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The Resources Agency

Department of Water Resources

BULLETIN No. 130-73

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HYDROLOGIC DATA: 1973

Volume III: CENTRAL COASTAL AREA

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OCTOBER 1974

NORMAN B. LIVERMORE, JR.
Secretary for Resources
The Resources Agency

RONALD REAGAN
Governor
State of California

JOHN R. TEERINK
Director
Department of Water Resources

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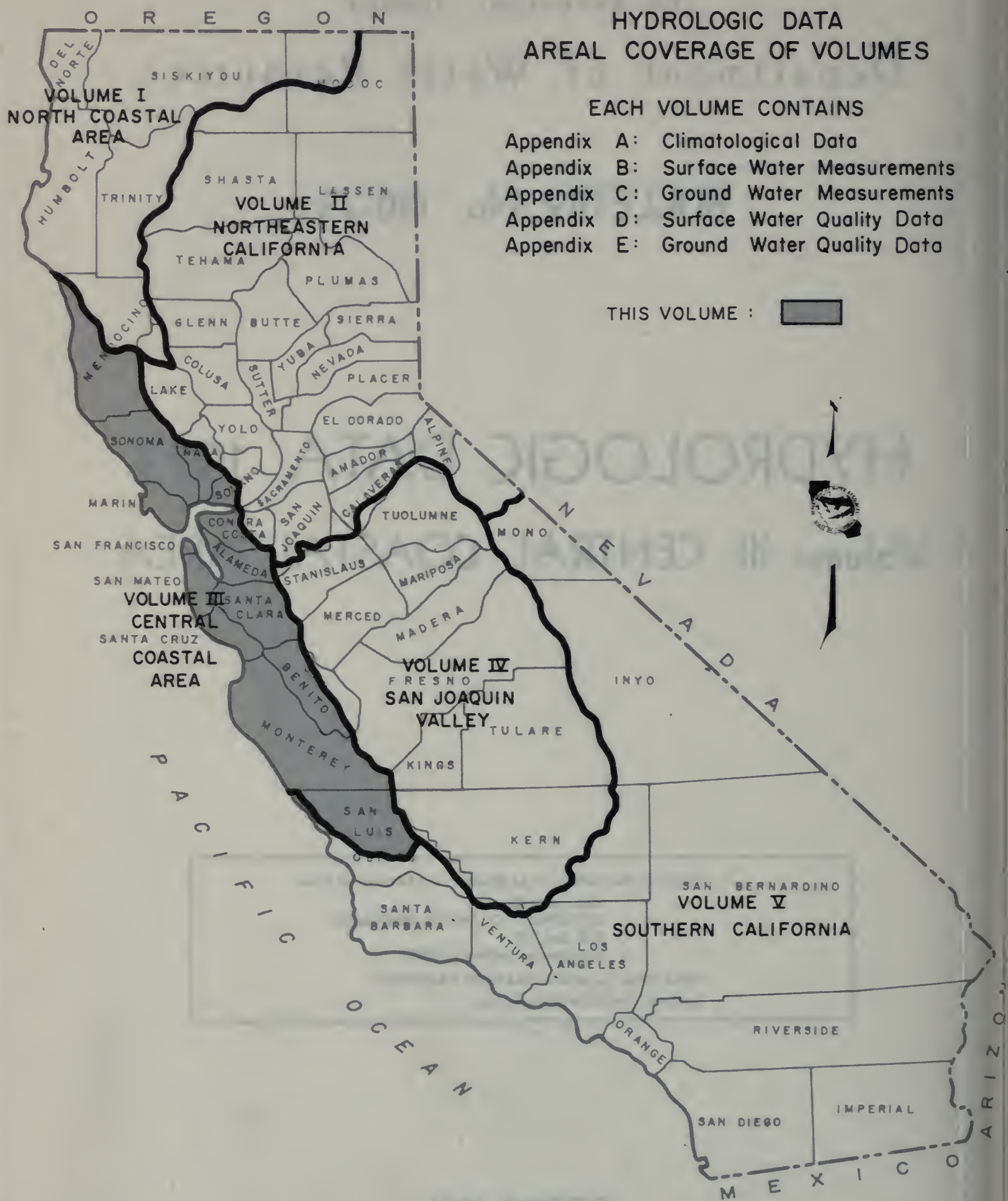
BULLETIN No. 130

