

BRP ISSUE PRIORITIZATION
DRAFT Recommendation Approach
October 29, 2010

After reviewing the issues listed and distributed to the panel, they seem to fall into 5 categories: education/outreach; standards; information development and research agenda; “regulatory rationalization”; and incentives. These are suggested categories to assist in developing concrete recommendations for going forward. Each Issue has been identified by its original priority number and its location in the BRP Summary of Proposed Recommendations for both the summary and the full White Paper Analysis. For example, (*Priority Issue #5 – pp I-5 & II-10*) refers to Priority Issue #5 which is summarized in Section I of the BRP Summary of Proposed Recommendations on page I-5 and the full white Paper Analysis for this issue can be found in Section II of the BRP Summary of Proposed Recommendations beginning on page II-10.

EDUCATION/OUTREACH

- (*Priority Issue #17 – pp I-22 & II-55*) Need for consistency in the use of common and positive terminology to convey effective messages about water sustainability;
- (*Priority Issue #20 – pp I-27 & II-64*) Need for better public understanding of the overall water picture and the role of reclaimed water in the water cycle;
- (*Priority Issue #16 – pp I-20 & II-44*) Need for the public, community leaders, water treatment professionals, businesses and industry to understand and be aware of water quality issues and how their actions including disposal of pharmaceuticals and personal care products can influence water quality;
- (*Priority Issue #5 – pp I-5 & II-10*) Need to create and expand public confidence that reclaimed water is safe for reuse through an understanding of how the water is treated and the types of potential uses for reclaimed water and the need to build a constituency for increased use and acceptance of reclaimed and recycled waters for beneficial purposes through education, outreach and other strategies;
- (*Priority Issue #6 – pp I-6 & II-13*) To develop support for programs that protect and enhance sustainability of Arizona water supplies; a firmly-grounded and fact-based awareness of the relationship of water availability, conservation, the economy, the environment and desired quality of life among the public, business community and government leaders is necessary;
- (*Priority Issue #3 – pp I-3 & II-6*) Water resource availability and associated development costs establish the role of water efficiency and demand curtailment programs in addressing growth and drought. This interrelationship must be incorporated in water resource planning at all levels.

STANDARDS

- (*Priority Issue #12 – pp I-15 & II-32*) Efforts should be made to manage water supplies to optimize the matching of water quality to intended uses (Can also be a part of regulatory rationalization and education/outreach);
- (*Priority Issue #21 – pp I-29 & II-67*) Compile a matrix of state, regional and local specifications and infrastructure standards and use it to identify similarities, inconsistencies and gaps. Use the matrix to develop recommendations on a suite of standards that will provide a common foundation of safety and good engineering practice for reclaimed water distribution systems;
- (*pending*) Compile a matrix of O&M best management practices (BMPs) that are applicable to reclaimed water distribution. Use the matrix to develop recommendations to the BRP on a menu of BMPs appropriate for use in Arizona;

- *(Priority Issue #10 – pp I-12 & II-24)* Develop definitions and guidance for Indirect Potable Reuse (IPR) in aquifers in association with drinking water source approval and local and state agency permitting requirements to facilitate a standardized and efficient approach to design, permitting and operation of such projects;
- *(Priority Issue #15 – pp I-19 & II-41)* Identify issues and develop approaches to operator training/certification for reclaimed water utility distribution systems to ensure consistent and safe management of this resource and its associated infrastructure. Based upon the analysis, develop recommendations on operator certifications for the BRP;
- *(Priority Issue #7 – pp I-8 & II-16)* Facilitate collaboration between water and energy planners should be developed to ensure the most efficient use of water and energy;
- *(Priority Issue #9 – pp I-11 & II-22)* Interactions and inconsistencies between the AZPDES Permit Program, Surface Water Quality Standards, Reclaimed Water Quality Standards and Aquifer Protection Permits need to be resolved.
 - A flowchart/matrix will assist in clarification. This should have the impact of removing impediments to reuse and recharge where what is allowed by one program might be inadvertently blocked by another. The flowchart should identify what each program covers and where one program ends and the next program starts. The working group believes it is beyond their scope to develop this matrix and it should be an effort of ADEQ.

