertheless it is not the only entity in the region. Tucson Water cannot balance the regional water budget by itself.

The uninformed reader is lead to believe, at least by inference, that Tucson Water's CAP allocation of 144,000 AF represents either the entire allocation to the Tucson AMA or at least the great majority. The actual total of CAP allocations for the Tucson AMA, which doesn't seem to appear anywhere in this report, is 262,490 AF. Tucson's share is about 55%. The remaining 45% is held by fourteen entities, including municipal providers, towns, the State Land Department (14,000AF) and the San Xavier District and the Schuk Toak District., who together hold 66,000AF. Much of this is not currently being taken by the holders of these allocations.

It is not possible to achieve anything close to balancing the water budget in the Tucson AMA without using this water. Every acre foot of CAP water that we do not take means that an acre foot of irreplaceable ground water is used instead.

There seems to be belief that the remaining water entities will be happy sign on to a plan developed by a committee from which they were intentionally excluded. Time will tell.

Citizen committees need to understand that the holders of these allocations have been paying annual fees for years whether or not they take any water. This is essentially a property right which can be sold or leased. Since this 262,000 AF represents our entire renewable supply, it will be impossible to consider anything remotely resembling

regional water planning unless the owners of these allocations are all at the table. They will be making the decisions about how to use their allocations, just Tucson Water has made decisions about how to use its allocation.

Not until page 31 does the report acknowledge Tucson Water dependence on decisions by CAWCD, DWR, and the other basin states.

As you move into the next phase, I would suggest that you involve the staff of the Tucson office of DWR more directly. This organization has a statutory duty to maintain accurate data and information on water within the Tucson AMA. Staff of the Tucson AMA has recently completed an analysis of the prospects that the AMA will be able to meet the statutorily mandated goal of safe yield by 2025. It is a veritable gold mine of information about water resources and use within the AMA. The Tucson AMA staff is the first of the 5 AMA's to complete this legally required report.

In a final note, I would suggest you consider dropping the term "conservation" and substituting "efficiency." Conservation programs evoke voluntary programs designed to appeal to the public's better nature. Conservation suggests that something of value is protected and kept as it is – art, landscapes, endangered species, rare plants, historic sites, rare books. Efficiency suggests using something to maximize the benefit from what is expended, but acknowledges that it is used. It is achieved by engineering and economics, not good intentions. The problem with appealing to people's better nature is that people with better natures will comply – at least in the short term – but bad natured people won't. The beauty of efficiency, say a low flow shower head, is that it saves the same amount of water regardless of the conscience of the person taking the shower. It does not involve any sacrifice, since the bather gets a perfectly good shower. It also keeps on saving water long after everyone has forgotten why they even bought the thing.

From years of experience, we know that gradual price increases are the secret to increases in efficiency. When the price of water charged to a mall reaches a certain point, the mall will be motivated to replace plumbing fixtures, check for leaks, redesign landscaping, investigate improvements in air conditioning and a lot of other stuff only the mall managers understand. It also works a lot better than trying to regulate how the mall uses water. Yes, they should get an award, but it is the bottom line that does the job. We know this works.

There is always a lot of concern about the impact of price increases on household budgets. However, every household still has the potential to use water more efficiently and thereby control costs. The growing interest in rainwater capture and gray water reuse for landscaping, both in their infancy, have great potential for impacting the pie chart on page 10 of the report. Gradual increase in cost of water will make these systems economically viable.

Public information programs urging wise use of scarce resources are also important, but their primary benefit is to help the thinking segment of the public understand the reasons for the regulatory and fiscal policies that do the real work.

