

## Redwood Creek Area Groundwater Basin

- Groundwater Basin Number: 1-26
- County: Humboldt
- Surface Area: 2,000 acres (3 square miles)

### Basin Boundaries and Hydrology

The Redwood Creek Area Groundwater Basin consists of the alluvial plain at the mouth of Redwood Creek which flows northwest along the trend of the Grogan Fault. The elongated shape of the basin is controlled by the fault. The basin is bounded by two distinct rock types of the Franciscan Assemblage: the hillslopes west of the fault are underlain by quartz-mica schist and to the east are underlain by unmetamorphosed sandstone and siltstone with minor outcrops of melange (Potter et. al. 1987). Annual precipitation in the basin ranges from 59- to 69-inches, increasing to the east.

### Hydrogeologic Information

Hydrogeologic information was not available for the following:

***Water-Bearing Formations***

***Groundwater Level Trends***

***Groundwater Storage***

### ***Groundwater Budget (Type B)***

The estimate of groundwater extraction for the Redwood Creek Area 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 500 acre-feet. Groundwater extraction for municipal and industrial uses is estimated to be 80 acre-feet. Deep percolation of applied water is estimated to be 150 acre-feet.

### ***Groundwater Quality***

**Characterization.** Based on chemical analyses for two wells in the basin, groundwater is characterized as sodium-calcium bicarbonate type water. Total dissolved solids concentration range from 102- to 332-mg/L (DWR unpublished data).

### Water Quality in Public Supply Wells

Constituent Group <sup>1</sup>	Number of wells sampled <sup>2</sup>	Number of wells with a concentration above an MCL <sup>3</sup>
Inorganics – Primary	4	0
Radiological	0	0
Nitrates	4	0
Pesticides	2	0
VOCs and SVOCs	2	0
Inorganics – Secondary	4	1

<sup>1</sup> A description of each member in the constituent groups and a generalized discussion of the relevance of these groups are included in *California's Groundwater – Bulletin 118* by DWR (2003).

<sup>2</sup> Represents distinct number of wells sampled as required under DHS Title 22 program from 1994 through 2000.

<sup>3</sup> Each well reported with a concentration above an MCL was confirmed with a second detection above an MCL. This information is intended as an indicator of the types of activities that cause contamination in a given basin. It represents the water quality at the sample location. It does not indicate the water quality delivered to the consumer. More detailed drinking water quality information can be obtained from the local water purveyor and its annual Consumer Confidence Report.

## Well Production characteristics

Well yields (gal/min)		
Irrigation	NKD	
Total depths (ft)		
Domestic	Range: 32 – 114	Average: 58 (11 Well Completion Reports)
Irrigation		40 (1 Well Completion Report)

NKD – No known data

## Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
DWR	Groundwater levels	1 well semi-annually
Department of Health Services	Miscellaneous water quality	4

## Basin Management

Groundwater management:	No known groundwater management plans, groundwater ordinances, or basin adjudications.
Water agencies	
Public	Orick CSD
Private	

## Selected References

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## **Errata**

Changes made to the basin description will be noted here.