HYDROLOGIC DATA
AREAL COVERAGE OF VOLUMES

EACH VOLUME CONTAINS

Appendix A: Climatological Data
Appendix B: Surface Water Measurements
Appendix C: Ground Water Measurements
Appendix D: Surface Water Quality Data
Appendix E: Ground Water Quality Data

THIS VOLUME :



FOREWORD

The hydrologic data programs of the Department of Water Resources supplement the data collection activities of other agencies and help satisfy the needs for data on the quality and quantity of water in the State. Bulletin No. 130-73 presents accurate, comprehensive, and timely hydrologic data which provide a more complete knowledge of the factors affecting our environment and are prerequisities for effective planning, design, construction, and operation of water facilities.

The Bulletin No. 130 series is published annually in five volumes. Each volume presents hydrologic data for one of five reporting areas of the State. These areas are delineated on the map on the opposite page.

John R. Teerink

John R. Teerink, Director
Department of Water Resources
The Resources Agency
State of California
August 13, 1978

METRIC CONVERSION TABLE

ENGLISH UNIT	EQUIVALENT METRIC UNIT
1 Inch (in.)	2.54 Centimeters
1 Foot (ft.)	0.3048 Meters
1 Mile (mi.)	1.609 Kilometers
1 Acre	0.405 Hectares
1 Square mile (sq.mi.)	2.590 Square kilometers
1 U. S. gallon (gal.)	3.785 Liters
1 Acre-foot (ac.ft.)	1,233.5 Cubic meters
1 U. S. gallon per minute (gpm)	0.0631 Liters per second
1 Cubic foot per second (cfs)	1.7 Cubic meters per minute
1 Part per million (ppm)	1 Milligram per liter (mg/l)
1 Part per billion (ppb)	1 Microgram per liter (ug/l)
1 Part per trillion (ppt)	1 Nanogram per liter (ng/l)
1 Equivalent part per million (epm)	1 Milliequivalent per liter (me/l)
Degrees Fahrenheit (°F)	5/9 (°F-32) Degrees Celsius (°C)

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State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

RONALD REAGAN, Governor, State of California
NORMAN B. LIVERMORE, Jr., Secretary for Resources
JOHN R. TEERINK, Director, Department of Water Resources

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Water Resources Evaluation Section

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Federal

National Weather Service
U. S. Army, Corps of Engineers
U. S. Army, Post Engineer, Fort Ord
U. S. Bureau of Reclamation
U. S. Coast Guard
U. S. Geological Survey
U. S. Soil Conservation Service

State

Department of Health
Department of Veterans Affairs
Division of Highways
Division of Forestry
Regional Water Quality Control Board, Central Coast Region, North Coast Region, and San Francisco Bay Region
University of California, Agricultural Extension Service
Water Resources Control Board

Local

Alameda County Flood Control and Water Conservation District
Alameda County Water District
City of San Francisco
City of Vallejo
East Bay Municipal Utility District
Marin County
Mendocino County
Monterey County Flood Control and Water Conservation District
Napa County Flood Control and Water Conservation District
San Benito County
San Luis Obispo County Flood Control and Water Conservation District
Santa Clara Valley Water District
Santa Cruz County
Solano Irrigation District
Sonoma County Flood Control and Water Conservation District
South Santa Clara Valley Water Conservation District

ABSTRACT

Report contains tables showing data on climate, surface water flow, change of ground water levels, and surface and ground water quality in the Central Coastal Area for the 1972-73 water year. Figures show the location of climatological observation stations and ground water basins; the fluctuation of average ground water level; fluctuation of water level in wells; the location of surface water measurement and surface water quality stations; and hydrographic unit boundaries.

