

## **Infrastructure/Retrofit Working Group of the Blue Ribbon Panel on Water Sustainability**

Meeting Minutes

February 24, 2010

### **Future Meeting Schedule**

The Infrastructure/Retrofit working group meetings will initially be held on Wednesdays (bi-weekly) from 9:30 – 11:30 AM. The dates of the next two meetings will be March 10<sup>th</sup> and March 24<sup>th</sup>. The feasibility of coordinating with other working group meeting times in the future will be investigated so that the number of trips for those participating in multiple working groups will be minimized.

### **Working Group Scope and Process**

Graham Symmonds agreed to serve as Co-chair of the Infrastructure/Retrofit Working Group.

The meeting minutes will focus on major decisions by the group.

The outcome of the working group will be proposed changes to statutes and rules related to reclaimed water infrastructure technical standards, including for aquifer recharge with reclaimed water.

### **Review of Current Regulatory Structure for Reclaimed Water Infrastructure and Technical Standards**

The Arizona Administrative Code Title 18, Chapter 9, Article 6 contains the existing technical standards for reclaimed water conveyances and was distributed to the working group. The working group identified several gaps in the existing technical standards that include:

- There is no guidance provided on retrofitting systems (e.g., converting an existing potable water line to deliver reclaimed water).
- Current standards do not address groundwater augmentation that occurs when reclaimed water is recharged to the aquifer.
- There is no guidance provided on the distribution and use of reclaimed water inside buildings.
- There is no guidance provided on using raw water to augment reclaimed water supplies to meet seasonal demand fluctuations.
- There is no guidance provided regarding using high quality reclaimed water to augment potable water supplies at water treatment plants during emergencies.
- There are inadequate criteria regarding separation of reclaimed water lines with other water and wastewater lines.

- There is no guidance provided related to the protection of reclaimed water from the point of delivery to end users in order to preserve the quality of the water to make certain that it meets the standards for its intended use.
- On-site issues are not addressed.
- There is no guidance provided related to operations and maintenance of reclaimed water conveyances.
- Lack of a common terminology—the same term means different things to different people.

### **What the Working Group Should Address/Components of a Code of Technical Standards**

The working group identified several components that should be addressed to fill in the gaps in the reclaimed water conveyances technical standards. These components include:

- Incorporating design standards in the regulatory rules and including, where applicable, performance standards that will accommodate expected advances in reclaimed water practice.
- Considering aquifers as “infrastructure” for storing reclaimed water for future use.
- Reviewing existing standards from other states or countries to determine applicability in the state of Arizona with a view to bringing in “best of class” ideas.
- Incorporating a visioning process that will help chart a course to achieve the goals of the working group.

### **Additional Issues to Consider or to Forward to the Blue Ribbon Panel or to another Working Group**

The working group identified several issues that were related to reclaimed water infrastructure but that also might be more appropriately addressed by another working group or at the Blue Ribbon Panel level. These issues include:

- The impact of water softening on reclaimed water quality with primary concern for increased salinity and TDS concentrations.
- De-centralized use of reclaimed water resources.
- Permitting issues related to jurisdictional boundaries that might result in potable water supplies being located too close to reclaimed water recharge projects.

### **Action Items**

The following action items resulted from the meeting:

- The Working Group will review both the reclaimed water conveyance and sewage collection system technical standards that were distributed at the meeting prior to the next working group session.
- Several members of the working group agreed to bring reclaimed water technical standards from various organizations/states/countries to the next meeting. The organization/states/countries and responsible individuals are as follows:
  - Tucson Water - Mark Titus
  - Maricopa County – Dale Lieb
  - Australia – Graham Symmonds
  - Texas & Florida – Michael Barone
- The next meeting will be held, Wednesday, March 10<sup>th</sup> from 9:30 – 11:30