

Goal 5: Environmental Protection and Enhancement

Desired Community Condition: Water resources are sustainably managed, conserved and protected to provide a long term supply and drought reserve.



Indicator: Per Capita Water Use

Progress Rating: Local Trend: POSITIVE Regional Comparison: BETTER

Indicator Description

This indicator measures the per capita water usage, the total amount of water pumped from the ground divided by our population. All of the residential, commercial, institutional and industrial water use as well as the unaccounted for water use (UAW) is included in the total amount pumped. Therefore, per capita water use includes the water we use at home, at work and play, plus the process water used by industries, water used in schools and other public facilities, and leakage in the delivery system. Water obtained from other systems, such as Conservancy District or Kirtland Air Force Base water, is excluded. So, per capita usage is a good overall measure of how we are doing on conserving water. Additionally, single-family residential daily per capita water consumption is used to compare water consumption from selected western cities. Western Resource Advocates recommend not using the system-wide data for comparing cities, due to a relatively high comparison error.

UAW is made up of meter losses (as meters age they turn more slowly), leaks from the system, well wash water and other system maintenance, water theft, and water use at locations that are too slow to make the meter turn (i.e. small leaks, swamp cooler bleed-off). UAW loss from the system has remained relatively constant since the water conservation program began.

Why is this indicator important?

Water conservation is an essential element of the City's strategy to ensure a sustainable water supply. Per capita water use shows water usage over time, taking into account the population increase, which helps determine progress toward water conservation goals. Smaller lot sizes, xeriscaping, rainwater harvesting, and efficient watering practices reduce outdoor water use. Low flow toilets, water saver showers, low water use washing machines and dishwashers, and hot water recirculation systems along with consumer practices to conserve water, reduce indoor water use. By tracking the use of water over time, the City knows how well its conservation program is working and also when additional and/or more challenging measures are needed.

Data Sources

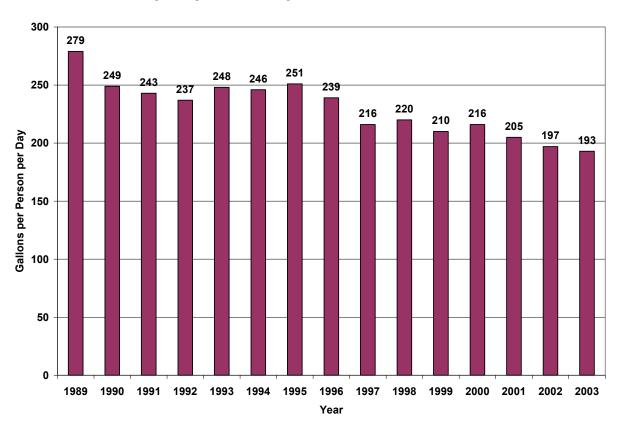
City of Albuquerque Public Works Department, Water Resources Division; "Smart Water, A Comparative Study of Urban Water Use Across the Southwest", Western Resource Advocates, 2003

What can we tell from the data?

• In 1995, the City set a goal to reduce per capita water use from 250 gpcd to 175 gpcd, a reduction of 30% from the baseline of 250 gpcd.

- Since 1995, when the program was initiated, per capita water use has declined from 251 gpcd to 193 gpcd in 2003, a 23% reduction from the baseline. On a per account basis the reduction is 28%. The City's residents are indeed "reducing their use."
- The range and average 2001 single-family residential daily per capita water consumption for selected western cities is 107 to 230 gpcd and 150, respectively; Albuquerque single-family per capita water consumption is 135 gpcd.

Albuquerque Per Capita Water Use 1989-2003



2001 Single-Family Residential Daily Per Capita Water Consumption

