



TEXAS PUBLIC POLICY FOUNDATION
LEGISLATORS' GUIDE TO THE ISSUES

Water Supply

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THE ISSUE

Providing an adequate supply of water is a growing challenge for Texas. Our state likely needs an additional 9 million acre-feet of water to meet the demands of a population projected to be 46 million in 2060.

Fourteen years have passed since enactment of SB 1 in 1997. This landmark water legislation has led to nationally-acclaimed regional and state water supply plans. Legal and financial constraints, however, stymie timely implementation of projects to increase water supply. And while Texas plans for enough water during a drought of record, that model may need revising. The drought of record refers to prolonged conditions over the decade of the 1950s. Yet, from 2008-09, central Texas experienced a drought unprecedented in its intensity with hydrological conditions worse than the historical drought of record.

As required by SB 1 in 1997, Texas has completed detailed water plans measuring available water and future demand. The 16 Regional Water Planning Groups have developed comprehensive plans which the Texas Water Development Board (TWDB) compiled into the official State Water Plan (SWP). In 2002, the TWDB issued the first SWP developed through the SB 1 requirements. In 2007, TWDB issued a revised SWP. The Regional Water Plans (RWPs) identify hundreds of strategies to augment available supply by 9 million acre-feet of water by 2060.

In 2009, Comptroller Susan Combs published *Liquid Assets: The State of Texas Water Resources*. This report details the status of specific water supply strategies in each of the 16 RWPs. A more cursory assessment in the 2007 SWP revealed only 9 percent of strategies were operational and only 5 percent had begun construction. The

Comptroller's report indicates that most, if not all, of the large scale projects remain in the preliminary stages.

Although the Regional Water Planning Group members, water purveyors, and local governments have worked effectively, project implementation has been delayed, in large measure by state regulatory issues. Indeed, following passage of SB 1 in 1997, the Legislature has, perhaps inadvertently, passed legislation which complicates—rather than facilitates—new water supply projects. SB 2 in 2001 and HB 1763 in 2005 enlarged the authority of Groundwater Conservation Districts to limit private development of groundwater. In 2007, SB 3 established a multi-layered process leading to the Texas Commission of Environmental Quality adoption of Environmental Flow Standards. Water supply projects based on development of groundwater and new surface water right permits are delayed by these new groundwater and environmental flow statutes.

Other regulatory issues complicate completion of water supply projects. The “junior rights” provisions required for inter-basin water transfers remains an impasse for projects. Unresolved issues about water right amendments and indirect reuse of water delay many projects.

SB 1 stipulated that “voluntary redistribution” of existing water supply would create much of the water needed for growing demand. Such redistribution assumes a well-functioning water market which facilitates change of use, e.g., from irrigation to municipal use, and water transfers. Markets depend upon defined property rights and predictable regulatory decisions. Except in a few areas, water marketing in Texas is far more limited than anticipated.

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THE FACTS

- ★ The 2007 SWP estimates Texas needs an additional 9 million acre-feet to meet demand in 2060 under drought conditions.
- ★ Implementation of the water supply strategies in the 16 RWPs has an estimated capital cost of \$30 billion.
- ★ The SWP assumes water conservation strategies could generate 23 percent (2 million acre-feet) of increased supply needed by 2060.
- ★ Re-use strategies are recommended in 14 of the 16 regional plans and could meet 14 percent (1.3 million acre-feet) of additional demand in 2060.
- ★ Surface water strategies in the 2007 SWP could produce 4.4 million acre-feet by 2060, accounting for almost 50 percent of new supply at an estimated capital cost of \$18 billion.
- ★ Fourteen recommended new reservoirs account for 1.1 million acre-feet annually at an estimated cost of \$5 billion.

RECOMMENDATIONS

- ★ Remove legal barriers to private investment in water supply projects.
- ★ Clarify that the landowner's groundwater right is a vested private property right.
- ★ Amend TWC 11.122.b to simplify TCEQ approval of water right amendments.
- ★ Simplify the requirements for bed and banks authorization for indirect reuse of water.
- ★ Amend SB 3 to clarify that the policy objectives for Environmental Flow Standards are critical flows during a drought of record.

RESOURCES

2007 State Water Plan, Texas Water Development Board (Nov. 2006).

Liquid Assets: The State of Texas Water Resources, Texas Comptroller of Public Accounts (Feb. 2009).★

