

# Infrastructure / Retrofit Group

March 5, 2010

Blue Ribbon Panel Report

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# Organization

- Co-Chairs: Guy Carpenter & Graham Symmonds
- Attendance: 16
- Expressed Interest: 34
- Agency Staff
  - Chuck Graf, ADEQ
  - Kym Holloway, ADEQ

# Objective

- From BRP – Recommend measures that will facilitate the design, construction, operation and maintenance of new and retrofitted reclaimed and recycled water systems. (This working group is proposed separately from the Regulations and Permitting working group because of the subject matter’s complex, technical nature.)
  - development of reclaimed water distribution system standards (i.e., a uniform code of technical standards for design, operation, and maintenance of “purple pipe” systems in Arizona)
- From 1<sup>st</sup> Meeting – Develop proposed changes to statutes and rules related to reclaimed water infrastructure technical standards, including for aquifer recharge with reclaimed water.
  - Bring as many standards as possible into State rule, so there is less disparity among jurisdictions within Arizona

# Emerging Areas of Focus

- Reclaimed water conveyances technical standards (AAC R18-9-601 through 603):
  - Incorporating design standards in the regulatory rules and including, where applicable, performance standards that will accommodate expected advances in reclaimed water practice.
  - Consideration of 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.

# “Gap” Analysis

- Retrofits
- Groundwater augmentation
- Distribution and use of reclaimed water inside buildings
- Use of other water supplies to augment reclaimed water supplies
- Use of high quality reclaimed water to augment potable water supplies at water treatment plants during emergencies
- Re-evaluate criteria for pipe separation
- 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
- Operations and maintenance of reclaimed water conveyances
- Lack of common, acceptable terminology

# Other Issues for BRP

- 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
- Role of water reuse in ecological / environmental / habitat preservation and/or mitigation

# Action Items

- Review materials (Arizona rules) from first meeting
- Assemble & present “best in class” rules from around the world for consideration

# Planned Meeting Schedule

- Every other Wednesday, 9:30 to 11:30 a.m.
  - ADEQ (usually)
  - March 10<sup>th</sup> & 24<sup>th</sup>
  - April 7<sup>th</sup> and 21<sup>st</sup>