

Berryessa Valley Groundwater Basin

- Groundwater Basin Number: 5-20
- County: Napa
- Surface Area: 1,400 acres (2 square miles)

Basin Boundaries and Hydrology

The Berryessa Valley Basin is located on the eastern shores of Lake Berryessa in a sparsely populated region of Napa County along the western flanks of Rocky Ridge in the Coast Ranges, approximately 14 miles northwest of the town of Winters. Two narrow swaths of shallow alluvium along the banks of Lake Berryessa, each about 2.5 miles in length, define the basin. This alluvium extends into the lower elevations of the Berryessa Valley, which was flooded by Lake Berryessa after the construction of Monticello Dam in 1957 (SID 1988).

Putah Creek, which flows into Lake Berryessa, is the primary surface water source for the Berryessa Valley, other than the lake. Additionally, several intermittent streams flow into Berryessa Valley Basin from the east. The basin is located within the Upper Putah Creek watershed, and receives approximately 18 inches to 24 inches of precipitation annually.

Hydrogeologic Information

Water Bearing Formations

Water Bearing Formations include Alluvium, described as poorly sorted stream and basin deposits (Wagner 1987). Beneath the alluvium lies the basement rock of the Lower Cretaceous Great Valley Sequence, comprised of marine mudstone, sandstone, and conglomerate. This basement rock is generally considered to be non-water bearing, but it does provide water through fractures.

Groundwater Level Trends

No information related to groundwater level trends was available for this basin, however it can be generally assumed that the groundwater level elevation mimics the lake surface elevation.

Groundwater Storage

No information is available for **Groundwater Storage Capacity** and **Groundwater in Storage** for this basin.

Groundwater Budget (Type)

No information is available.

Groundwater Quality

No information is available.

Well Characteristics

Well yields (gal/min)	
Municipal/Irrigation	No information is available.
Total depths (ft)	
Domestic	No information is available.
Municipal/Irrigation	

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
No wells are currently being monitored in this basin.		

Basin Management

Groundwater management: There are no management plans currently in effect in this basin.

Water agencies

Public

Private

References Cited

Wagner, D.L., Bortugno, E.J. 1982. Geologic Map of the Santa Rosa Quadrangle. Regional Geologic Map Series, Map No. 2A (Geology), Santa Rosa Quadrangle. California Division of Mines and Geology. 5 sheets, 1:250,000.

Solano Irrigation District. 1988. The Solano Water Story – A History of the Solano Irrigation District and the Solano Project. 137p.

Additional References

California Department of Water Resources. 1962. Reconnaissance Report on Upper Putah Creek Basin Investigation. Department of Water Resources Bulletin No. 99. 253p.

Napa County Flood Control and Water Conservation District. 1991. Water Resource Study for the Napa County Region.

Errata

Changes made to the basin description will be noted here.