Johnson Valley Groundwater Basin, Upper Johnson Valley Subbasin

- Groundwater Basin Number: 7-18.02
- County: San Bernardino
- Surface Area: 34,830 acres (54 square miles)

Basin Boundaries and Hydrology
Upper Johnson Valley Subbasin underlies the Upper Johnson Valley in the southern Mojave Desert. The subbasin is bounded on the north by the Fry Mountains and on all other sides principally by other unnamed crystalline rocks. The western boundary follows the Johnson Valley fault, and surface drainage divides form parts of the southern and eastern boundaries. Upper Johnson Valley has internal surface drainage that converges to Melville (dry) Lake. Average annual precipitation ranges from 4 to 6 inches.

Hydrogeologic Information
The main water-bearing materials in the subbasin are alluvial deposits consisting of silt, clay, sand, and gravel, along with some fine-grained lakebed deposits. Depth to bedrock is unknown, but probably is about 200 feet in the deepest part of the valley (French 1978). The alluvium in the northern part of the subbasin is a thin cover over a bedrock pediment. A well completed in the northern part of the subbasin penetrated 40 feet of alluvium and 84 feet of weathered bedrock and struck unweathered bedrock at 125 feet. Water was found at a depth of 480 feet in fractured bedrock (French 1978).

Groundwater Level Trends
Data are not available.

Groundwater Storage
Groundwater Storage Capacity. Unknown.

Groundwater in Storage. Unknown.

Groundwater Budget (Type C)
Groundwater budget information is not available.

Groundwater Quality
Characterization. Groundwater sampled by French (1978) was sodium chloride to sodium sulfate in character with TDS concentrations as high as 3,000 mg/L.

Impairments. Groundwater in the subbasin has TDS and fluoride concentrations above the recommended levels for drinking water (French 1978).
Well Characteristics

<table>
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<th>Well yields (gal/min)</th>
<th>Municipal/Irrigation</th>
<th>Range: –</th>
<th>Average:</th>
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<tbody>
<tr>
<td>Total depths (ft)</td>
<td>Domestic</td>
<td>Range: -</td>
<td>Average:</td>
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<td>Municipal/Irrigation</td>
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Active Monitoring Data

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<th>Parameter</th>
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Basin Management

Groundwater management:

- Water agencies
  - Public
  - Private

References Cited


Additional References


Errata

Changes made to the basin description will be noted here.