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An Examination of the Legal Issues in Municipal Water Reuse

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AN EXAMINATION OF THE LEGAL ISSUES IN MUNICIPAL WATER REUSE

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Fiscal, physical, environmental and political consideration have severally restricted building new reservoirs to meet municipal water needs in Texas and throughout the American west. Water management is transitioning from an era of reservoir construction to one of more intensive management through conservation, reallocation, desalination, rainwater harvesting, aquifer storage and recovery and reusing treated effluent as means of meeting water supply needs. As opportunities for conventional water supply development dwindle and costs for wastewater treatment and disposal climb, the role water reuse plays in water resource management increases significantly. Both nonpotable and potable applications of reclaimed water offer a means to extend and maximize the utility of limited water resources. Increasing biological and microbiological knowledge, improved wastewater treatment technology, and strict legal requirements on the quality of discharged effluent have elevated the notion of wastewater reuse to a realistic water supply alternative.

Reuse projects are characterized as direct or indirect. With direct reuse projects, treated effluent is collected and piped to the place of reuse without using a watercourse for transport. Indirect reuse projects use the bed and banks of a stream, a reservoir, or the confines of an aquifer to convey or store treated effluent for subsequent downstream diversions or recapture.

A growing number of municipalities throughout Texas and the West are implementing reuse strategies. At a macro level of consideration, reuse issues fall into four main categories: (1) legal. (2) economic, (3) health, and (4) public acceptance. The legal issues are related to ownership, application, third party impacts, and environmental limitations. This paper and presentation will examine the legal certainty or uncertainty associated with these issues in Texas and other western states.

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