Little Valley Groundwater Basin

Groundwater Basin Number: 1-41

County: Mendocino

• Surface Area: 810 acres (approx. 1 square mile)

Basin Boundaries and Hydrology

Little Valley is an irregular-shaped, north to northwest trending coastal drainage basin situated within the Coast Ranges of northwest central Mendocino County. This valley is located approximately 2.5 miles inland from the coast and 4 miles north of Fort Bragg. Little Valley is approximately 2.5 miles in total length and varies in width from about 0.2 to 0.6 miles. The Little Valley Groundwater Basin is defined by the areal extent of Quaternary Alluvium, which is bounded on all sides by bedrock of the Franciscan Formation.

Little Valley is drained to the south by Little Valley Creek and its tributaries before joining Pudding Creek approximately 0.5 miles south of the basin boundary. Precipitation in this basin averages about 48 inches annually.

Hydrogeologic Information

Water-Bearing Formations

Significant water-bearing formations that occur in Little Valley include only Quaternary Alluvium. Bedrock of the Franciscan Complex surrounds and underlies the area but due to its consolidated nature, it is essentially non-water bearing except for areas with significant fracture porosity. Information on water-bearing formations and groundwater occurrence was taken from DWR (1958).

Alluvium and River Channel Deposits. These deposits are Holocene in age and consist largely of unconsolidated silts, gravels, clays, and sands. These deposits are exposed in the active river channel and floodplain of Little Valley Creek. Limited data suggests the alluvium in the smaller valleys in Mendocino County averages 10 to 15 feet thick. The maximum thickness of these deposits is unknown. No published well yield data was identified for wells in this area; however, wells drilled in the small alluvial valleys in Mendocino County have proven unproductive because of low permeability. Groundwater in the alluvial deposits is typically unconfined but may be semi-confined locally. No published specific yield data for alluvium in this area are available.

Groundwater Level Trends

No groundwater level data available.

Groundwater Storage

Groundwater Storage Capacity. No data available.

Groundwater in Storage. No data available.

Groundwater Budget (Type C)

No data available.

Groundwater Quality

Characterization. No groundwater quality data available.

Impairments. No data available.

Well Characteristics

Well yields (gal/min)				
Municipal/Irrigation	No data is available.			
Total depths (ft)				
Domestic	Range: 41 - 180	Average: 118 (Based on 14 well completion		
Municipal/Irrigation	No data is available.	reports)		

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
DWR (incl. Cooperators)	Groundwater levels	None
DWR (incl. Cooperators)	Mineral, nutrient, & minor element.	None
Department of Health Services	Coliform, nitrates, mineral, organic chemicals, and radiological.	None

Basin Management

Groundwater management:	No groundwater management plans were identified.
Water agencies	
Public	Mendocino County Water Agency.
Private	

Selected Bibliography

California Department of Water Resources (DWR) 1958. Recommended Water Well Construction and Sealing Standards, Mendocino County. Bulletin No. 62 – November.

Errata

Changes made to the basin description will be noted here.