INTRODUCTION

This bulletin contains data regarding climate, surface water, ground water levels, and surface and ground water quality. The data were collected by the Department of Water Resources and by various organizations cooperating with the Department.

The Department's files contain some data that currently are not being published. Inquiries regarding local data should be directed to the District Offices listed as follows:

Central District
P. O. Box 9137
3251 S Street
Sacramento, CA 95816

San Joaquin District
P. O. Box 2385
3374 East Shields Avenue
Fresno, CA 93723

Northern District
P. O. Box 607
2440 Main Street
Red Bluff, CA 96080

Southern District
P. O. Box 6598
849 South Broadway
Los Angeles, CA 90055

Inquiries regarding statewide data should be directed to the Division Office:

Division of Resources Development
P. O. Box 388
1416 Ninth Street
Sacramento, CA 95802

Federal and local agencies also are maintaining substantial data files. A partial listing follows:

Federal Agencies

U. S. Army, Corps of Engineers
Sacramento District
650 Capitol Mall
Sacramento, CA 95814

U. S. Army, Corps of Engineers
San Francisco District
100 McAllister Street
San Francisco, CA 94102

U. S. Department of the Interior
Geological Survey
Water Resources Division
855 Oak Grove Avenue
Menlo Park, CA 94025

U. S. Department of the Interior
Geological Survey
Water Resources Division
2800 Cottage Way
Sacramento, CA 95825

U. S. Department of the Interior
Bureau of Reclamation
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, CA 95825

Local Agencies

Alameda County Flood Control and
Water Conservation District
399 Elmhurst Street
Hayward, CA 94544

Alameda County Water District
38050 Fremont Boulevard
Fremont, CA 94537

City of San Francisco
855 Harrison Street
San Francisco, CA 94107

East Bay Municipal Utility District
2130 Adeline Street
Oakland, CA 94623

Marin Municipal Utility District
220 Nellen Avenue
Corte Madera, CA 94925

Monterey County Flood Control and
Water Conservation District
Court House
Salinas, CA 93901

Napa County Flood Control and
Water Conservation District
1125 First Street
Napa, CA 94558

Pacific Gas and Electric Company
245 Market Street
San Francisco, CA 94106

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118

Appendix A

CLIMATOLOGICAL DATA

This appendix contains monthly precipitation data for certain climate stations for the 1973 water year, October 1, 1972, through September 30, 1973. Additional precipitation data, as well as data concerning air temperature, wind, and evaporation, are available in the National Weather Service's publications "Climatological Data - California"; and, for particular key stations, "Local Climate Data". These publications can be obtained from:

Superintendent of Documents
Government Printing Office
Washington, D. C. 20402

Other agencies within the area covered by this report have established their own supplemental rain gage networks. Some of these agencies are: Alameda County Flood Control and Water Conservation District; City of San Francisco; Contra Costa County Flood Control and Water District; East Bay Municipal Utility District; Marin Municipal Water District; Marin County Department of Public Works; Monterey County; San Benito County; San Luis Obispo County Flood Control and Water District; Santa Clara Valley Water District; Santa Cruz County Department of Public Works; Sonoma County Water Agency; U. S. Department of the Army, Corps of Engineers, San Francisco District.

Each station in this appendix has been assigned an identification number. The letter and first digit denote the hydrographic unit as shown below. The remaining digits denote the sequence of the station in alphabetical order.

<u>Central Coastal Area</u>

D0 Santa Cruz Coast
D1 Pajaro-San Benito Rivers
D2 Lower Salinas River
D3 Upper Salinas River
D4 Monterey Coast
T9 Upper Salinas River

