The City of Tucson analyzed the impact of 30 years of water conservation efforts on its water and wastewater rates to provide a clear answer to the common customer question: "Why do you ask me to conserve water and then raise my rates?" The analysis found that fees and rates are significantly lower today than they would have been without conservation.

How did conservation change Tucson's water use?
For 30 years, Tucson has helped customers conserve water with indoor and outdoor conservation programs, continuous outreach, and efficiency-oriented rates.

Thanks to conservation, the volume of water used per person per day declined by 58 gpcd (31\%), while the population grew by 205,875 people ( $40 \%$ ).

Tucson also produces less water overall today. In 1987 Tucson's average system production was 96.4 mgd , but in 2015 it only produced 93.3 mgd.

What if water use patterns from 1997 had persisted and were unchanged today?

To meet the higher demand that would exist were it not for conservation, Tucson would have needed to invest:

- $\$ 22,969,872$ in annual water treatment and operational costs.
- $\$ 6,417,286$ in annual wastewater treatment and operation and maintenance costs.
- $\$ 194,862,732$ in water resources and wastewater treatment capital costs.

How did these avoided costs impact customer rates?
The reduction from conservation has been critical in helping Tucson level off total production, and thereby avoid the need to invest in up-sizing its system, build new facilities, and purchase new water supplies. These savings are passed on to the customers.

In 2015, the average single-family home paid a total annual water and wastewater bill of $\$ 847$, which is $11.7 \%$ less than the $\$ 959$ bill the same family would have paid under the non-conserving scenario.


Today, residents and businesses pay water and wastewater rates that are at least 11.7\% lower than they would be if it weren't for conservation.

Impact to an Average Single-Family Customer - Tucson, AZ
120
\$1,200


Alliance for Water Efficiency

