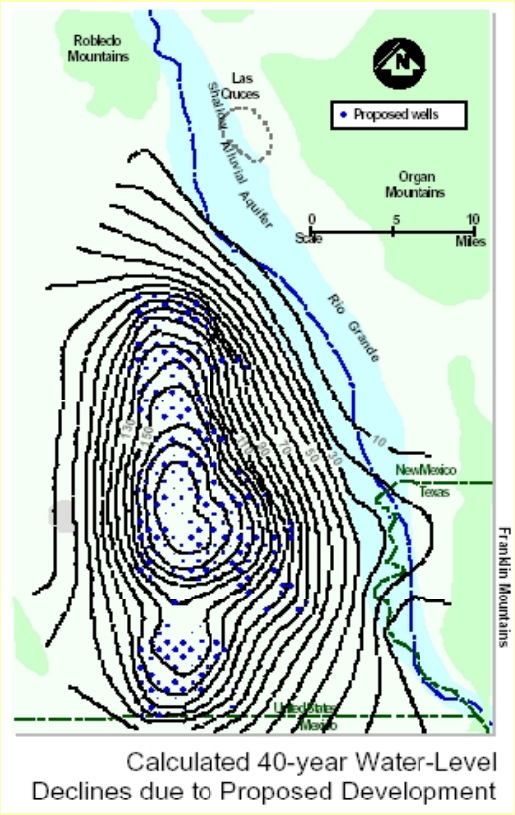
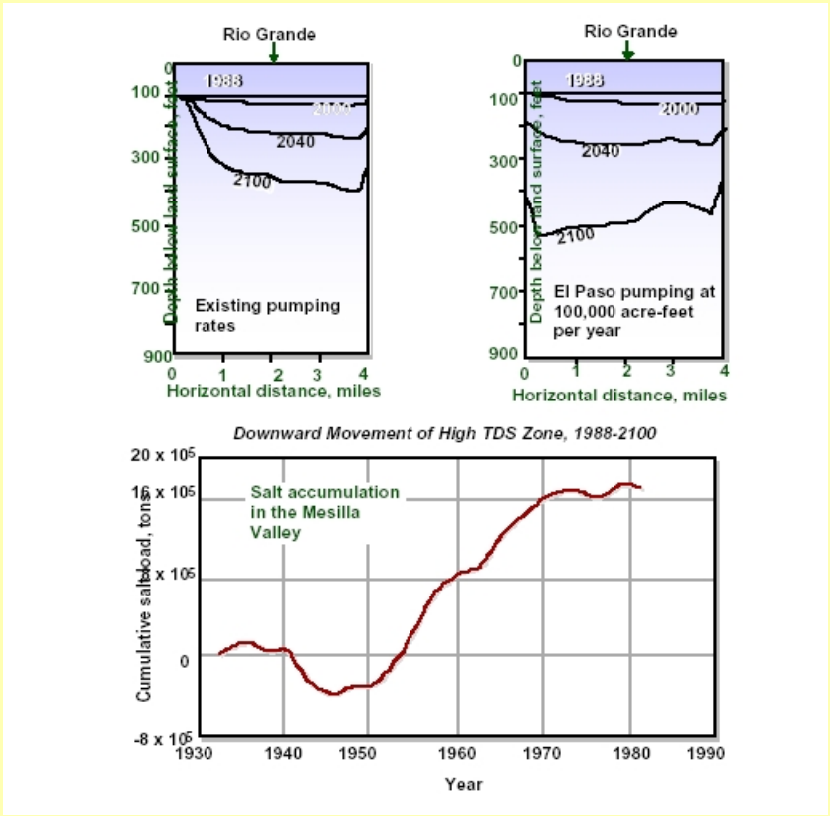


Calculated 40-year Water-Level Declines due to Proposed Development



Lower Rio Grande Basin

Location

Lower Rio Grande Basin, New Mexico

Problem

In order to secure a long-term water supply, the City of El Paso filed application with the New Mexico State Engineer's Office to appropriate 246,000 acre-feet per year from a wellfield to be located in the Lower Rio Grande Basin. The State of New Mexico required evaluation of the impacts of the proposed pumping on existing groundwater and surface water rights in the region.

Geologic/Hydrogeologic Conditions

The Mesilla Bolson, with up to 2,000 feet of saturated permeable sediments, contains large amounts of groundwater in storage, although water quality varies with depth. The Rio Grande, with an extensive irrigation distribution and drainage network, passes through the Mesilla Valley.

Key Personnel

Steve Larson, Charles Andrews, and Deborah Hathaway.

SSP&A's Role

SSP&A conducted hydrogeologic evaluations of the proposed development, including assessment of impacts on groundwater levels, surface-water flow and water-quality conditions. Assessments of water availability and surface water conditions were made within a modeling framework. This information was presented in an expert report.