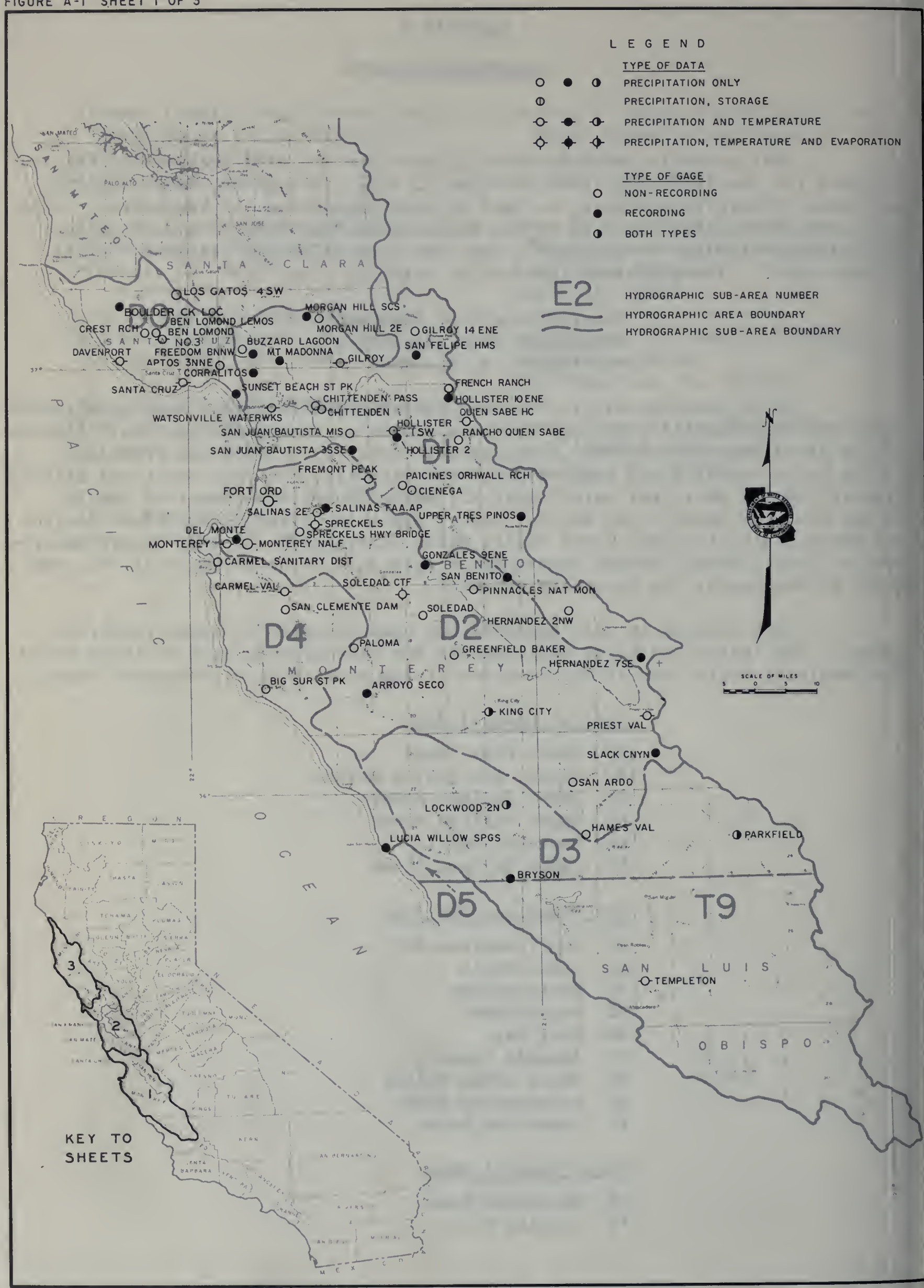
<u>San Francisco Bay Area</u>

E0 San Francisco Bay
E1 Coast-Marin
E2 Marin-Sonoma
E3 Napa-Solano
E4 East Bay
E5 Alameda Creek
E6 Santa Clara Valley
E7 Bayside-San Mateo
E8 Coast-San Mateo

<u>North Coastal Area</u>

F8 Mendocino Coast
F9 Russian River

FIGURE A-1 SHEET 1 OF 3



CLIMATOLOGICAL OBSERVATION STATIONS 1972-73

CLIMATOLOGICAL OBSERVATION STATIONS 1972-73

FIGURE A-1 SHEET 3 OF 3

CLIMATOLOGICAL OBSERVATION STATIONS 1972 - 73

TABLE A-1

PRECIPITATION IN CENTRAL COASTAL AREA
DURING WATER YEAR 1973

This table summarizes monthly precipitations totals for selected stations for the 1973 water year, October 1, 1972, through September 30, 1973. The table shows each station's assigned number in accordance with the explanation given in the introduction to this appendix. Location is shown by latitude and longitude in degrees to the third decimal.

