

April 22, 2013

**TEXAS WATER DEVELOPMENT BOARD  
DIRECT POTABLE WATER REUSE RESEARCH PROJECT**

The Texas Water Development Board's (TWDB) mission is to provide leadership, planning, financial assistance, information, and education for the conservation and responsible development of water for Texas. Texas faces many challenges when planning for future water supplies. The population in Texas is expected to increase 82 percent between 2010 and 2060, ongoing droughts have stressed water supplies in many regions of the state, and increasing challenges associated with acquiring new surface and groundwater supplies. The [2012 State Water Plan](#) has identified water reuse as a significant water management strategy to support future water needs in the state. Statewide, water reuse comprises over 10 percent of the water management strategies for the year 2060.

Potable reuse projects that include an environmental buffer are typically referred to as "indirect" potable reuse projects because the reclaimed water is not delivered directly to the water treatment plant or drinking water distribution system. Incorporating an environmental buffer into a potable reuse project, such as a constructed wetland, or storage in a water reservoir or groundwater basin, has been utilized in Texas for many years and will continue to be an important option for some projects.

In contrast, "direct" potable reuse eliminates or significantly minimizes the use of an environmental buffer. Instead, engineered treatment processes are used to purify the reclaimed water so it is safe to drink. Interest in the direct potable use of reclaimed water continues to grow in Texas, particularly under the recent drought conditions.

The TWDB has allocated a portion of its priority research funding to support the development of a resource document that will provide scientific and technical information related to the implementation of direct potable reuse projects in Texas. The majority of the potable reuse research and/or approaches that have been undertaken or are being considered in other parts of the country may not be applicable or may not necessarily provide the best approach for Texas projects. Therefore, it is imperative that a process begin in order to prepare a resource document that will identify safe and practical approaches applicable to Texas and provide advice on how utilities can plan and implement projects. TWDB has contracted with a consulting team that includes a number of leading potable reuse experts to help develop this resource document.

The TWDB is coordinating closely with the Texas Commission on Environmental Quality (TCEQ) in the development of this resource document. The TWDB and the TCEQ are committed to facilitating a process that will both ensure the protection of public health and provide practical approaches to implementation of direct potable reuse projects that are appropriate for Texas water providers. The development of the resource document is also supported by water utility stakeholders throughout the state. Diverse stakeholder input and feedback will help ensure that the final product addresses the needs of Texas water providers and can be embraced as a framework for advancing this important water management strategy in the future.