## El Paso helps itself through water conservation

Edmund Archuleta Guest columnist, El Paso Times

Statewide focus groups commissioned last year by a Water Conservation Task Force yielded no surprises for El Paso Water Utilities' staff. El Paso residents interviewed for the study were very knowledgeable about water resources and water conservation issues.

The task force, assembled by the Texas Water Development Board, hired consultants who also gathered data in Dallas, Laredo, Houston and Lubbock. The researchers described the El Paso group as the most water-conservation savvy.

Conservation is a key component in our water-resource management plan.

We calculate usage by determining the amount of water produced for all customers, which includes residential, commercial, industrial users, institutional, firefighting, etc. The total is divided by the number of people in our service area.

We launched our water-conservation program in 1991, and water consumption trended downward in the years that followed. The program includes enforcement of the conservation ordinance and a number of successful incentive programs that are complemented by public education.

Our tiered-rate structure also encourages conservation.

Our governing entity, the Public Service Board, has twice challenged residents to reduce water use. Our goal in 1991 was to reduce per-person water use from nearly 200 to 160 gallons per day by the end of the decade. The city rose to the challenge and the 20 percent reduction was achieved. By Dec. 31, 2000, per-person water use had fallen to 159 gallons per day.

A new challenge was issued in 2001 -- to reduce per-person water use to 140 gallons per day by 2010. We ended 2004 at 139 gallons per person per day, six years ahead of schedule. We project that 2005, due to a wet summer, will end at about 137 gallons per day. We plan to keep water use to at least this level through the end of the decade, and beyond.

Water conservation benefits El Paso in several ways. When customers install water-efficient plumbing fixtures and adopt other indoor conservation habits, less water flows into our wastewater-treatment plants. Wastewater flows were 2 billion gallons less in 2004 than in 1994, which allows us to postpone planned plant expansions. This saves ratepayers millions of dollars in capital and financing costs.

With flows currently averaging only 62 percent of our total wastewater plant capacity, we can treat 36 million additional gallons of wastewater per day. This is sufficient to handle near-term projected growth, including the anticipated influx of troops and families into Fort Bliss.

Peak-day water demand, which is what we produce on a hot summer day, has also fallen. Daily water use peaked at 195 million gallons in 1990; it peaked at 156 million gallons last year. This means less demand on electrical consumption, less chemicals, i.e., less operating costs and more deferred capital construction.

Conservation helps us manage water resources. A 1979 assessment of Texas aquifers concluded that without proactive measures, we would deplete the fresh water in the El Paso portion of the Hueco Bolson

by 2030. By reducing potable water use, expanding our reclaimed water program and using more river water, we have reversed the trend.

Pumping from the aquifer peaked in 1989. We are now pumping at quantities last seen in the late 1960s, despite steady population growth. Hydrogeologists confirm that with proper management, more than 70 percent of the fresh water in the El Paso portion of the Hueco Bolson will remain after 100 years.

El Paso Water Utilities is known throughout the country for its comprehensive conservation program. We are grateful to the citizens of El Paso and El Paso County for your role in the program's success.

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