Precipitation values are shown to the nearest hundredth (.01) of an inch. Where Fischer & Porter rain gages are used, a zero is shown in the second decimal place, even though these instruments record to only the nearest tenth (.1) of an inch. The following notations are used to qualify the values:

.00-	No record or incomplete record
B	Record began
E	Wholly or partially estimated
N	Record ends
.00T	Trace, an amount too small to measure

The county code shown for each station is in accordance with the Standard California County Codes shown below.

Alameda	60	Marin	21	San Mateo	41
Alpine	02	Mariposa	22	Santa Barbara	42
Amador	03	Mendocino	23	Santa Clara	43
Butte	04	Merced	24	Santa Cruz	44
Calaveras	05	Modoc	25	Shasta	45
Colusa	06	Mono	26	Sierra	46
Contra Costa	07	Monterey	27	Siskiyou	47
Del Norte	08	Napa	28	Solano	48
El Dorado	09	Nevada	29	Sonoma	49
Fresno	10	Orange	30	Stanislaus	50
Glenn	11	Placer	31	Sutter	51
Humboldt	12	Plumas	32	Tehama	52
Imperial	13	Riverside	33	Trinity	53
Inyo	14	Sacramento	34	Tulare	54
Kern	15	San Benito	35	Tuolumne	55
Kings	16	San Bernardino	36	Ventura	56
Lake	17	San Diego	90	Yolo	57
Lassen	18	San Francisco	80	Yuba	58
Los Angeles	70	San Joaquin	39		
Madera	20	San Luis Obispo	40	Oregon	61
				Nevada	62
				Arizona	63
				Mexico	64

TABLE A-1 (Cont.)

