CONSERVATION & EFFICIENCY

Texas' population is projected to increase 73% between 2020 and 2070. During that time, our water demand is projected to increase by 9%, and our current supply is projected to decline by approximately 18%. The 2022 Texas State Water Plan predicts a potential 6.9 million acre-feet shortage of water by 2070. The State Water plan also identifies 2,400 important water management strategies to manage that supply and demand. About **30% of future water supply will come from conservation strategies. Conservation and efficiency have already reduced per capita water consumption in Texas, and are key to Texas' future water security.**

WHY IS WATER CONSERVATION IMPORTANT?

- Defers or prevents costly new water supply projects
- Reduces pressure on water supply
- Provides for social, recreational, cultural, and environmental uses of water
- Saves ratepayer money on water bills
- Saves energy
- Creates statewide economic benefits

DEFINITIONS

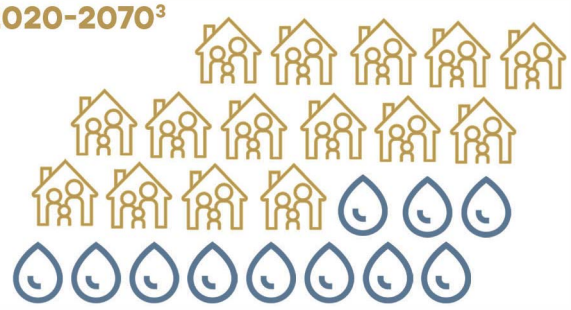
Conservation: Reducing the amount of water used for any given activity, typically as a result of a behavioral change.[2]

Efficiency: Accomplishing a given task with less water than it traditionally requires, typically through the use of water-saving fixtures.

Water loss: Water that is treated but never delivered to customers as a result of system leakage, unbilled municipal uses, unauthorized consumption, meter malfunction, or data processing errors.

Best Management Practices (BMPs): proven water-saving measures

2020-2070[3]



+21M MORE PEOPLE

+1.5M AF/YR MORE WATER DEMAND

-3M AF/YR LESS WATER SUPPLY

If the State Water Plan is not implemented:

- $153B estimated annual economic loss
- 1/4 of Texas population will have less than 1/2 of water supplies needed by 2070

Investing $2B in conservation strategies could yield $2.6B state output, 17.4k jobs, & $1.6B state value[1]

[1] Impact of Water Efficiency Program Expenditure on the Texas Economy, AWE & TWF, 2017
[2] Texas Water Code in 1985 defined water conservation as "those practices, techniques, and technologies that will reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water, or increase the recycling and reuse of water so that a water supply is made
[3] 2022 Draft State Water Plan

CURRENT CONSERVATION EFFORTS

Water Loss Audits: accounting of where, how, and why water is lost in a utility's distribution system as well as the value of that water.

- Required **every 5 years** for all **retail public water suppliers**
- Required **every year** for **retail public utilities** with 3,300 **connections** or more, or entities with **active financial obligations** to Texas Water Development Board (TWDB)

Water Conservation Plans: strategy submitted to TWDB that includes targets for reducing consumption, water loss, efficiency, or reuse

- Required for **retail public water utilities with 3,300** connections or more
- Required for entities applying for or **receiving financial assistance** of more than $500K or certain **surface water rights** with TCEQ
- Revised every **5 years**

WaterSense Ratings: Environmental Protection Agency (EPA) sponsored program for water efficient products that certifies products

- WaterSense products have saved Americans more than 4.4 trillion gallons of water
- **Saved $87 billion in water and energy expenses**
- To earn WaterSense label, a toilet must use **20% less water** than current federal standard maximums of 1.6 gallons per flush. **The Texas toilet standard is 1.28 gallons per flush.**

Conservation Scorecard: periodic assessment by the Texas Living Waters Project evaluating the progress of Texas water utilities conservation and efficiency targets

- Review and assessment of over **350 water utilities**
- **2020 Conservation Scorecard Report** here

Awareness Programs: educational or communication efforts to promote water conservation and efficiency

- Conservation involves **behavior changes**
- Many utilities have invested in conservation awareness programs, but **Texas has not yet funded a statewide effort**
- Regulatory and water user groups promote water conservation and research[5]

GOOD TO KNOW

- 2022 State Water Plan: the draft 2022 State Water Plan is open to public comment through May, and scheduled for adoption in July 2021.
- Water Conservation Advisory Council (WCAC): Legislative Reports to the Legislature
- WCAC: Conservation & Efficiency Best Management Practices
- Alliance for Water Efficiency: Resource library

POLICY CONSIDERATIONS

Utilities

- Improve quality of water conservation plans and provide summaries for customers
- Set more ambitious targets for reducing per person water usage and adopting appropriate BMPs
- Adopt outdoor watering limitations
- Address water efficiency funding needs, and consider affordability for rate payers

Agencies

- Consider requiring standardized information in conservation plans and standardize the timing of their submittal
- Provide opportunity for utilities to enter all water data online – to enhance efficiency and expand public access to information

State

- Provide more resources to assist small water utilities in customer education
- Consider the legislative recommendations in the WCAC report
- Base financial assistance decisions on a utility's record + targets for conservation
- Address water efficiency funding needs, and consider affordability issues
- Advance use of data to understand trends in water use
- Prioritize conservation & efficiency targets in both drought and flood years, and consider ways to augment, better manage, and diversify existing supplies

[5] E.g. Agricultural water conservation and research, Texas Ag Water Efficiency Education & Demonstration Project

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