INFORMATION DEVELOPMENT & RESEARCH AGENDA

- *(Priority Issue #4 – pp I-4 & II-8)* Data collection needs to be streamlined to reduce the administrative burden on reclaimed water providers. ADEQ and ADWR should initiate a review process of data collection requirements, monitoring requirements and reporting requirements for permit and non-permit information.
 - Data should be collected in an efficient manner, avoid redundancies where possible and reflect a comprehensive picture of reclaimed water use;
 - Permit requirements should be reviewed for frequency, consistency and applicability of monitoring;
 - Consider the expertise/capabilities developed by the regulated community to electronically report and manage data; and accept electronic signatures.
- *(Priority Issue #13 – pp I-16 & II-35)* A strategic research plan is needed that supports new direction in policy and rule development (emerging contaminants, direct potable and full body contact reuse)
 - Direct potable use;
 - Research efforts coordinated similar to those under the prior Arizona Water Institute;
 - Technology based standards development process;
 - Human health impacts for existing, traditional reuse applications;
 - Human health impacts of PCPs in gray water.
- *(Priority Issue #2 – pp I-2 & II-4)* Arizona-specific information is needed about how much water is embedded in energy and how much energy is embedded in water;
- *(Priority Issue #25 – pp I-35 & II-88)* Look at opportunities for efficiency in the water and energy nexus including water-less solar facilities and dry cooling towers;
- *(Priority Issue #22 – pp I-31 & II-82)* It is important to consider a continuing role for research and incentives which will transition worthy technologies into mainstream markets.
- *(Priority Issue #26 – pp I-37 & II-91)* Further research is needed regarding regulatory barriers, cost and benefits, quality issues and avenues for increasing utilization of stormwater and rainwater at the regional, community and homeowner/property owner

level. Provide incentives for emphasizing water harvesting as a preferred Best Management Practice (BMP) for stormwater management.

“REGULATORY RATIONALIZATION”

- *(Priority Issue #8 – pp I-9 & II-18)* Policy and rule changes are needed to encourage use of new water sources (reclaimed water, gray water, rainwater, Stormwater and remediated water). (Can also be under Incentives)
 - ADWR policy should clearly address commingling of remediated waters with reclaimed water;
 - BMPs need to encourage “green” infrastructure development such as rainwater harvesting;
 - Aquifer Protection Permit and Reclaimed Water Permit Rules should emphasize protection of public drinking water sources from contamination to maintain public support for use of reclaimed water, gray water and other alternative water sources (Can also be part of Education/Outreach)
 - Refine Arizona policies and regulations governing the accrual of groundwater credits to provide incentives for conversion to reclaimed water from groundwater pumping for groundwater turf and irrigation users – proximate to reclaimed lines;
 - Make changes to state statutes to grant full recharge credits to the Secretary of the Interior for effluent used to sustain the flows in riparian corridors.
- *(Priority Issue #1 – pp I-1 & II-1)* Jurisdictional/duplication issues exist between ADEQ, ADWR, ACC, counties and other entities –terms should be standardized, reporting requirements should be examined for duplication and fees should be examined for duplication between entities;
- *(Priority Issue #11 – pp I-14 & II-29)* Title 18, Chapter 11, Article 3 Reclaimed Water Quality Standards need review and updating to take into account experience and knowledge learned from reclaimed water use in AZ (Can also be under Standards):
 - New candidates for general permits
 - Type 3 gray water system design standards
 - New gray water uses
 - Definitions, amendments and signage requirements
 - Review of outstanding issues
 - Coliform monitoring issues (e.g. e-coli v. fecal coliform)
 - Gray water usage limitations (quantity)
 - Accommodate de minimus uses of alternate water sources
 - Type 3 gray water system design standards review
- *(Priority Issue #23 – pp I-32 & II-84)* Establish financial and rate-making guidelines for the ACC regulated water utilities (and public utilities) that mirror the programs currently in effect for power utilities;
- *(Priority Issue #14 – pp I-18 & II-38)* Recharge, Reuse and AZPDES permits do not adequately address unique situations. More flexibility is needed so that reclaimed water use opportunities can be taken advantage of.
 - De-Chlorination requirements for riparian and recharge projects should be case-by-case;
 - Lake management plans should substitute for narrative nutrient standards;
 - Permits need to be consistent (APP BADCT/Reclaimed Water Quality Standards)
 - General Permits should be more widely offered.

INCENTIVES

- *(Priority Issue #19 – pp I-25 & II-61)* Current state statutes have created a jurisdictional issue with regards to control of gray water systems and need to provide incentives for continued/expanded use of alternative sources of water supply:
 - Tax credits for gray water systems;
 - Provide financial and regulatory incentives for conversions;
 - Local control of gray water systems.
- *(Priority Issue #18 – pp I-23 & II-58)* Provide technical support and serve as a clearinghouse for AZ communities in determining needs for water resource requirements relative to reclaimed water and to provide assistance with eligibility for grants and financial assistance and continue and expand WIFA grant and loan programs targeted to Green Infrastructure such as aquifer recharge and stormwater capture/rainwater harvesting.