PRECIPITATION IN CENTRAL COASTAL AREA DURING WATER YEAR 1973

CO	STA NO	LAT	LONG	ELEV	STATION NAME	TOTAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
07	E40006400	37.866	122.033	410	ALAMO 1N	.00-	2.89	5.93	1.75	9.84	6.38	2.60	.22	.01	.00T	.00	.00	.00-
21	F90013500	37.941	122.638	680	ALPINE DAM	57.32	7.76	10.06	5.73	14.97	10.86	5.71	.18	.00	.00	.00	.00	2.05
60	E50014600	37.761	121.778	675	ALTAMONT	22.01	2.08	5.24	2.13	5.25	4.21	2.64	.32	.00	.00	.00	.00	.14
43	E60016700	37.433	121.966	8	ALVISO	21.68E	2.37	5.21	1.31	4.61	5.82	2.18	.17	.01	.00	.00E	.00E	.00E
28	E30021200	38.571	122.434	1815	ANGWIN PACIFIC UNION C	51.46	4.35	8.43	4.79	18.04	9.99	4.58	.26	.07	.00	.00	.00T	.45
44	D00024600	37.018	121.884	880	APTOS 3NNE	.00-	3.98	11.92	5.10	10.68	.00-	4.82	.00-	.06	.02	.00	.01	.33
60	E50031200	37.616	121.750	700	ARROYO DEL VALLE SAN	21.78	2.39	4.59	2.39	5.59	3.65	2.69	.28	.00	.00	.00	.00	.20
27	D20032200	36.233	121.483	800	ARROYO SECO	33.96	4.23	6.44	1.50	8.26	11.07	2.46	.00	.00	.00	.00	.00	.00
28	E30036800	38.433	122.250	1660	ATLAS ROAD DUTRA	.00-	3.90	6.50	5.00	.00-	.00-	4.50	.00	.10	.00	.00	.00	.00-
21	E10057200	38.043	122.797	50	BEAR VALLEY OLEMA	.00-	5.74	9.10	5.78	16.89	9.90	5.98	.00-	.10	.00	.00	.00-	.00-
44	D00067405	37.083	122.100	504	BEN LOMOND LEMOS	.00-	7.34	14.01	3.85	15.40	21.01	6.00	1.16	.00	.00	.00-	.00-	.00-
44	D00067700	37.083	122.066	720	BEN LOMOND NO. 3	65.29	6.97	15.15	3.51	14.55	19.08	5.57	.13	.00T	.00T	.00	.00	.33
60	E40069300	37.866	122.250	299	BERKELEY	36.57	3.70	6.95	3.13	12.47	6.47	2.94	.14	.01	.00	.00	.00T	.76
27	D40079000	36.250	121.783	235	BIG SUR STATE PARK	60.15	5.20	14.56	2.59	13.76	17.27	6.40	.25	.00T	.00	.00	.00	.12
48	E30081448	38.138	121.868	60	BIRDS LANDING	26.44	3.75	4.61	1.55	7.92	5.47	2.66	.20	.05	.00	.00	.00	.23
43	F60085000	37.300	122.166	2331	BLACK MTN 2 SW	51.98	6.76	8.81	3.29	13.17	13.91	4.88	.14	.07	.00T	.00	.00	.45
21	F90087600	38.194	122.916	40	BLAKES LANDING	.00-	2.95	6.20	5.85	13.00	7.50	3.80	.00	.15	.00	.00-	.00-	.00-
49	F90093302	38.329	122.994		BODEGA BAY 2E	.00-	3.60	14.30	9.70	17.48	9.70	4.60	.35	.45	.00	.00-	.00-	.00-
49	F90093303	38.383	123.050	900	BODEGA BAY 4 N	71.79	5.91	14.32	8.62	22.06	11.08	6.57	.47	.57	.00	.00	.00	2.19
49	F90093400	38.317	123.069	40	BODEGA MARINE LAB	.00-	2.85	8.69	5.23	11.89	7.01	3.59	.25	.00-	.00-	.00-	.00-	.00-
60	E40095404	37.765	122.029	1000	BOLINAS CANYON	33.02	3.15	6.87	3.05	10.05	6.40	3.75	.05	.00	.00	.00	.00	.50
21	E10095430	37.906	122.553		BOLINAS FIRE DIST	.00-	8.06	9.73	7.00	20.14	11.35	5.58	.25	.49	.00	.00-	.00-	.00-
21	F90096900	37.956	122.610	723	BON TEMPE DAM	68.89	8.87	13.40	6.33	18.32	14.79	5.83	.29	.00	.00	.00	.00	1.06
