#### STATE OF CALIFORNIA STATE WATER RIGHTS BOARD

In the Matter of Application 17855

By Ida M. Holmes to appropriate

from San Leandro Creek in Contra

Costa County

Decision No. D 927

# Substance of Application

The application requests a permit to appropriate 10,000 gallons per day, year-round, from San Leandro Creek tributary to San Francisco Bay for domestic purposes. Water is to be diverted by pumping from a sump formed by a small dam at a point within the  $SE_{4}^{1}$  of  $NW_{4}^{1}$  of Section 23, TlS, R3W, MDB&M, and conveyed through about 1,500 feet of 2-inch pipeline to the place of use within the  $E_{8}^{1}$  of  $NW_{4}^{1}$  of said Section 23. Water is desired for domestic purposes at eight houses and for the irrigation of lawns and gardens in connection therewith.

# Protest and Answer

A protest against the approval of Application 17855 was submitted by East Bay Municipal Utility District. The protestant claims that based upon License 1750 (Application 6707), water was stored in Upper San Leandro Reservoir beginning in January of 1925, and upon a right which antedates the Water Commission Act, water was stored in Chabot Reservoir beginning in 1874; and that storage and use have been continuous since those dates except for brief periods of shut down. The District serves water for municipal purposes in the cities of Oakland,



Berkeley, Piedmont, Alameda, Emeryville, San Leandro, Richmond, Albany, El Cerrito and surrounding territory. The protestant further claims that except for unusual flood flows there is no unappropriated water in San Leandro Creek and that the proposed appropriation would deprive the District of water to which it is entitled.

In reply to the protest the applicant indicates that the water is needed for proposed domestic use and for fire protection, and that as a taxpayer she feels entitled to the water requested.

### Field Investigation

The applicant and protestant, with the approval of the State Water Rights Board, stipulated to proceedings in lieu of hearing as provided for under Section 737 of the Board's rules, and a field investigation was conducted on August 28, 1958, by A. N. Webb, an engineer of the Board. The applicant and protestant were present or represented at the investigation.

# Records Relied Upon

The records relied upon in support of this decision are Application 17855 and all relevant information on file therewith, with particular reference to "Report of Field Investigation of Application 17855" dated September 19, 1958, and covering an investigation made on August 28, 1958, by the above-named engineer; United States Geological Survey, "Oakland East" and "Las Trampas Ridge" quadrangles,  $7\frac{1}{2}$  minute series; operation records of East Bay Municipal Utility District of Upper San

Leandro and Chabot Reservoirs; and "Inspection Report on Application 6707, Permit 3607 (now License 1750)", dated December 31, 1936, covering an inspection of the protestant's Upper San Leandro Reservoir on August 24, 1936.

### Description of the Watershed

San Leandro Creek (called Redwood Creek in the application) rises in the Berkeley Hills within Section 16, T1S, R3W, MDB&M, at about elevation 1,200 feet and flows in a general southeasterly direction about four miles into Upper San Leandro Reservoir. The proposed point of diversion under Application 17855 is located about 1.75 miles above the reservoir and has a watershed area of about 1.7 square miles. The watershed is rather steeply sloping hillside with a moderate to heavy covering of brush and trees.

### Protestant's Project

East Bay Municipal Utility District has two water storage reservoirs downstream from the proposed point of diversion from which it serves the cities of Oakland, Berkeley, Piedmont, Alameda, Emeryville, San Leandro, Richmond, Albany, El Cerrito and surrounding territory. Upper San Leandro Dam is located about 6.5 miles and Chabot Dam is located about 13 miles below the applicant's proposed point of diversion. Upper San Leandro Reservoir is operated under License 1750 (Application 6707), and Chabot Reservoir is operated under a claim of right based upon use beginning prior to December 19, 1914, the effective date of the Water Commission Act.

According to the Inspection Report on Application 6707, Upper San Leandro Dam is an earth dam, 185 feet high and 665 feet long forming a reservoir covering 770 acres at spillway elevation. The storage capacity at that elevation is reportedly 41,436 acrefeet. The water is diverted through a tunnel and a pipeline to a filtration plant and thence to the place of use.

License 1750 confirms to the protestant pursuant to Application 6707 filed on June 21, 1930, a right to 42 cubic feet per second, year-round, as made available by the operation of Upper San Leandro Reservoir.

Chabot Dam is 120 feet high and 450 feet long with a freeboard of 5 feet and is constructed of earth. The reservoir has a surface area of 437 acres and a capacity of 14,469 acrefeet. According to the protestant the dam was built in 1874 and completed to final height in 1892.

The protestant also uses the aforementioned reservoirs for terminal storage of water imported from the Mokelumne River.

## Water Supply

A summary of the runoff of the watershed tributary to Upper San Leandro Reservoir, as shown in the operation records of East Bay Municipal Utility District, is set forth in Table 1, and the spillway discharge or water wasted down San Leandro Creek from Chabot Reservoir is set forth in Table 2. No record of leakage from the two reservoirs was furnished at the investigation. Table 1 shows that there have been more zero flows in July and August than otherwise.

