

## Branscomb Town Area Groundwater Basin

- Groundwater Basin Number: 1-39
- County: Mendocino
- Surface Area: 1,320 acres (2 square miles)

### Basin Boundaries and Hydrology

Branscomb Town Area is an elongate, north and northwest-trending basin situated within the Coast Ranges of northwestern Mendocino County and located approximately 3.5 miles west of Laytonville Valley. This valley is about 6 miles in length and has a width ranging from about 0.2 to 0.7 miles. The Branscomb Town Area Groundwater Basin is defined by the areal extent of Quaternary Alluvium, which is bounded on all sides by bedrock of the Franciscan Formation.

Branscomb Town Area is drained to the north by the South Fork Eel River and its local tributaries; Bear, Mud, Buck, and Kenny Creeks. Precipitation in this basin ranges from approximately 67 inches in the southwest to 77 inches per year on its east side.

### Hydrogeologic Information

#### ***Water-Bearing Formations***

Significant water-bearing formations that occur in the Branscomb Town Area 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 primarily 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 the South Fork of the Eel River in this area. 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 for wells in Branscomb Town Area are available and therefore, groundwater levels trends could not be determined.

#### ***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 recently published groundwater quality data is available for wells in Branscomb Town Area; however, limited water quality data collected in 1953 from two domestic wells in the central portion of the valley indicate a calcium bicarbonate water type with a TDS range of 80 to 179 ppm (DWR 1958).

**Impairments.** No data available.

### **Well Characteristics**

<b>Well yields (gal/min)</b>		
Municipal/Irrigation	No data is available	
<b>Total depths (ft)</b>		
Domestic	Range: 195 – 240	Average: 218 (Based on 2 well completion reports)
Municipal/Irrigation	No data is available	

### **Active Monitoring Data**

<b>Agency</b>	<b>Parameter</b>	<b>Number of wells /measurement frequency</b>
DWR (incl. Cooperators)	Groundwater levels	None known
DWR (incl. Cooperators)	Mineral, nutrient, & minor element.	None known
Department of Health Services	Coliform, nitrates, mineral, organic chemicals, and radiological.	0

### **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.