Black Springs Valley Groundwater Basin

Groundwater Basin Number: 6-13

County: Inyo

• Surface Area: 30,800 acres (48.1 square miles)

Basin Boundaries and Hydrology

This basin underlies Black Springs Valley and Lower Centennial Flat in the central western part of Inyo County. The basin is bounded on the north by the Inyo Mountains and Malpais Mesa (Jennings 1958), on the northeast by the Talc City Hills, and on the south and west by the Coso Range (DWR 1964; Norris and Webb 1990). Surface waters are drained westward into Owens Valley. Annual precipitation averages 6 to 10 inches.

Hydrogeologic Information

Water Bearing Formations

Groundwater can likely be found in alluvium of Quaternary age (DWR 1964). Alluvium typically consists of unconsolidated, fine- to coarse-grained sand, pebbles, and boulders with variable amounts of silt and clay.

Restrictive Structures

Unknown.

Recharge Areas

The principal source of recharge to the basin is percolation of runoff from surrounding mountains (DWR 1964), with minor contribution from percolation of precipitation to the valley floor.

Groundwater Level Trends

No wells are known in this basin. Groundwater is inferred to flow to the northwest (DWR 1964) following surface drainage patterns.

Groundwater Storage

Groundwater Storage Capacity. The total storage capacity is estimated at 230,000 af (DWR 1975).

Groundwater in Storage. Unknown.

Groundwater Budget (Type C)

No information is available.

Groundwater Quality

Characterization. Water from Lower Centennial Spring on the southwest margin of the basin is calcium-sodium bicarbonate-chloride in character (DWR 1964). In 1954, water from this spring was rated suitable for domestic and irrigation use with a TDS concentration of 356 mg/L (DWR 1964). In 1975, groundwater sampled from another location along the

southwestern margin of the basin had a specific conductance of 505 μ S/cm (USGS 2002).

Impairments. Unknown

References Cited

- California Department of Water Resources (DWR). 1975. *California's Ground Water*. Bulletin 118. 135 p.
- California Department of Water Resources (DWR). 1964. *Ground Water Occurrence and Quality, Lahontan Region.* Bulletin 106-1. 439 p.
- Jennings, C. W. 1958. *Geologic Map of California Death Valley Sheet*. Olaf P. Jenkins Edition. 1 sheet, scale 1:250,000.
- Norris R. M. and R. W. Webb. 1990. *Geology of California*. New York. John Wiley and Sons. Second Edition. 541 p.
- United States Geological Survey (USGS). 2002. http://waterdata.usgs.gov/nwis/gw. 9 July 2002.

Errata

Changes made to the basin description will be noted here.