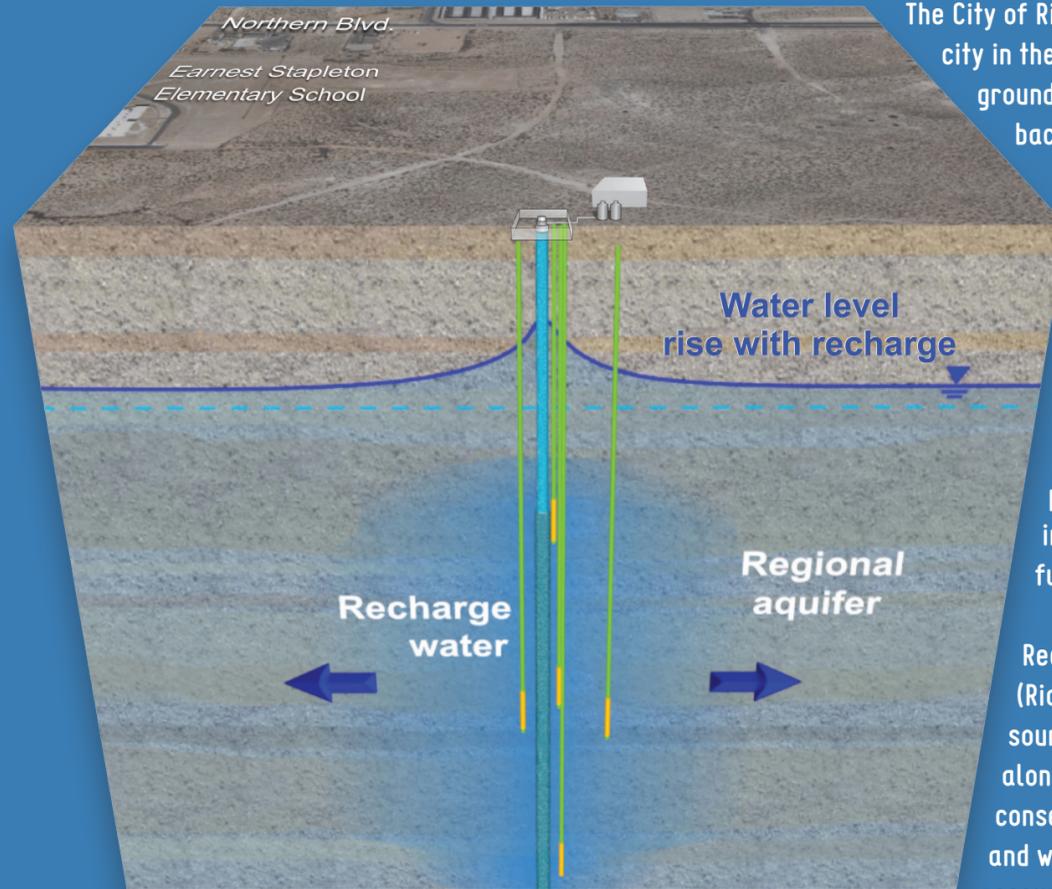


RIO RANCHO ... LEADING THE STATE IN RECHARGING OUR AQUIFER



The City of Rio Rancho is the first city in the State to replenish groundwater by putting water back into the aquifer via direct injection.

This forward-thinking approach is in its first stages, and should add up to one-million gallons per day of pristine, purified water put back into the aquifer for future use.

Recharging the aquifer (Rio Rancho's sole source of drinking water), along with good water conservation practices and wise use of our existing resources, is crucial to

long-term water sustainability and a vital component for the future success of Rio Rancho.

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Rio Rancho PURE

NEW MEXICO'S FIRST WATER PURIFICATION
AND AQUIFER STORAGE PROJECT



2001

City of Rio Rancho Governing Body creates a Water Reuse Strategy that includes a plan to treat wastewater effluent and addresses alternate uses of effluent. The plan is to ultimately re-use 100% of the treated effluent within the City and be in the best interest of wise water resource management.

2004

The City's Water Resources Management Plan produced by the citizens committee is approved by the Utilities Commission. A Reuse Water Plan is completed, which will direct what studies and pilot testing are needed prior to injection.

2007

Injection Pilot Study is funded by a State Special Appropriations Grant and City funds; \$4.5 million with completion by the end of 2008.

2010

Injection well (16-inch pipe is drilled to 1,700 feet deep) and five monitor wells are drilled.

2012

Construction begins to increase capacity at Cabezon Water Reclamation Facility from 0.6 million gallons per day to 1.2 million gallons per day.

2012-14

18" reuse water lines are installed from Cabezon Water Reclamation Facility to the injection site, to parks, and to Wastewater Treatment Plant #2 in Industrial Park.

2014

Concrete tank and pump station are built just south of Cabezon subdivision. The tank is designed to hold 3 million gallons of purified water. The pump station is the cornerstone of the recycled water distribution system. Highly treated water is pumped to the injection site for further treatment before injection, and to the non-potable water system to irrigate golf courses and parks. Any water not used for those purposes is sent to the Rio Grande.

2017

Completion of the tank and advanced water treatment facility. Injection of the highly purified water projected to begin in summer 2017. Up to 1 million gallons a day of purified water will be returned to the aquifer.

2002

A citizen committee is formed to develop goals and objectives for managing the City's Water Resources in the future.

2005

Cabezon and Mariposa Water Reclamation Facilities are built with developer funds. Both facilities use membrane bioreactor technologies (MBR) to clean the wastewater. MBR technology has a 0.1 micron pore size to clean the water. Pilot tests assess effectiveness of reverse osmosis treatment of the membrane bioreactor effluent to meet applicable standards for direct injection. Additional tests assess effectiveness using carbon absorption followed by advanced oxidation consisting of ultraviolet light and peroxide disinfection to ensure complete pathogen die-off.

2008

A permit application is submitted to the New Mexico Office of the State Engineer for Underground Storage and Recovery. Another permit application is submitted to the New Mexico Environment Department for Temporary Permission to Discharge. As part of the permit requirements, the City's purified water for injection meets and exceeds water quality standards.

2011

Injection Pilot Study pumps close to 1 million gallons of potable water into the aquifer using the injection well for 30 days to study the direction and rate of the water flow. The study also shows a rise in the aquifer near the injection well and provides data to calculate when the purified water would reach our closest drinking water well in about 30 years.

2016

Two-million-gallon concrete storage tank is built at the injection site. Advanced water treatment facility is equipped with ultraviolet, ozone, and biological granulated carbon for final water purification prior to injection.