

Coles Flat Groundwater Basin

- Groundwater Basin Number: 6-72
- County: Inyo
- Surface Area: 2,950 acres (4.6 square miles)

Basin Boundaries and Hydrology

The Coles Flat Groundwater Basin underlies a north-trending upland valley in the Coso Range of southwestern Inyo County. Elevation of the valley floor ranges from about 5,800 to 6,000 feet above sea level. The basin is bound by the nonwater-bearing rocks of the Coso Range on all sides. Elevation of the mountains on the west range from about 6,500 feet to 8,160 feet at Coso Peak, while the mountains on the east are generally lower in elevation. The basin lies within China Lake Air Weapons Station (USGS 1982a, 1982b, 1982c, 1982d).

Annual average precipitation ranges from about 8 to 10 inches. Runoff from the surrounding mountains drains to the central part of the valley and eastward through an unnamed wash to Darwin Wash and Panamint Valley (Jennings 1958).

Hydrogeologic Information

Water Bearing Formations

Quaternary alluvium forms the water-bearing material within the basin and includes unconsolidated younger alluvial deposits and underlying unconsolidated to semi-consolidated older alluvial deposits (DWR 1964).

Recharge and Discharge Areas

Recharge of the basin is chiefly from the percolation of runoff through alluvial deposits at the base of the surrounding mountains and from the infiltration of precipitation that falls to the valley floor. Groundwater moves towards the eastern margin of the basin and discharges as underflow to an east-trending wash and to the Darwin Valley Groundwater Basin (USGS 1982a, 1982b).

Groundwater Level Trends

There are no historical records of wells or groundwater levels in the basin.

Groundwater Storage

Groundwater Storage Capacity. Unknown.

Groundwater in Storage. Unknown.

Groundwater Budget (C)

Groundwater budget information is not available.

Groundwater Quality

Characterization. There are no historical records of chemical analyses of groundwater from springs or wells in the basin.

Impairments. Unknown.

Well Production characteristics

Well yields (gal/min)	
Municipal/Irrigation	
Total depths (ft)	
Domestic	
Municipal/Irrigation	

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
Department of Health Services and cooperators	Groundwater levels	
	Miscellaneous water quality	
	Title 22 water 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.
- Jennings, C.W. 1958. *Geologic Map of California: Death Valley Sheet*. Olaf P. Jenkins Edition. California Department of Conservation, Division of Mines and Geology. Scale 1: 250,000.
- U.S. Geological Survey. 1982a. *Coso Peak, California*. 7.5' Quadrangle. Provisional Edition. Scale 1: 24,000.
- U.S. Geological Survey. 1982b. *China Gardens, California*. 7.5' Quadrangle. Provisional Edition. Scale 1: 24,000.
- U.S. Geological Survey. 1982c. *Petroglyph Canyon, California*. 7.5' Quadrangle. Provisional Edition. Scale 1: 24,000.
- U.S. Geological Survey. 1982d. *Louisiana Butte, California*. 7.5' Quadrangle. Provisional Edition. Scale 1: 24,000.

Errata

Changes made to the basin description will be noted here.