

Infrastructure / Retrofit Group

May 7, 2010

Blue Ribbon Panel Report

Guy W. Carpenter, P.E.

Organization

- **Co-Chairs:**
 - **Guy Carpenter, Carollo Engineers**
 - Board of Directors, WateReuse Association
 - **Graham Symmonds, Global Water**
 - WateReuse Arizona Officer
- **Roster: 42**
- **Average Attendance: 20**
- **Meeting Frequency: Every 2 Weeks, for 2 Hours**
- **Agency Staff**
 - **Chuck Graf, ADEQ**
 - **Kym Holloway, ADEQ**

Objectives

- Recommend measures that will facilitate the design, construction, operation and maintenance of new and retrofitted reclaimed and recycled water systems.
 - Develop reclaimed water distribution system standards (i.e., a uniform code of technical standards for design, operation, and maintenance of “purple pipe” systems in Arizona) .
 - Develop proposed changes to statutes and rules related to aquifer recharge with reclaimed water.
- Bring as many standards as possible into State rule, so there is less disparity among jurisdictions within Arizona.

Areas of Focus

- Reclaimed (Non-potable?) water conveyances technical standards (AAC R18-9-601 through 603):
 - Common regulations for all non-potable water supply systems to protect potable water systems
 - Design standards to the point of delivery
 - Performance standards (operations & maintenance)
 - Design & operation standards after the point of delivery (on-site) for all non-potable water; new & retrofit

Areas of Focus (continued)

- Infrastructure/technology (BADCT?) specifications for a new, higher quality reclaimed water quality class
- Treatment and infrastructure standards and associated best practices for indirect potable reuse
 - Groundwater (under APP program, not Article 6 (infrastructure))
 - Surface Water (under what program?)

Issues “Punted” to Our Group

- Installation impacts to existing infrastructure and environment
- Storage standards – seasonal and diurnal variation
- Incorporation of harvested rain water into sewer system for balancing loadings and increasing available reclaimed water supply
- “CMOM” approach to reclaimed water distribution systems
- MCESD ATC and AOC for all reclaimed systems (including onsite); and associated inspections, etc.
- Signage issues (are seen as “infrastructure issues”)
- Conversion/retrofit best practice standards (dye testing, cross connection control, etc.)

Cross Cutting Issues

- Water quality distinctions guiding our decisions
- Near impossible to not talk about regulations and permitting when talking about infrastructure
- Designation of non-potable water after part of indirect potable reuse
- Rights to non-potable water after introduction to indirect potable reuse system
- Definitions: Non-potable as the overarching category

Cross Cutting Issues (continued)

- New class for higher than Class A+ quality reclaimed water
- Guidelines for indirect potable reuse
- APP for reclaimed water distribution systems?
- Signage, standards, regulations for any water after it is introduced to an artificial lake or other open impoundment in a publicly accessible area
- Consumer Confidence Report for non-potable systems

Action Items

- Develop policy statements:
 - Policy statement: background/description
 - Guidelines (not in rule): best practice examples
 - Standards (in rule): best practice examples
 - Recommendations
- Prepare Working Group Report for June Interim Report to BRP

Planned Meeting Schedule

- Wednesdays, 9:30 to 11:30 a.m.
 - ADEQ (usually)
 - May 12th & 26th
 - June 2nd, 16th & 30th

 - Note: May 26th & June 2nd – only one week separation