23	F80097300	39.015	123.372	342	BOONVILLE HMS	43.40	3.11	6.16	6.77	13.34	8.09	4.32	.28	.07	.00T	.00	.00	1.26
44	D00100500	37.142	122.195	2175	BOULDER CREEK LOCATELL	77.40	8.40	16.20	5.70	17.70	20.00	7.60	.40	.20	.00	.00	.00	1.20
07	B80104100	37.895	121.863	650	BRANCH JAIL	.00-	.00-	16.30	6.50	19.50	18.30	9.30	.10	.70	.00	.00	.00	1.20
27	D30114200	35.800	121.083	925	BRYSON	36.12	3.27	7.49	1.17	10.55	10.72	2.92	.00	.00	.00	.00	.00	.00
41	E70120600	37.583	122.350	10	BURLINGAME	32.97	5.35	5.54	2.97	8.87	7.14	2.80	.30	.00	.00	.00	.00	.00
07	E40121600	37.866	122.083	530	BURTON RANCH	33.79	3.33	6.21	3.12	10.72	6.97	2.85	.15	.01	.00	.00	.00	.43
44	D10124700	37.033	121.833	1275	BUZZARD LAGOON	51.71	3.99	10.71	5.09	11.06	15.87	3.80	1.19	.00	.00	.00	.00	.00
60	E50128100	37.486	121.818	805	CALAVERAS RESERVOIR	30.96	2.75	6.82	3.03	7.31	6.34	3.89	.38	.02	.00T	.00	.00	.42
28	E30131200	38.584	122.582	364	CALISTOGA	45.54	3.34	7.79	5.56	16.11	8.67	3.17	.10	.05	.00	.00	.00	.75
49	F90131202	38.601	122.650	944	CALISTOGA 4NW	48.89	4.24	7.58	5.45	17.65	9.59	3.02	.11	.00	.00	.00	.00	1.25
49	F90131204	38.533	122.633	750	CALISTOGA 4 SW	70.65	4.47	12.38	8.55	25.87	10.25	6.40	.38	.08	.00	.00	.00	2.27
49	F90131206	38.483	122.566		CALISTOGA SS	58.09	3.86	9.24	4.42	20.67	10.41	5.19	.71	.20	.00	.00	.00	3.39
43	E60137701	37.283	121.950	192	CAMPBELL WATER CO	.00-	3.22	5.74	1.19	5.86	7.09	2.07	.02	.00	.00	.00-	.00-	.00T
27	D40153240	36.539	121.918		CARMEL SANITARY DIST	.00-	3.03	7.30	1.46	6.08	5.25	3.72	.00	.00	.00	.00-	.00-	.00-
27	D40153400	36.483	121.733	425	CARMEL VALLEY	27.69	2.08	5.81	2.31	5.83	6.87	4.54	.16	.02	.00	.00	.00	.07
28	E30153700	38.283	122.358		CARNEROS VALLEY ALEXAN	.00-	5.83	9.36	3.82	14.49	8.14	3.92	.21	.08	.00	.00-	.00-	.00-
60	E50159700	37.761	121.778	675	CAYETANO CREEK	24.76	3.73	5.57	2.18	5.45	4.83	2.64	.25	.03	.00	.00	.00	.08
49	F90160300	38.533	123.133	1100	CAZADERO 3 W	76.51	4.46	13.21	12.27	22.98	12.92	7.15	.17	.18	.00	.00	.00T	3.17
60	E40164701	37.731	122.128	140	CHABOT FILTERS	32.25	3.54	6.33	3.15	8.78	6.49	3.34	.05	.13	.00	.00	.00	.44
35	D10173900	36.900	121.600	125	CHITTENDEN PASS	27.83	2.02	6.75	1.91	6.49	6.82	3.52	.20	.00T	.00	.00	.00	.12
44	D10173901	36.902	121.604	104	CHITTENDEN	27.58	1.95	6.76	1.91	6.44	6.77	3.48	.18	.00T	.00	.00	.00	.09
35	D10176600	36.715	121.346	900	CIENEGA	25.19	1.99	4.95	2.83	7.06	5.75	2.50	.11	.00	.00	.00	.00	.00
49	F90183800	38.766	122.983	320	CLOVERDALE 3 SSE	56.20	5.53	7.82	6.11	18.73	11.93	4.57	.21	.07	.00	.00	.25	.98
49	F90184001	38.823	122.951	700	CLOVERDALE RANCH	56.78	4.41	8.29	5.62	18.39	13.62	4.65	.21	.07	.00	.00	.20	1.32
