



COUNTY OF LAKE WATER RESOURCES

255 N. Forbes Street
Lakeport, California 95453
Telephone (707)263-2344
Fax (707)263-1965
water.resources@lakecountyca.gov

David C. Cowan
Water Resources Director

HISTORICAL WATER LEVELS OF CLEAR LAKE

The level of Clear Lake is measured in reference to the "RUMSEY GAGE" which was established by Captain Rumsey at Lakeport in 1873.

Zero Rumsey considered the natural low water level of Clear Lake. Zero Rumsey is equal to 1318.257 feet above mean sea level. A full lake, by definition, is reached when the lake measures 7.56 feet on the Rumsey Gage.

The level of Clear Lake is controlled by Cache Creek Dam, which was constructed on Cache Creek in 1914. This dam is owned and operated by Yolo County Flood Control and Water Conservation District and is operated in conformance with two court decrees. The Gopcevic Decree of 1920 stipulated that the lake shall be operated between Zero and 7.56 feet, except for unforeseen storms that raise the level faster than the Cache Creek channel capacity can draw down. In that event the level may go up to 9.0 feet, but not for a period of more than 10 consecutive days. It must be noted that with a full lake, the outlet capacity of Cache Creek is limited to 2,540 cubic feet per second. During the January and March 1995 storms, peak inflows of over 50,000 cfs occurred. Due to the limited outflow and high inflows, it is physically impossible to comply with the 10 day requirement.

Statistically the following peak flood levels can be expected on Clear Lake:

10% chance each year	10.04 feet
2% chance each year	11.74 feet
1% chance each year	12.34 feet
0.2% chance each year	13.84 feet

The Solano Decree of 1978 (revised 1995) very specifically outlines the operation of Clear Lake for Yolo irrigation purposes. If the lake is full on May 1, Yolo may withdraw 150,000 acre-feet of water and the level on October 31 may not be below 1.25 feet Rumsey. If the lake is 3.22 feet or lower on May 1, no water may be released. Evaporation on Clear Lake through the average summer is 3 feet.

As a point of interest, when Clear Lake is full it has a surface area of 43,790 acres and contains 1,155,000 acre-feet of water.

At zero the surface area is 39,170 acres with a capacity of 842,000 acre-feet.

For more detailed information please contact the Lake County Water Resources Department.

<u>Year</u>	<u>Month</u>	High <u>Level</u>	<u>Month</u>	Low <u>Level</u>	<u>Lakeport Rainfall</u>
1873	---	---	Nov.	1.08	
1874	Mar.	8.62	Oct.	3.41	
1875	Feb.	6.60	Nov.	1.75	
1876	Mar.	12.37	Jan.	3.71	
1877	Mar.	5.64	Oct.	1.77	
1878	Mar.	12.39	Jan.	1.95	
1879	Mar.	8.31	Nov.	3.56	
1880	Apr.	10.08	Nov.	3.83	
1881	Feb.	10.25	Nov.	3.08	
1882	Mar.	6.16	Nov.	2.39	
1883	May	4.12	Nov.	1.47	
1884	Apr.	5.58	Dec.	1.41	
1885	Jan.	6.02	Oct.	1.41	
1886	Jan.	8.94	Dec.	3.08	
1887	Mar.	5.42	Dec.	1.82	
1888	Mar.	4.86	Nov.	1.56	
1889	Apr.	5.88	Oct.	2.88	
1890	Jan.	13.66	Nov.	3.25	
1891	Apr.	6.47	Nov.	2.35	
1892	May	5.08	Nov.	1.75	
1893	Mar.	9.70	Nov.	2.83	
1894	Mar.	8.66	Nov.	2.50	
1895	Jan.	12.25	Nov.	2.58	
1896	Feb.	7.75	Nov.	2.91	
1897	Apr.	8.16	Nov.	2.25	
1898	Mar.	3.41	Nov.	0.08	
1899	Apr.	3.08	Oct.	0.25	
1900	Mar.	5.66	---	---	
1901	Feb.-Mar.	8.13	Nov.	1.92	26.30
1902	Mar.	9.98	Oct.-Nov.	2.77	38.57
1903	Mar.	7.81	Oct.-Nov.	1.67	26.20
1904	Apr.	11.91	Nov.	2.67	44.81
1905	Apr.	8.68	Nov.	1.72	24.04
1906	Apr.	9.66	Dec.	2.17	45.38
1907	Mar.	11.64	Nov.	2.42	32.55
1908	Mar.	7.53	Oct.-Nov.	1.37	20.23
1909	Feb.	13.38	Nov.	2.42	47.07
1910	Apr.	6.95	Nov.-Dec.	1.27	16.40
1911	Mar.	9.09	Jan.	1.27	27.73
1912	Mar.	3.78	---	---	25.14
1913	Jan.-Feb.	4.16	Oct.	0.62	31.49
1914	Jan.	11.12	Nov.-Dec.	2.78	32.99
1915	Feb.	10.68	Nov.	2.48	42.35

