# **Buckman Direct Diversion**



Helping provide a safe, sustainable, reliable water supply for the Santa Fe Region.

For more information, call 505-955-4520, or visit www.bddproject.org

# The Role of Buckman Direct Diversion

### Why Buckman Direct Diversion Was Needed

Despite ongoing, very successful water conservation programs, the Santa Fe region did not have enough drinking water to meet our current needs. Our current sources of water are groundwater wells that pump water from an underground aquifer and Santa Fe River reservoirs that hold runoff water.

We were overpumping the groundwater wells resulting in damage to the underground aquifer. Even in the best of years, the Santa Fe River reservoirs could only supply about half of the water our region needs. In very dry years, they cannot supply much water at all and emergency water restrictions have to be put in place.

### Another Source of Sustainable and Reliable Drinking Water

BDD provides a fourth source of water, improving the regional water supply under drought conditions, replacing current groundwater pumping that cannot be sustained, and making a drought reserve possible.

The City of Santa Fe and Santa Fe County constructed the BDD Project to add this source of water by diverting and treating water available from the Rio Grande that each already owns but cannot access through groundwater pumping. BDD created the infrastructure required to fully use the City's and County's permanent yearly supply of the San Juan-Chama Project water, which is about half of the Santa Fe Community's current total annual water use. BDD also accesses native Rio Grande water rights owned by Las Campanas.

This surface water is renewable. It allows major reductions in groundwater pumping, thereby reserving the aquifer for use in times of drought, rather than for our daily water supplies. This provides a much more sustainable, renewable and drought- resistant water supply system for the entire Santa Fe community. It also fills a water supply gap identified in the Jemez y Sangre regional water plan.

According to a recent update, the BDD and the very effective water conservation successes of the Santa Fe Community almost eliminate the gap between the Santa Fe sub-region's water supply and water demand identified in the state-approved Jemez y Sangre Regional Water Plan. This plan was completed during the severe droughts of 2000 and 2002 and was updated in 2007 (see graph to right).

Even though the City of Santa Fe and Santa Fe County are leaders in water conservation and drought management in our region, future additional water supplies will be needed to supply population growth served by the Santa Fe region after the year 2020 based on current growth rates.

JEMEZ Y SANGRE REGIONAL WATER PLAN UPDATE

#### Projected Municipal and Domestic Demand Santa Fe Subregion – Revised 2007



Notes: Water supply and demand values represent diversions (not consumption) during average conditions. BDD=Buckman Direct Diversion

### Water Supply Amounts

The plant's size was determined in 2001 to provide a renewable water supply for the area's projected 2010 customer population under existing climate conditions when used together with reduced amounts of groundwater pumping and water from the Santa Fe River.

Buckman Direct Diversion can deliver up to 15 million gallons per day (MGD) of treated drinking water, which is approximately the current maximum daily water demand of existing City and County customers. Normally, BDD operates at about one-half of full capacity. Annual water diversions from the Rio Grande are limited to 8,730 acre-feet per year.

BDD is designed to deliver up to 3.2 MGD of raw, untreated Rio Grande water to Las Campanas at the location shown on the BDD map attached. Other Las Campanas pipelines and facilities required for Las Campanas to use the water are not a part of the City and County's contract for BDD facilities design and construction.