

## Kane Wash Area Groundwater Basin

- Groundwater Basin Number: 6-89
- County: San Bernardino
- Surface Area: 5,960 acres (9.3 square miles)

### Basin Boundaries and Hydrology

This groundwater basin underlies a northwest-trending valley along the Camp Rock fault in central San Bernardino County. The basin is bounded by nonwater-bearing rocks of the Newberry Mountains on the north, of the Ord Mountains on the west and south, and of the Newberry and Rodman Mountains along the Camp Rock fault on the east (Dibblee 1964a , 1964b; Rogers 1967).

Surface water drains toward the central part of the valley and exits northeastward through Kane Wash (Dibblee 1964a, 1964b). Annual average precipitation ranges from about 6 to 10 inches.

### Hydrogeologic Information

#### ***Water Bearing Formations***

Quaternary alluvium forms the water-bearing materials within the basin and includes unconsolidated younger alluvial deposits and underlying unconsolidated to semi-consolidated older alluvial deposits (DWR 1964). The younger alluvium consists of unconsolidated, undissected coarse gravel to sand deposited in alluvial fans with a maximum thickness of about 100 feet (Dibblee 1964a, 1964b). Older alluvium consists of presumed Pleistocene age gravel, sand, and silt of dissected alluvial fans at least 100 feet thick (Dibblee 1964a, 1964b). Wells in the basin yield as much as 60 gpm.

#### ***Restrictive Structures***

The Camp Rock fault bounds the eastern side of the basin and cuts across the head of Kane Wash (Dibblee 1964a, 1964b). It is unknown whether or not this fault is a barrier to groundwater flow.

#### ***Recharge Areas***

The principal source of recharge to the basin is likely percolation of runoff from surrounding mountains, with minor contribution from percolation of precipitation to the valley floor.

#### ***Groundwater Level Trends***

Few data are available; however, groundwater likely follows surface drainage, flowing to the central portion of the basin and out beneath Kane Wash. In 1964, depth to groundwater ranged from about 21 to 88 feet in the basin.

#### ***Groundwater Storage***

**Groundwater Storage Capacity.** Groundwater storage capacity is estimated to be about 105,000 af (DWR 1967).

**Groundwater in Storage.** Groundwater in storage was estimated to be about 52,000 af in 1961 and had stayed the same since about 1936 (DWR 1967). Because there is very little development and pumping in this basin, it is likely that groundwater in storage remains about the same as in 1961.

### **Groundwater Budget (Type C)**

No information available.

### **Groundwater Quality**

**Characterization.** Water from a well in the central part of the basin in 1963 was sodium sulfate-bicarbonate character with a TDS content of 576 mg/L.

**Impairments.** Unknown.

### **Well Production characteristics**

| Well yields (gal/min) |                |
|-----------------------|----------------|
| Municipal/Irrigation  | To 60 gal/min  |
| Total depths (ft)     |                |
| Domestic              | Range: 200-300 |
| Municipal/Irrigation  |                |

### **Active Monitoring Data**

| Agency  | Parameter                      | Number of wells<br>/measurement frequency |
|---|--------------------------------|---|
|   | Groundwater levels             |   |
|   | Miscellaneous<br>water quality |   |
| Department of<br>Health Services and<br>cooperators | Title 22 water<br>quality      |   |

### **Basin Management**

Groundwater management:

Water agencies

Public

Private

### **References Cited**

- California Department of Water Resources (DWR). 1964. *Ground Water Occurrence and Quality Lahontan Region*. Bulletin No.106-1. 439 p.
- \_\_\_\_\_. 1967. *Mojave River Ground Water Basins Investigation*. Bulletin No. 84. 151 p.
- Dibblee, T. W. Jr. 1964a. *Geologic Map of the Ord Mountains Quadrangle San Bernardino County, California*. U S Geological Survey Geologic Quadrangle Map I-427. Scale 1:62,500.

Dibblee, T. W. Jr. 1964b. *Geologic Map of the Rodman Mountains Quadrangle San Bernardino County, California*. U S Geological Survey Miscellaneous Geologic Investigations Map I-430. Scale 1:62,500.

Rogers, T. H. 1967. *Geologic Map of California, San Bernardino Sheet*. Olaf P. Jenkins Edition. California Department of Conservation, Division of Mines and Geology. Scale 1:250,000.

## **Additional References**

California Department of Water Resources (DWR). 1975. *California's Ground Water*. Bulletin 118. 135 p.

## **Errata**

Changes made to the basin description will be noted here.