



May 14, 2001

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Department of Public Works

QUALITY CONTROL BOA

Steve Moore, P.E.  
Policy and Planning Division  
California Regional Water Quality Control Board. San Francisco Bay Region  
1515 Clay St., #1400  
Oakland, CA 94612

**SUBJECT: PUBLIC SOLICITATION OF WATER QUALITY INFORMATION**

Dear Mr. Moore:

Enclosed you will find two hard copies and diskette of the data requested by the State Water Resources Control Board (SWRCB) seeking data and information on the quality of surface waters of the state. The city has data that have been generated since July 1997 for the city of Benicia receiving water, Carquinez Straight (file:/recwater.xls) and Lake Herman (file:/lakedata.xls). Information for Lake Berryessa and the North Bay Aqueduct may be obtained from the Department of Water Resources database known as, "Writeon." The file names to look for are, D48/001NBRNBA (aqueduct) and 4810001-008 PutahSouthCanal (Berryessa).

The City of Benicia's receiving water data were generated by samples collected and analyzed by the Benicia Laboratory personnel (ELAP certificate no. 1510). The Lake Herman samples were collected by Benicia Laboratory and analyzed by Caltest Laboratory (ELAP no. 1664) from 1997 to 1999 on an annual basis. Starting in April of year 2000, Lake Herman samples have been collected monthly by Benicia Laboratory technicians and the samples for inorganic analyses were tested by Benicia Laboratory and the metals and organic analyses performed by Caltest Laboratory.

If you have any questions, please feel free to contact me at telephone number (707) 746-4336 or via email: [pfong@ci.benicia.ca.us](mailto:pfong@ci.benicia.ca.us).

Sincerely,

Peter Fong, Laboratory Technician III

PF:dg

f:/pubworks/peter/swrcbdata.501.doc\\file: WWTP files\SWRCB correspondence

Enclosure

cc: John Bailey, WWTP Superintendent w/attachments  
Vicki Shidell, Water Quality Supervisor w/attachments

**City of Benicia Receiving Water Data**

<b>Date</b>	<b>Total Hardness (mg/L)</b>	<b>TDS (mg/L)</b>	<b>Total Coliform (MPN/100 mL)</b>	<b>Fecal Coliform (MPN/100 mL)</b>
1/28/00	740	3200		
2/24/00	72	223		
3/24/00	228	720		
4/28/00	1324	7306		
5/19/00	768	4260		
6/12/00	1488	8480	22	8
7/12/00	2256	13980	90	40
8/8/00	1620	9576	17	17
9/25/00	2510	14441	500	90
10/17/00	2930	17800	23	23
11/13/00	3292	18992	220	50
12/15/00	3080	17796	900	80
1/23/01	2350	12922	22	13
2/7/01	1280	14147	17	11
3/6/01	1570	9582	3000	1300
4/3/01	1890	9814	30	17

## City of Benicia - 1997-1999 Lake Herman Data

	Units	DLR	6/9/97	7/14/97	7/21/97	6/16/98	2/10/99	12/20/99
Total Alkalinity	mg/L	10	110			210		180
Total Hardness	mg/L	3	110			220		180
Fluoride	mg/L	0.1	0.2			0.4		0.3
pH			7.7			7.5		7.4
Temperature	Celsius							
Dissolved Oxygen	mg/L							
Conductivity	umhos/cm	10	340			640		480
TDS	mg/L	10	220			400		300
TSS	mg/L							
Turbidity	NTU	0.17	29			3.9		8.2
Total Coliform	MPN/100 ml							
Fecal Coliform	MPN/100 ml							
Aluminum	ug/L	50	1700			200		700
Antimony	ug/L	6	ND			ND		ND
Arsenic	ug/L	2	5			4		ND
Barium	ug/L	100	ND			ND		82
Beryllium	ug/L	1	ND			ND		ND
Cadmium	ug/L	1	ND			ND		ND
Chromium (Total Cr)	ug/L	10	ND			ND		ND
Copper	ug/L	50	ND			ND		ND
Iron	ug/L	100	1200			200		790
Lead	ug/L	5	ND			ND		ND
Mercury	ug/L	1	ND			ND		ND
Nickel	ug/L	10	ND			ND		ND
Selenium	ug/L	5	5			ND		ND
Thallium	ug/L	1	ND			ND		ND
Zinc	ug/L	50	ND			ND		ND
Phosphate	mg/L	0.1	0.2					ND
Ammonia	mg/L	0.1	ND					
Nitrate (as NO3)	mg/L	2	2	ND		ND	ND	100
Cyanide	ug/L	10	ND		ND	ND	ND	ND
NO3 + NO2 as N	ug/L	100	600	ND		ND	600	300
Nitrite as N	ug/L	400	ND	ND		ND	ND	ND
Monthly Rainfall Total	inches							

