

White Paper

*Provide technical support and a Clearinghouse for assistance to Arizona communities
Blue Ribbon Panel*

1. Describe the existing situation or issue

There is a general lack of information available to help communities determine the feasibility of developing their effluent resources or pursuing demand side management options, such as gray water or rain water harvesting, or what funding options are available. This lack of readily-available information undermines a community's capacity to pursue re-use as a viable alternative supply.

2. Describe associated impediments to increased reuse

In many cases, particularly for small or emerging communities - communities that were once small but have grown or are expected to grow rapidly – it is believed there is insufficient capacity with either the water providers or local government to begin to pursue the development of water reuse alternatives. Furthermore, funding organizations are constantly changing criteria making it difficult for communities with limited staff resources to keep up with these changing conditions.

3. Describe the possible solution (e.g. policy/rule/legislation or guidance) that could be applied to remove impediments.

This recommendation could take a number of forms. At its simplest and least costly, it would be to develop a web-based information and referral site. The site could include tools for assessing the benefits and costs of water reuse using the Water Reuse Research Foundation model, a section on funding options with links to the funders, and case studies showing solutions to various reuse problems. The case studies could be statewide or nationwide. A more robust approach might be modeled after the Extension Service, where their staff would be available to provide direct assistance, from reconnaissance level feasibility assessment to helping with applications for funding.

4. Describe how the policy/rule/legislation or guidance could be administered (state, county, local, etc.).

There are no rules or regulations required to pursue this option. There are number of options for where this resource could be housed – within a state agency (ADWR, ADEQ), at a University (Water Resource Research Center, Decisions for a Desert City), private non-profit such as the Watershed Management Group or trade groups.

There are resources on the national level which could be of assistance - the WaterReuse Association and its affiliated WaterReuse Research Foundation. Quoting from their web site, the Research Foundation “is an educational, nonprofit public benefit corporation that serves as a centralized organization for the water and wastewater community to advance the science of water reuse, recycling, reclamation, and desalination. The Foundation's research covers a broad spectrum of issues, including chemical contaminants, microbiological agents, treatment technologies, salinity management, public perception, economics, and marketing.” The Research Foundation is funded by its member organizations, many of which are state and federal agencies. There are also a significant number of private enterprises which subscribe.

5. Provide the recommendations, including the associated cost of implementation and possible funding sources – cost to the end user:

The cost will depend largely on how robust the services provided are. At a minimum, a web site would have to be hosted and supported, both from a technical perspective (web site development, links etc) and a content. If an extension service model were adopted, then there would be additional staffing requirements, clerical as well as technical. Dependent on the range of technical assistance provided (site visits, reconnaissance level cost assessment, assistance with funding applications etc) staffing could vary significantly. Given the size of this state, travel expenses could be significant if site visits were involved. Much of the information necessary for a reconnaissance level assessment may require site visits.

Unlike a regulatory or reporting change which could result in increased costs to the end user (utility-rate payers), this recommendation does not inherently directly impact the end user by its implementation, though actually implementing a reuse program would. If technical assistance were offered, some sort of fee-based service could be considered, possibly based on ability to pay. (Note, the target audiences for this service are cash and staff poor, so putting additional costs for these services service may be self defeating.)

Funding: If the service was housed in a state agency, funding/staffing this service would be part of the normal budgeting process – either reallocation within existing budgets or with new funding. If it were located at a university, it could be state funded (passed through an agency and thus require appropriation) or the university could seek grant funding from federal agencies (ear marks) or private non-profits. This would hold true for co-locating with a private non-profit.

6. Benefits –

Providing consistent, up to date information on funding, regulatory requirements, inventory of reuse (in the state and nationally) and tools to help assess feasibility; will help put utilities in a position to make informed decisions about the development of their effluent resources.

7. Unintended consequences -

It is hard to imagine any negative unintended consequences as a result of providing more information and assistance than is currently available.