

Mattole River Valley Groundwater Basin

- Groundwater Basin Number: 1-28
- County: Humboldt
- Surface Area: 3,150 acres (5 square miles)

Basin Boundaries and Hydrology

The Mattole River Valley Groundwater Basin occupies small valleys of the Mattole and North Fork Mattole Rivers where the Mattole River discharges to the ocean. The basin is bounded to the south and east by undifferentiated marine Cretaceous deposits of graywacke and shale. The basin is bounded to the northwest by Tertiary marine sedimentary rocks of the Wildcat series (Strand 1962). The Wildcat series is a group of five formations ranging in age from Miocene to Pleistocene consisting of sandstone, marine siltstone, and claystone (Evenson 1959). Annual precipitation ranges from 63- to 75-inches.

Hydrogeologic Information

Hydrogeologic information was not found for the following:

Water-Bearing Formations

Groundwater Level Trends

Groundwater Storage

Groundwater Budget (Type B)

The estimate of groundwater extraction for the Mattole River Valley Basin is based on a 1996 survey conducted by the California Department of Water Resources. The survey included landuse and sources of water. Groundwater extraction for agricultural use is estimated to be 140 acre-feet. Groundwater extraction for municipal and industrial uses is estimated to be 7 acre-feet. Deep percolation of applied water is estimated to be 87 acre-feet.

Groundwater Quality

Hydrogeologic information was not found.

Well Production characteristics

		Well yields (gal/min)	
Municipal/Irrigation		NKD	
		Total depths (ft)	
Domestic		Range: 48 - 51	Average: 49 (3 Well Completion Reports)
Municipal/Irrigation		NKD	

NKD – No known data

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
	Groundwater levels	NKD
	Miscellaneous water quality	NKD
Department of Health Services	Miscellaneous water quality	2

Basin Management

Groundwater management:	No known groundwater management plans, groundwater ordinances, or basin adjudications.
Water agencies	
Public	None
Private	None

Selected References

- Evenson, R.E. 1959. Geology and Groundwater Features of Eureka Area, Humboldt County, California. USGS Water Supply Paper 1470.
- Strand RG. 1962. Geologic Map of California, [Redding Sheet]. Scale 1:250,000. California Division of Mines and Geology.

Bibliography

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- California Department of Water Resources. 1975. California's Ground Water. California Department of Water Resources. Bulletin 118.
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- Dickinson WR, Ingersoll RV, Grahm SA. 1979. Paleogene Sediment Dispersal and Paleotectonics in Northern California. Geological Society of America Bulletin 90:1458-1528.
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- Nolan KM, Kelsey HM, Marron DC. 1995. Summary of Research in the Redwood Creek Basin, 1973-83. USGS Professional Paper.
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Errata

Changes made to the basin description will be noted here.