TABLE 1
RUNOFF INTO UPPER SAN LEANDRO RESERVOIR
Million Gallons

	•	-	:			June	. Tayler	A.s.e	: :	Oct.	Nov.	Dec.	
Year	: Jan.	: Feb.	: Mar. :	April : 221.498	May : 129.626	22.864	: July :	Aug.	: Sept. :	0	0	0 .	Total 4,011.556
1925	72.360	3,230.350											
1926	60.863	1,340.811	117.478	536.741	32.864	60.354	3.438	2.599	1.440	13.558	403.814	167.121	2,680.218
1927	653.916	3,443.216	778.350	1,132.835	70.723	47.588	10.330	13.083	19.276	35.282	51.917	149.683	6,416.199
1928	299.376	400.803	1,776.669	835.747	125.319	40.679	0	0	1.026	<b>.95</b> 8	79.876	207.868	3,768.321
1929	132.807	329.583	185.695	85.873	35.613	84.294	28.164	0	0	.274	0	102.333	984.636
1930	487.881	279.522	917.032	78.718	0	O	0	0	0	8.693	21.395	12.029	1,805.270
1931	104.870	79.678	67.460	24.498	19.278	10.724	0	0	0	16.025	33.523	2,121.720	2,477.776
n 1932	566.828	1,367.409	193.495	75.726	42.776	0	0	0,	0	0	16,294	<b>58.</b> 896	2,321.424
1933	395.689	160.101	312.451	106.722	101.984	28.435	0	0	4.707	33.924	0	122.352	1,266.365
1934	88.614	478.304	104.843	8.309	4.990	13.847	0	0	1.314	17.821	53 • 395	59.383	830.820
1935	860.541	210.011	703.671	1,246.882	96.379	12.861		4.220	1.727	15.627	14.808	45.109	3,211.836
1936	920.704	4,089.956	456.749	430.648	108.583	47.676	6.187	0	0	14.672	0	63.036	6,138.211
1937	247.839	1,954.886	2,322.966	533.108	92.354	38.900	0	0	0	23.539	78.658	758.502	6,050.752
1938	371.869	4,315.058	2,778.044	637.952	116.858	2.206	.6	0	.7	37.4	30.6	40.3	8,331.587
1939	98.4	183.1	311.7	43.4	17.5	.4	0	0	17.2	8.6	5.6	39.1	725.00
1940 1	L,423.1	3,387.1	2,162.8	561.1	102.7	8.4	0	0	10.8	28.2	42.4	503.8	8,230.4

TABLE 1

RUNOFF INTO UPPER SAN LEANDRO RESERVOIR
Million Gallons
(Continued)

w <u></u>		<del></del>				(Continu	ied)						
Year	: Jan.	: Feb.	: Mar.	: April :	May	June	: : July	Aug.	: : Sept.	Oct.	Nov.	: Dec.	: Total
1941	2,285.8	2,782.2	1,422.7	1,506.8	269.4	51.9	.8	.2	5.4	27.2	62.2	1,045.4	9,460.0
1942	2,113.6	2,385.6	655.7	876.6	298.4	90.1	29.6	15.6	12.7	23.0	388.6	482.6	7,372.1
1943	2,818.1	758.0	1,186.5	337.8	98.6	66.4	24.7	16.6	12.5	14.9	17.3	53.8	5,405.2
1944	94.5	819.9	835.8	147.0	74.7	7.3	0	.8	0	41.7	248.9	364.9	2,635.5
1945	288.5	1,982.3	1,099.0	283.0	146.6	43.7	8.3	0	.6	51.8	87.1	1,611.4	5,602.3
1946	759.4	266.2	244.7	148.6	66.9	21.3	•3	0	5.6	2.3	55.9	50.9	1,622.1
ې 1947	31.8	138.2	331.9	71.4	18.2	18.5	7.6	5.2	6.1	68.9	18.2	21.2	737.2
1948	63.1	61.5	237.6	333.6	69.2	20.6	0	.6	0	4.3	14.0	92.3	896.8
1949	124.0	528.8	1,262.5	171.4	63.1	16.7	6.031	10.259	5.942	18.010	19.933	20.911	2,247.586
1950	1,420.921	1,053.267	623.427	282.979	84.975	25.562	9.497	11.221	10.162	35.963	212.764	2,962.380	6,733.118
1951	2,540.748	1,008.771	1,160.790	212.815	121.837	40.367	10.940	2.933	0	33.516	220.718	2,109.058	7,462.493
1952	5,000.578	1,609.864	2,054.651	449.405	116.770	61.973	18.815	0	8.032	.165	44.774	1,094.282	10,459.309
1953	1,873.741	211.075	525.181	272.390	117.566	38.943	0	4.028	.324	11.969	51.060	48.169	3,154.446
1954	312.683	760.576	385 <b>.87</b> 3	231.137	60.304	25.998	0	2,030	0	2.542	41.855	246.813	2,069.811
1955	546.130		164.380	109.995	51.863	0	0	0	.267	.905	42.718	4,103.399	5,316.254
1956 1957		1,240.965	138.029	-	127.458	9.398	0	0	3.405	68.784	.348		5,421.586
<b></b>	153.264	357.717	749.314	126.277	534.160	35.831			•				1,956.563

