TEXAS WATER UPDATE

With the prolonged drought continuing to grip Texas, the United States Drought Monitor reports that nearly two-thirds of the state (61 percent) is currently categorized as experiencing abnormally dry to exceptional drought conditions. As water supplies continue to diminish and even dry up, the effect of the increasingly arid Texas climate is best seen in the depleted lake levels from across the state.

LAKE LEVELS



Complicating this ominous trend is the fact that there is no end in sight and forecasters project conditions will worsen, providing the potential for expanded statewide effect. Texas climatologist Dr. John Nielsen-Gammon has stated the drought conditions could last "another 10 to 15 years."

DROUGHT OF RECORD

Historically, the state's "drought of record" was recorded in the 1940s and 1950s, resulting in changes in lifestyles and a population shift to urban areas, but many believe the current conditions will soon eclipse that catastrophic period. According to the Lower Colorado River Authority, two of Texas' Highland Lakes, Travis and Buchanan, have received seven of their all-time lowest inflows in the past 10 years. While the LCRA is not ready to officially declare today's conditions as the drought of record, with the situation expected to worsen, that could soon change — setting off major water disruptions to consumers, businesses and local governments.



Across the state, dangerously low lake levels are threatening many

communities' drinking water supplies. Some smaller communities have been reduced to trucking in drinking water, and many are scrambling to acquire additional water supplies. One Texas city has resorted to treating wastewater for consumption. Even cloud seeding has been attempted as an alternative. In January of 2014, a report by the Texas comptroller noted that 46 of the state's public water systems were at risk of running out of water within 180 days.

REVERSING THE TEXAS JOBS MIRACLE

With the state's population expected to increase 82 percent between 2010 and 2060, the demands on the state's water supply will only intensify. While the adoption of Proposition 6 in 2014 and the subsequent creation of the State Water Implementation Fund for Texas (SWIFT) are important steps toward increasing water supplies for the future, the \$27 billion in projects the initiative is designed to fund represents roughly half of the estimated

\$53 billion in costs for water needs identified by the regional water planning groups. Additionally, the needs identified reflect roughly 23 percent of the \$231 billion in total costs for water supplies, water treatment and distribution, wastewater treatment and collection, and flood control that state leaders project will be needed in the next 50 years.

The adverse effects of a declining, if not limited, water supply on the state's drinking water and economic development is not easily reversed and could be crippling. Unlike the need for more schools or roads, it's not easy to build your way out of a water crisis when it doesn't rain. With less water available to fuel key industries such as manufacturing, agriculture and tourism, the state's quality of life and its appealing business climate could be threatened. According to the Texas Water Development Board, annual economic losses from not meeting water supply needs could result in a reduction in income of approximately \$11.9 billion annually if current drought conditions approach the drought of record, and as much as \$115.7 billion annually by 2060, with over a million jobs lost.



BETTER MANAGEMENT OF EXISTING WATER SUPPLIES

A lack of rainfall is not the only factor contributing to the state's water crisis — past water management policies have also played a significant role. In hindsight, a decision in 2011 to release almost half of the available water in Lake Travis to be used for weed control in rice fields was ill-advised. The lake has never recovered from the mass release, and remains at only a fraction of its storage capacity, raising concerns for its future viability as the region's major source for drinking water. In October 2013, the lake's declining level led the Austin Water Utility director to suggest it could go dry in two to six years if the current weather conditions continue.

FACTORS FOR ECONOMIC GROWTH



PLANNING FOR THE FUTURE

If Texas is to sustain its expanding economy and meet the public health and safety demands of a growing population, it is vital that water planning, including better management of existing supplies, be at the forefront of water policy decisions. We can't make it rain, so we must plan for the future and better manage the resources we have. Those decisions must include:

- Requiring regulatory entities to fully assess the impact of their water management decisions on an affected region and state's future drinking water supply
- Consideration of economic impact as a factor that must be weighed in water management decisions
- Implementing conservation policies with water pricing aimed at protecting resources and reducing consumption
- Increasing transparency in water planning decisionmaking processes to ensure greater public and local government input
- Using the most up-to-date hydrological data for decision-making
- Increasing state support for new water supplies, including alternatives such as desalinization

NEXT ISSUE Texas Water Crisis: A Policy Roadmap