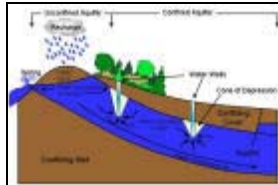




Goal 5: Environmental Protection and Enhancement

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



Indicator: Change in Aquifer Level

Progress Rating: Local Trend: NEGATIVE National Comparison: NOT KNOWN

Indicator Description

This indicator measures the change in water levels in Albuquerque wells. The water level in the well is a measure of the depth of the aquifer in that specific location. A negative change in water level indicates that water is being removed at a greater rate than it is being recharged. Water levels are compared for 2000 to 2001.

Why is this indicator important?

Data collected from these wells provide a picture of the health of the aquifer, aid understanding of groundwater resources in the Albuquerque Basin, and allow local officials to manage those limited resources more effectively. When groundwater pumping exceeds aquifer recharge by the river and other sources, the aquifer water level drops. Continued groundwater pumping leads to eight kinds of impacts, according to *The Value of Water*, F. Lee Brown et al:

- Lowering of water levels in production wells
- Lowering of water levels in shallow valley wells
- Impairment of existing groundwater rights in the region
- Lowering of the water table in the riparian zone
- Subsidence of the land surface
- Change in water quality
- Increased capital and operating costs
- Loss of drought reserve

By monitoring the change in the aquifer water elevations, the potential for these impacts can be assessed.

Data Sources

Water Customers Advisory Committee; *The Value of Water*, F. Lee Brown et al; City Of Albuquerque Public Works Department, Water Resources Division

What can we tell from the data?

- The average water level change from December 2000 to December 2001 is -0.44 feet.
- A total of 60 wells were measured; 33 wells had a negative change in water level, 1 well had no change, and 26 wells had a positive change in water level.

Water Level Changes in City Wells from December 2000 to December 2001