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TABLE 2

SPILLWAY DISCHARGE OR WASTE FROM CHABOT RESERVOIR
Million Gallons

Year: Jar 1925 1926 1927 1928 1929	0 0 0 0	Feb. : 0 0 0 0 0	Mar. : 0 0 0 0	0 0 0 0	May : 0 0 0	June : 0 0 0	0 0	Aug. O	: Sept.: 0 0	0 ct. :	Nov. 0 0	0 0	: Total 0
1926 1927 1928 1929	0 0 0	0 0	0 0 0	o o	0 0	0	0						
1927 1928 1929	0 0 0	0	o o	0	0		•	0	0	0	0	0	0
1928 1929	0	. 0	0			0	•						
1929	0	•		0			0	0	0	0	0	0	0
		0			0	0	0	0	0	0	0	0	0
1930	^		0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	0
7 1932	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	O	O	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	32.522	334.180	312.620	0	0	0	0	0 3	90.465	412.147	0	1,481.934
1937	0	556.350	1,072.500	1,704.100	450.890	1.810	581.66	3.63	0	0	0	0	4,370.940
1938	0	3,624.77	3,162.54	1,650.48	332.74	17.90	0	0	0	1.3	0	0	8,789.73
1939 1,012	3	o	0	0	0	0	0	0	0	0	0	0	1,012.3
1940	0 :	1,145.7	2,748.2	1,831.1	33.1	0	0	0	0	0	0	0	5,758.1

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TABLE 2

SPILLWAY DISCHARGE OR WASTE FROM CHABOT RESERVOIR

Million Gallons

(Continued)

					·	Continued	.)				~		
Year:	Jan.	: Feb.	: Mar.	: April	May	June :	July :	Aug.	: Sept.:	Oct.	Nov.	: : Dec.	Total
1941	1,519.2	2,892.5	1,908.2	1,866.0	326.5	16.5	0	0	0	0	0	37.7	8,566.6
1942	2,194.7	2,926.7	557.5	717.2	189.9	14.3	0	0	0	0	0	0	6,600.3
1943	426.2	922.0	1,039.4	22.2	0	0	0	0	0	0	0	O	2,409.8
1944	0	0	0	0	o	0	0	0	0	0	0	0	0
1945	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	O	0	0	0	0	0	0	0
1948	• 0	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	3,235.620	1,566.010	2,261.400	322.900	75.860	2.250	2.250	0	0	0	0	0	7,466.290
1953	0	0	0	0	0	O	0	0	0	0	0	0	0
1954	0	0	o	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	o	66.130	54.640	21.710	27.880	0	0	0	0	0	0	0	170.360
1957	0	0	0	0	0	0							0

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Decision 858 of the former State Engineer adopted July 3, 1956, indicates that the total potential safe yield of all local sources including ground water extractions was 24 million gallons per day while the use within the East Bay Municipal Utility District was about 125 million gallons per day, the deficiency being made up by importation of Mokelumne River water.

#### Discussion

As heretofore stated, License 1750 confirms a right to East Bay Municipal Utility District to the diversion of 42 cubic feet per second, year-round, as made available by the operation of Upper San Leandro Reservoir. On a continuous flow basis, 42 cubic feet per second is equivalent to about 9908 million gallons per year. A comparison of this figure with the yearly total runoff of San Leandro Creek above the reservoir as set forth in Table 1 reveals that there was only one year (1952) during the 32 years of record when the total runoff exceeded the right of the District under License 1750.

In a letter dated March 9, 1958, the applicant inferred that the water being imported from the Mokelumne River by the protestant would have some bearing on the situation. Although the protestant imports over 80% of its supply from other sources, there is no information to indicate it has abandoned or curtailed the use of water under License 1750 and/or the old appropriative right claimed at Chabot Reservoir.

Considering the combined rights claimed by the District; namely, License 1750 and the old appropriative right at Chabot

Reservoir, the only water which this Board finds is now available for appropriation from San Leandro Creek under an application, such as Application 17855, is the spillway overflow or waste from Chabot Reservoir as set forth in Table 2. According to that table, since Upper San Leandro Reservoir was put into operation in 1925, spill or wastage occurred in 51 months of a 390-month period or about 13.1% of the time.

### Conclusions

The information indicates and the Board finds that unappropriated water in the source under consideration occurs too infrequently to be of any value to the applicant for a domestic water supply. Accordingly, it is the conclusion of this Board that Application 17855 should be denied.

#### ORDER

Application 17855 for a permit to appropriate unappropriated water having been filed, a protest having been submitted, an investigation having been held by the Board and said Board now being fully informed in the premises:

IT IS HEREBY ORDERED that Application 17855 be, and the same is hereby denied.

	Ado	opted	as	the	decis	ion	and	orde	er of	the	State	Water	
Rights	Board	at a	me	eting	g duly	cal	lled	and	held	at _			
Califor	rnia, (	on th	is _	~	day o	f _			, 1	9	•		

Henry Holsi	nger, Chairman
W. P. Rowe,	Member