<u>Year</u>	High		Low		Lakeport <u>Rainfall</u>
	<u>Month</u>	<u>Level</u>	<u>Month</u>	<u>Level</u>	
1916	Feb.	8.53	Nov.	1.37	17.54
1917	Apr.	6.60	Dec.	0.61	21.93
1918	Apr.	3.03	Oct.	-2.00	23.62
1919	Apr.	4.42	Nov.-Dec.	-1.50	29.65
1920	Apr.-May	-0.50	Sept.	-3.50	23.99
1921	Mar.-Apr.	7.20	Nov.	1.75	29.94
1922	Apr.	6.50	Oct.	1.18	14.20
1923	Apr.	5.70	Dec.	0.70	23.77
1924	Feb.	1.80	Oct.	-1.53	29.37
1925	May	6.90	Nov.	2.00	35.37
1926	Apr.	7.47	Nov.	1.90	31.35
1927	Feb.	9.00	Oct.-Nov.	1.30	24.28
1928	Apr.	7.35	Oct.-Nov.	1.70	18.41
1929	Mar.-Apr.	3.30	Dec.	-0.32	16.01
1930	Apr.	6.00	Dec.	1.25	24.02
1931	Mar.-Apr.	2.20	Dec.	-0.85	14.29
1932	Mar.-Apr.	3.78	Nov.-Dec.	-0.10	13.55
1933	Apr.	2.60	---	---	22.35
1934	Mar.-Apr.	3.60	Oct.	0.07	21.02
1935	Apr.	7.28	Nov.-Dec.	0.78	26.82
1936	Feb.	8.20	Dec.	1.85	26.91
1937	Apr.	7.05	Nov.	1.10	40.42
1938	Feb.	10.25	Dec.	2.10	33.54
1939	Apr.	3.75	Dec.	-0.36	15.01
1940	Mar.	8.33	Oct.	2.55	46.64
1941	Apr.	8.90	Nov.	3.05	45.71
1942	Feb.	9.60	Nov.	2.32	36.62
1943	Apr.	7.72	Dec.	1.30	21.24
1944	Apr.	5.03	Oct.	0.45	28.91
1945	Apr.	5.82	Sept.	0.10	34.91
1946	Apr.	7.23	Nov.	0.08	16.03
1947	Apr.	3.41	Dec.	0.00	19.11
1948	May	4.62	Dec.	0.55	27.00
1949	Apr.	5.95	Nov.	0.13	16.09
1950	Apr.	4.65	Oct.	-0.135	36.75
1951	Mar.-Apr.	7.38	Nov.	1.56	33.31
1952	Feb.	8.08	Nov.	1.45	35.00
1953	Jan.	7.81	Nov.	2.41	22.39
1954	Apr.	7.67	Nov.	1.58	30.37
1955	Mar.	4.71	Nov.	-0.12	28.68