Note: Data from Caltest Laboratory

f:\pw\vicki\wtp\lherman\lakedata.xls

## City of Benicia - 2000 Lake Herman Data

	Units	DLR	2/2/00	3/7/00	4/3/00	5/8/00	6/5/00	7/10/00	8/7/00	9/5/00	10/2/00	11/13/00	12/19/00
Total Alkalinity	mg/L				170	134	204	84	76	86	94	186	192
Total Hardness	mg/L				172	148	204	86	82	84	88	182	196
Fluoride	mg/L				0.275	0.219	0.301	0.148	0.105	0.108	0.155	0.318	0.288
pH					7.87	7.86	8.34	7.83	7.85	7.83	7.57	8.09	7.74
Temperature	Celsius				17.5	19.8	23.5	22.6	24.3	21.1	22.6	15.9	13.1
Dissolved Oxygen	mg/L				9.06	9.34	9.16	8.32	6.47	8.5	9.75	9.65	10.49
Conductivity	umhos/cm				515	479	604	244	222	239	226	538	478
TDS	mg/L				343	295	374	184	166	163	175	308	318
TSS	mg/L				20.8	13	23.7	10	17.2	21	2	6	16
Turbidity	NTU				30	13.9	43.8	39.6	58	52.4	31.7	11.5	23
Total Coliform	MPN/100 ml				28	165	38	55	126	145	210	210	160
Fecal Coliform	MPN/100 ml				20	12	15	8	10	14	80	80	12
Aluminum	ug/L	100			1,300	800	1,400	2,300	2,600	1,900			600
Antimony	ug/L	10			ND			ND					
Arsenic	ug/L	2			ND			3					
Barium	ug/L	5			68			54					
Beryllium	ug/L	1			ND			ND					
Cadmium	ug/L	1			ND			ND					
Chromium	ug/L	5			ND			5					
Copper	ug/L	2			3	6	5	5	5	5			3
Iron	ug/L	50			1,600	900	2,100	2,500	2,700	2,300			770
Lead	ug/L	2			ND	ND	ND	ND	ND	ND			ND
Mercury	ug/L	0.01	ND	0.05	ND	ND	0.01	ND	ND	0.01			
Nickel	ug/L	5			ND			7					
Selenium	ug/L	10			ND			ND					
Thallium	ug/L	10			ND			ND					
Zinc	ug/L	20			ND	ND	ND	ND	ND	ND			11
Phosphate	mg/L	0.1			ND	0.1	ND	0.2	0.2	0.2			ND
Ammonia	mg/L	0.1			ND	0.1	ND	ND	ND	ND			ND
Nitrate (as NO3)	mg/L	0.1			ND	ND	ND	ND	0.2	0.2			
Cyanide	ug/L	3			ND			ND					
Nitrate + Nitrite as N	ug/L	100			ND			600					
Total Coliform	MPN/100 ml								79 (1)				
Monthly Rainfall Totals	inches		6.67"	1.97"	.98"	1.33"	.21"	0"	0"	0.06"	1.74"		

Notes: (1) Sample collected on 8/3/00

Metals and organic data from Caltest Laboratory, inorganic data from Benicia Laboratory

f:\pw\vicki\wtp\lakerman\lakedata.xls

### City of Benicia - 2001 Lake Herman Data

	Units	DLR	1/16/01	2/21/01	3/13/01	4/16/01								
Total Alkalinity	mg/L		104	198	204	148								
Total Hardness	mg/L		120	50	210	154								
Fluoride	mg/L		0.169	0.309	0.3	0.215								
pH			7.74	8.13	7.47	7.87								
Temperature	Celsius		9.8	12.1	13.3	15.9								
Dissolved Oxygen	mg/L		11.66	10.55	6.09	9.96								
Conductivity	umhos/cm		407	541	575	482								
TDS	mg/L		242	505	385	329								
TSS	mg/L		2.4	14.4	43	14								
Turbidity	NTU		15.8	32.5	67.3	32.7								
Total Coliform	MPN/100 ml		65	900	900	40								
Fecal Coliform	MPN/100 ml		17	300	1400	2								
Aluminum	ug/L	100	700		2,000									
Antimony	ug/L	10	ND *											
Arsenic	ug/L	2	ND *											
Barium	ug/L	5	43 *											
Beryllium	ug/L	1	ND *											
Cadmium	ug/L	1	ND *											
Chromium	ug/L	5	ND *											
Copper	ug/L	2	3	3	6									
Iron	ug/L	50	710	900	2,500									
Lead	ug/L	2	ND	ND	ND									
Mercury	ug/L	0.01	ND	ND	ND	ND								
Nickel	ug/L	5	ND *											
Selenium	ug/L	10	ND *											
Thallium	ug/L	10	ND *											
Zinc	ug/L	20	ND	ND	ND									
Phosphate	mg/L	0.1	ND	ND	0.1									
Ammonia	mg/L	0.1	ND	ND	0.1									
Nitrate (as NO3)	mg/L	0.1	ND	ND	ND									
Cyanide	ug/L	3	ND *											
NO3 + NO2 as N	ug/L	100	400 *											
Total Coliform	MPN/100 ml													
Monthly Rainfall Total	inches		2.08	4.96	0.87	0.8								

Notes: \* Samples collected on 1/16/01

Metals and organic data from Caltest Laboratory, inorganic data from Benicia Laboratory