

# 2017 State Water Plan

To ensure the vitality of Texas' future, Texas citizens, water experts, and government agencies collaborate in a comprehensive regional water planning process. Conducted in five-year cycles, the process culminates in a state water plan. The cycle for the 2017 State Water Plan was underway when the state experienced its second worst statewide drought on record from August 2010 to October 2014 and its worst one-year drought in 2011. The scope and effects of those droughts reminded us of the importance of water planning.

## What does the plan tell us?

Texas faces significant water shortages over the next 50 years if steps are not taken to conserve and develop additional water supplies. The 2017 State Water Plan, based on 16 approved regional water plans, forecasts rapid population growth of more than 70 percent between 2020 and 2070, from 29.5 million to 51 million people. Water demands are projected to increase less significantly

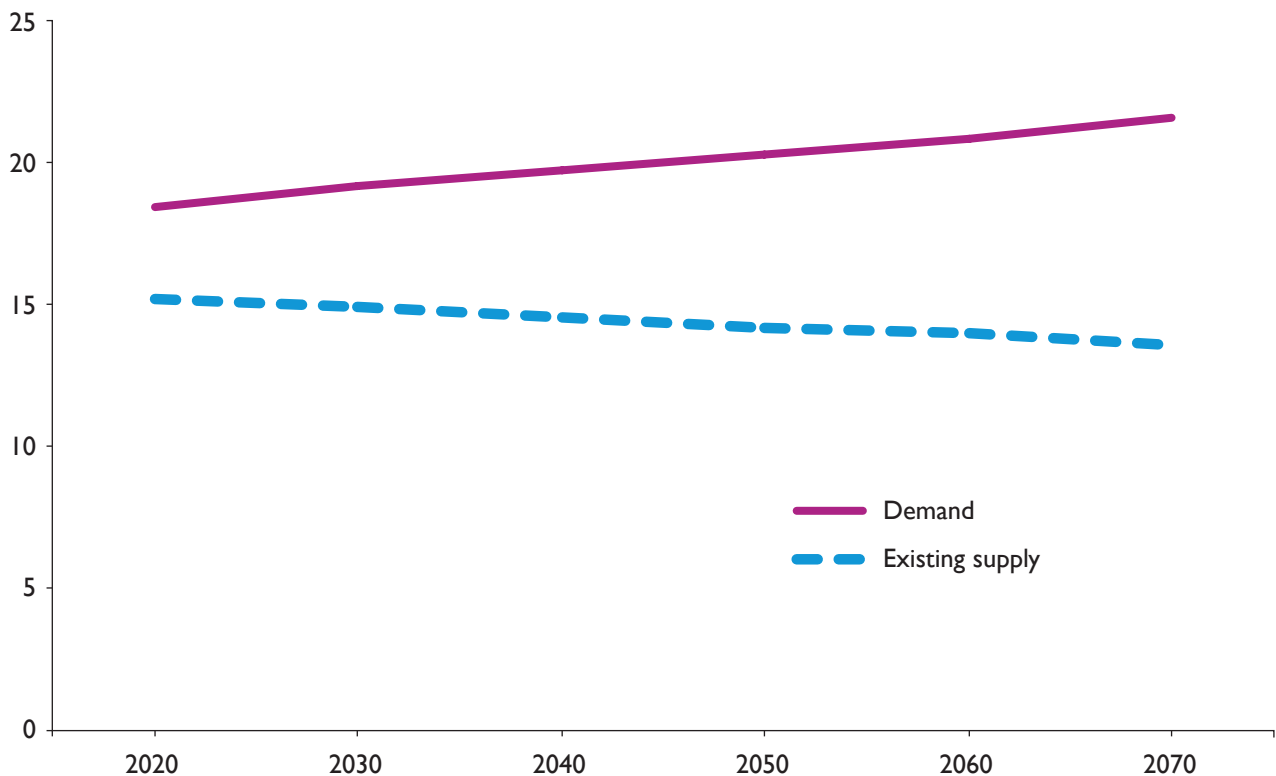
by approximately 17 percent between 2020 and 2070, from 18.4 million to 21.6 million acre-feet per year.

During the same period, Texas' existing water supplies—those that can already be relied on in the event of drought—are expected to decline by approximately 11 percent, from 15.2 million to 13.6 million acre-feet per year. Texas would need to provide 8.9 million acre-feet of additional water supplies to meet all of its demand for water in 2070.

## What can we do to get more water?

The plan provides a roadmap for how to address water needs (potential shortages) that accompany the projected growth by identifying water management strategies and their associated projects and costs for communities all across the state. The information shows how Texas can ensure adequate and affordable water supplies both now and in the future.

Projected annual water demand and existing water supply in Texas (millions of acre-feet)



Approximately 5,500 water management strategies recommended in this plan would provide 3.4 million acre-feet per year in additional water supplies to water user groups in 2020 and 8.5 million acre-feet per year in 2070.

- Conservation strategies were recommended for over half of the water user groups and compose approximately 28 percent of the strategy volumes in 2070.
- Approximately 45 percent of strategy supplies in 2070 are based on surface water, and just under 10 percent will rely on groundwater.

If the state water plan is implemented, the vast majority of potential municipal water supply needs would be met.

### How much will the plan cost?

The estimated capital cost to design, construct, and implement the approximately 2,500 recommended water management strategy projects by 2070 is \$63 billion, including over \$4 billion in costs associated with conservation projects. Water providers surveyed during the planning process reported an anticipated need of \$36.2 billion in state financial assistance to implement strategies. The Texas Water Development Board (TWDB) offers a variety of cost-effective financial support programs that fund state water plan projects. The Texas Legislature specifically created one of those programs—the State Water Implementation Fund for Texas (SWIFT) program\*—to finance only state water plan projects.

### What if we do nothing?

If recommended water management strategies are not implemented, annual economic losses resulting from water shortages would range

from approximately \$73 billion in 2020 to \$151 billion in 2070. Job losses could total approximately 424,000 in 2020 and 1.3 million in 2070. If strategies are not implemented, approximately one-third of Texas’ population would have less than half the municipal water supplies they will require during a drought of record in 2070.

### Policy recommendations in the plan

The state water plan also serves as a guide for state water policy. Based on regional water planning group recommendations and other policy considerations, the 2017 State Water Plan includes recommendations regarding

- the designation of river and stream segments of unique ecological value,
- the designation of unique sites for reservoir construction, and
- the timing of the adoption of desired future conditions with respect to state and regional water planning cycles.

### An interactive plan

The 2017 State Water Plan provides information through both the actual state water plan publication and an interactive state water plan website ([texasstatewaterplan.org](http://texasstatewaterplan.org)). Information can be viewed in numerous ways through the interactive state water plan.

For additional information on the 2017 State Water Plan, please visit our website at [www.twdb.texas.gov/waterplanning/swp/2017](http://www.twdb.texas.gov/waterplanning/swp/2017).

\*The SWIFT program includes two funds, the State Water Implementation Fund for Texas (SWIFT) and the State Water Implementation Revenue Fund for Texas (SWIRFT). Revenue bonds for the program are issued through SWIRFT.

### Annual water supply needs and needs met by the plan by water use category in 2070 (acre-feet)