<u>Year</u>	High		Low		<u>Lakeport Rainfall</u>
	<u>Month</u>	<u>Level</u>	<u>Month</u>	<u>Level</u>	
1956	Feb.	9.53	Dec.	2.35	23.10
1957	Apr.	7.06	Sept.	2.69	35.18
1958	Feb.	10.86	Dec.	3.32	37.98
1959	Apr.	7.48	Dec.	1.18	21.57
1960	Apr.	6.71	Jan.	1.29	31.59
1961	Apr.	7.18	Nov.	1.76	20.30
1962	Mar.	7.75	Oct.	1.88	28.20
1963	Apr.	8.20	Oct.	3.17	30.87
1964	Mar.	5.88	Oct.	0.31	32.31
1965	Jan.	9.03	Nov.	2.50	28.50
1966	Mar.	7.59	Oct.	1.05	25.59
1967	Mar.	7.92	Nov.	3.02	32.07
1968	Mar.	7.71	Oct.	1.41	35.66
1969	Feb.	8.80	Dec.	1.74	40.41
1970	Jan.	10.37	Oct.	1.37	38.94
1971	Mar.	7.84	Oct.	1.60	33.14
1972	Apr.	4.58	Oct.	0.54	19.60
1973	Feb.	7.74	Nov.	1.28	38.01
1974	Apr.	9.10	Nov.	1.70	46.95
1975	Mar.	8.90	Oct.	1.68	31.62
1976	Apr.	2.32	Nov.	-0.60	12.19
1977	Feb.	-0.30	Nov.	-3.39	12.46
1978	Mar.	8.10	Dec.	1.43	45.06
1979	May	6.62	Oct.	1.38	24.71
1980	Feb.	9.61	Nov.	2.49	40.81
1981	Apr.	6.79	Oct.	1.04	20.57
1982	Apr.	9.17	Oct.	2.37	44.99
1983	Mar.	11.32	Oct.	3.57	62.04
1984	Mar.	7.93	Oct.	1.83	32.06
1985	Apr.	6.25	Nov.	1.37	25.85
1986	Feb.	11.34	Nov.	1.54	43.03
1987	Apr.	4.86	Nov.	0.81	18.01
1988	Feb.	5.94	Nov.	1.02	23.45
1989	May	5.27	Dec.	1.47	23.93
1990	Mar.	3.39	Dec.	0.32	18.55
1991	Apr.	3.98	Dec.	0.43	22.43
1992	Apr.	4.54	Oct.	0.62	22.74
1993	Feb.	8.48	Nov.	1.76	40.09
1994	Mar.	4.39	Oct.	0.44	20.68
1995	Mar.	10.72	Nov.	2.70	57.64
1996	Mar.	8.05	Nov.	2.00	40.56
1997	Jan.	8.50	Nov.	1.34	18.37
1998	Feb.	11.44	Nov.	2.74	56.13
1999	Mar.	7.79	Nov.	1.36	20.91
2000	April	7.69	Nov.	1.12	26.58

<u>Year</u>	<u>Month</u>	High <u>Level</u>	<u>Month</u>	Low <u>Level</u>	<u>Lakeport Rainfall</u>
2001	March	5.20	Nov.	0.85	
2002	April	6.89	Nov.	0.82	
2003	May	7.86	Nov	2.14	
2004	Feb	8.85	Oct	1.29	
2005	May	7.85	Nov	3.20	
2006	Apr	8.77	Oct	2.79	
2007	Mar	6.13	Dec	0.97	
2008	Mar	7.11	Dec	0.98	
2009	Mar	4.17	Dec	0.53	
2010	Apr	8.07	Oct	1.99	
2011	Mar	9.37	Nov	2.32	
2012	Apr	5.90	Nov	1.13	
2013	Apr	6.23	Jan ('14)	0.53	
2014	Apr	2.48	Nov	-0.83	
2015	Feb	4.55	Dec	0.45	