

# Albuquerque Basin--Studies in hydrogeology

William C. Haneberg

New Mexico Geology, v. 17, n. 4 pp. 61, Print ISSN: 0196-948X, Online ISSN: 2837-6420.

<https://doi.org/10.58799/NMG-v17n4.61>

Download from: <https://geoinfo.nmt.edu/publications/periodicals/nmg/backissues/home.cfm?volume=17&number=4>

---

*New Mexico Geology* (NMG) publishes peer-reviewed geoscience papers focusing on New Mexico and the surrounding region. We also welcome submissions to the Gallery of Geology, which presents images of geologic interest (landscape images, maps, specimen photos, etc.) accompanied by a short description.

Published quarterly since 1979, NMG transitioned to an online format in 2015, and is currently being issued twice a year. NMG papers are available for download at no charge from our website. You can also [subscribe](#) to receive email notifications when new issues are published.

---

*New Mexico Bureau of Geology & Mineral Resources*  
*New Mexico Institute of Mining & Technology*  
801 Leroy Place  
Socorro, NM 87801-4796

<https://geoinfo.nmt.edu>



*This page is intentionally left blank to maintain order of facing pages.*

## Albuquerque Basin—studies in hydrogeology

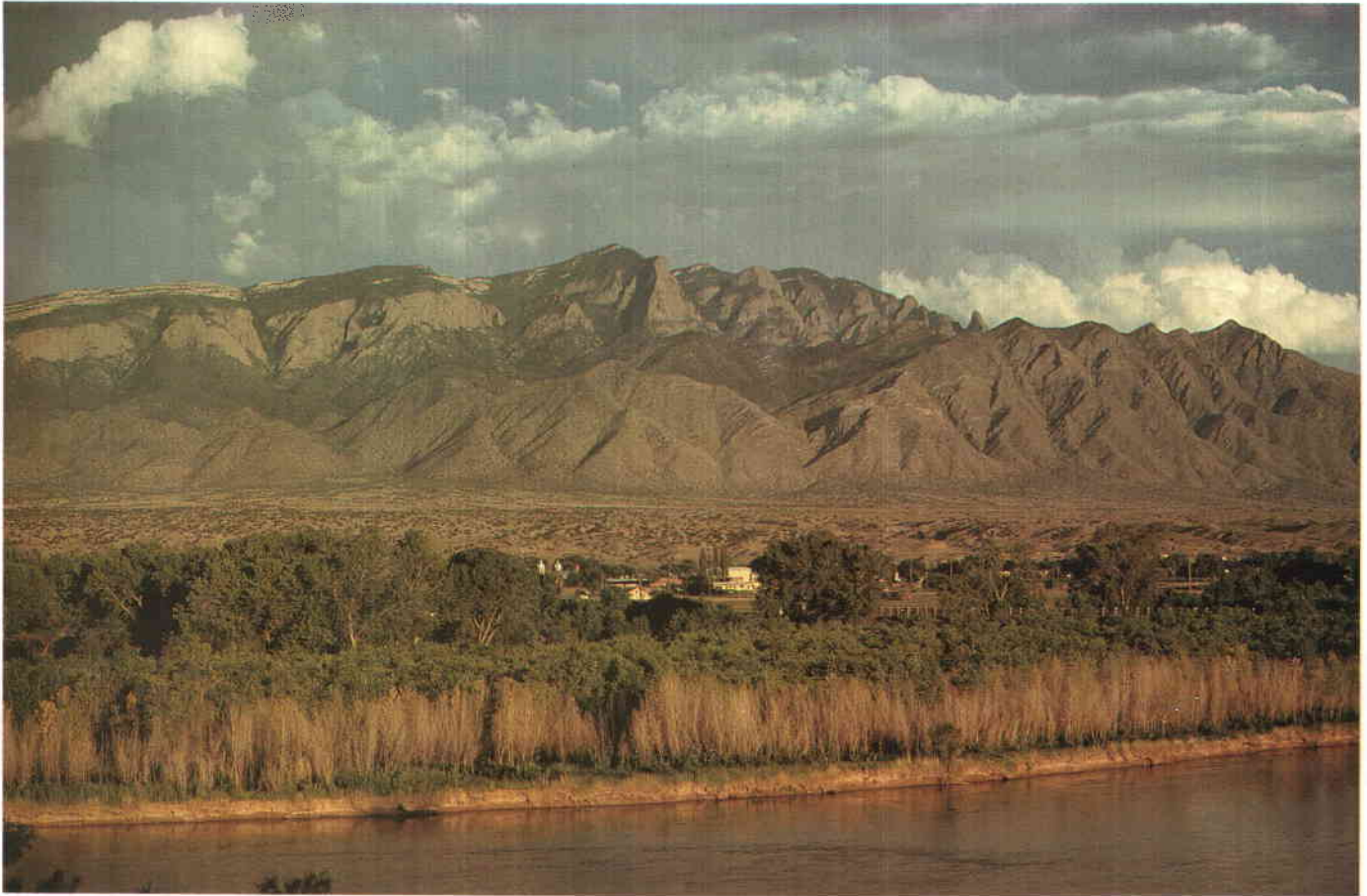


FIGURE 1—View of the Albuquerque Basin at Bernalillo, New Mexico, from the Rio Grande, across the Rio Grande graben, to the Sandia Mountains.

### Introduction

This topical issue of *New Mexico Geology* contains four papers describing hydrogeologic studies of the Albuquerque Basin undertaken by New Mexico Bureau of Mines and Mineral Resources (NMBMMR) scientists and associates. Most of the work was funded through cooperative agreements with the City of Albuquerque and the U.S. Bureau of Reclamation, with significant cost-sharing by NMBMMR. The subjects of these papers include (1) the potential for land subsidence as a consequence of falling ground-water levels in the Albuquerque area, (2) computer simulations of chemical reactions that may arise if treated effluent is injected into the aquifer system as a means of artificial recharge, (3) the ability of different aquifer zones to transmit ground water, and (4)

patterns of naturally occurring mineralization that can clog otherwise productive aquifer units.

NMBMMR published its first ground-water report in 1948. Today, NMBMMR scientists work on ground-water problems of practical significance throughout the state. The results of NMBMMR ground-water investigations are available as Ground-water Reports, Hydrologic Reports, Hydrogeologic Sheets, and Open-file Reports as well as papers in various peer-reviewed scientific journals. Much of this work has involved collaborative efforts with local, state, and federal agencies. Major projects have been undertaken in the Albuquerque, Estancia, La Jencia, Mesilla, Mimbres, Roswell, and San Juan Basins.

—William C. Haneberg

### Also in this issue

- |   |       |
|---|-------|
| Depth-porosity relationships and virgin specific storage estimates for the upper Santa Fe Group aquifer system    | p. 62 |
| Hydrogeochemical computer modeling of proposed artificial recharge of the upper Santa Fe Group aquifer system     | p. 72 |
| Permeability, porosity, and grain-size distribution of Pliocene and Quaternary sediments in the Albuquerque Basin | p. 79 |
| Spatial distribution of calcite cement in the Santa Fe Group: implications for ground-water resources             | p. 88 |

### Coming soon

Mammal footprints from the Miocene-Pliocene Ogallala Formation