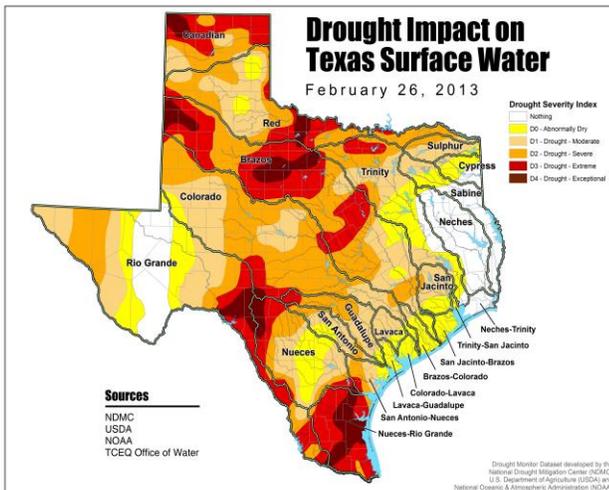


### The Role of Water Conservation

#### ISSUE SUMMARY:

Texas has experienced one of the worst droughts in recorded history, and the state’s climatologist predicts drought conditions lasting for several years to come. In 2011, the state’s water supplies reached dangerous lows and in many areas of the state they remain so. This kind of emergency provides the necessary impetus for significant change.

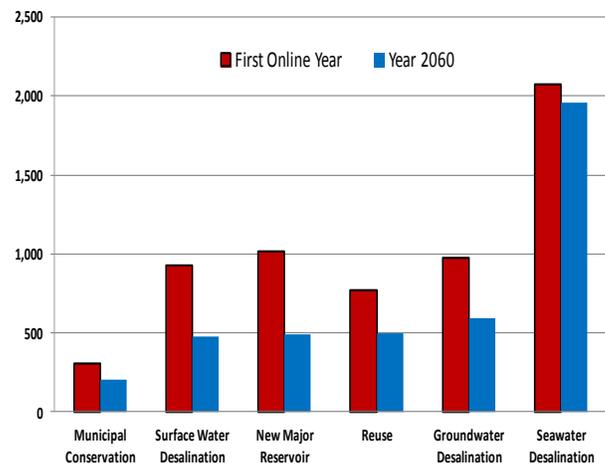


There is broad agreement that funding should be appropriated to address the state’s water plan for development of several new reservoirs to provide additional water resources in the near future. It is also necessary for the state to provide an ongoing funding mechanism for acquisition of additional feasible reservoir sites for the future.

There is also agreement that conservation should be part of the solution to the state’s water problems. There is less agreement about *how much* to include water conservation though the cost-benefit of these efforts is clear.

According to Andrew Sansom, director of the Meadows Center for Water and the Environment at Texas State University, the cheapest source of water is ensuring we don’t waste what we have: “It’s hard to grasp that the easiest, cheapest water to get is the water we already have. So should we spend \$100 million to build a new reservoir, or spend that money fixing the leaking water mains all over town?” (Price 2012). When you compare the cost of infrastructure repairs to reduce water loss, to the cost of a new reservoir, the answer is obvious.

#### Annual average Unit Costs by Strategy (dollars per acre-foot) in State Water Plan Presentation



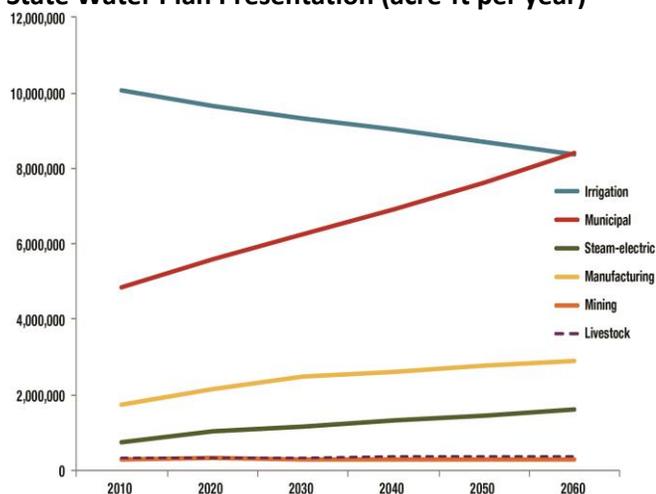
The House Committee on Natural Resources Interim Report, in a section called “Strategies for Managing Future Droughts,” listed a seemingly simple recommendation: “Define appropriate conservation measures for state water planning and funding. Clarify that conservation measures should be longstanding goals implemented not only during times of drought but also as daily best management practices.”

As the Legislature grapples with water supply issues, it is critical that water conservation be at the top of list for funding strategies to deal with the problem in the most cost-effective manner. The 2012 State Water Plan suggests that 24% of new water supplies will come from conservation. Legislative proposals thus far some have called for 10%-20% of water funding to go toward conservation. Much more could be done at a much cheaper price than building new reservoirs.

**POLICY CONSIDERATIONS:**

- Per the 2012 State Water Plan, requiring water utilities to audit water loss yearly rather than every five years as required under current law would reduce water loss. Further savings could be realized from adding accountability for meeting specific goals in the Water Plan, such as 140 gallons per capita day, by 2020.

**Projected Demand for Water by Segment – 2012 State Water Plan Presentation (acre-ft per year)**



- Provide matching funds to the utilities that are already doing the most conservation and developing best practices for others. Building codes, irrigation standards, and reuse programs all impact our consumption greatly.
- Require every water utility to update old infrastructure, while the state is developing plans for new sources. The industry

acknowledges that some water is lost in delivery or unaccounted for, but water losses should be less than 10% for every utility.

- Extend the sales tax holiday for EnergyStar products to WaterSense products. WaterSense labeled products are backed by independent third party certification, and meet EPA's specifications for water efficiency and performance.
- Incent power plant developers to implement technologies that reduce water use in the design of their plants and incent existing generation facilities to modify facilities to use less water. Some of the largest consumers of water are existing thermal electric generators. New dry cooling technologies can dramatically reduce water usage at electric generation facilities.
- Implement energy efficiency and water conservation measures in every public building. Texas LoanSTAR program provides low interest funding for all these projects. It takes 15 gallons of water to produce each kilowatt-hour of electricity. Saving energy reduces water usage and air pollution.

**RESOURCES:**

- House Committee on Natural Resources. "Interim Report to the 83<sup>rd</sup> Legislature." <http://bit.ly/VCMEG9>
- Price, Asher (2012). "As Water Plan Moves Toward Development, Who Benefits?" *Austin American Statesman*. Feb. 18, 2013. <http://goo.gl/uonkX>
- Texas Water Development Board (2012). 2012 State Water Plan. [http://www.twdb.state.tx.us/publications/state\\_water\\_plan/2012/2012\\_SWP.pdf](http://www.twdb.state.tx.us/publications/state_water_plan/2012/2012_SWP.pdf)
- <http://www.cleanwateraction.org/feature/conserving-water-texas>
- Droughtmonitor.unl.edu