23	F90190150	39.243	123.119	880	COLD CREEK RANCH GUNTL	.00-	2.75	6.42	6.23	13.16	7.00	4.92	.44	.20	.00	.00-	.00-	.00-
48	E30191900	38.090	121.854	34	COLLINSVILLE	.00-	3.25	4.03	1.65	5.13	4.93	.00-	.00-	.00-	.00-	.00-	.00-	.00-
60	E50195800	37.668	121.748	580	CONCANNON WINERY	19.20	1.20	4.55	2.04	4.71	3.79	2.60	.21	.00	.00	.00	.00	.10
07	E40196200	37.966	121.983	200	CONCORD 3 E	23.48	2.63	4.41	1.96	7.37	4.70	1.93	.32	.02	.00	.00	.00	.14
44	D10204800	36.983	121.800	260	CORRALITOS	.00-	3.40	6.90	2.70	9.70	.00-	4.00	.10	.00	.00	.00	.10	.00
23	F90210500	39.183	123.183	720	COYOTE DAM	25.41	3.12	1.11	6.64	2.08	6.34	3.92	.89	.14	.00	.00T	.00	1.17
07	E40217700	38.033	122.216	12	CROCKETT	30.53	3.28	5.22	2.59	10.64	5.88	2.12	.27	.06	.00	.00	.00	.47
44	D00229000	37.016	122.200	273	DAVENPORT	44.07	5.05	10.15	2.90	7.52	12.55	5.47	.00T	.00T	.02	.00	.00	.41
27	D20236200	36.600	121.866	46	DEL MONTE	22.30	2.40	4.40	1.80	4.80	4.90	3.60	.20	.10	.00	.00	.00	.10
21	F90243700	38.246	122.965	40	DILLON BEACH	.00-	5.20	.00-	6.95	18.35	8.65	4.85	.00-	.10	.05	.00	.00	.00-
60	E50252500	37.698	121.938	450	DUBLIN 1 W	34.91	3.68	7.27	2.71	9.22	7.34	3.67	.72	.02	.00	.00	.00	.28
49	F90255000	38.450	123.066	85	DUNCANS MILLS	52.84	4.27	8.01	4.42	21.48	8.70	4.12	.50	.34	.00	.00	.00	1.00
28	E30258000	38.201	122.303	20	DUTTONS LANDING	33.11	3.38	6.67	2.91	11.71	5.32	2.55	.16	.04	.00	.00	.00	.37
48	E30293400	38.260	122.040	34	FAIRFIELD FIRE STATION	33.55	4.60	6.73	1.67	11.54	5.62	2.71	.19	.14	.00	.00	.00	.35
48	E30293500	38.283	122.033	110	FAIRFIELD 3NNE	.00-	4.70	6.30	.00-	.00-	5.50	.00-	.00-	.10	.00	.00	.00	.20
49	F90313700	38.466	122.858	200	FORESTVILLE 2 ESE	49.21	4.61	8.79	6.12	15.11	9.43	4.04	.25	.00	.00	.00	.00	.86
23	F80316100	39.445	123.806	80	FORT BRAGG	44.62	3.18	8.02	6.28	10.80	7.87	5.30	.92	.49	.06	.08	.16	1.46
27	D20318600	36.683	121.766	134	FORT ORD	20.57	1.72	5.02	1.56	3.45	5.48	3.21	.06	.02	.00T	.00T	.00T	.05
49	F80319100	38.516	123.250	116	FORT ROSS	47.28	3.89	8.02	4.72	15.52	6.92	5.64	.29	.33	.04	.07	.07	1.77
44	D10323200	37.050	121.816	1495	FREEDOM 8 NNW	.00-	.00-	.00-	3.79	.00-	.00-	.00-	.00-	.00	.00	.00	.00	.00-
35	D10323800	36.760	121.498	2500	FREMONT PEAK	35.87	2.21	8.54	3.45	7.75	7.56	5.76	.20	.06	.02	.03	.00	.29
35	D10324500	36.948	121.233	1827	FRENCH RANCH	26.14	1.83	7.72	2.09	3.46	6.84	3.75	.30	.00	.00	.00	.00	.15
43	F50338700	37.366	121.486	2140	GERBER RCH	27.88	2.60	6.07	1.80	5.94	8.57	2.46	.31	.00T	.09	.00	.00	.04
49	F90339505	38.733	122.900	420	GEYSERVILLE 2N BARR	70.50	5.85	10.40	7.40	24.05	14.85	6.00	.50	.00	.00	.00	.10	1.35
43	D10341700	37.000	121.566	194	GILROY	28.35	2.12	7.50	1.76	5.96	7.49	3.15	.36	.00T	.00	.00	.00	.02
43	E60341900	37.033	121.450	1050	GILROY 8 NE	26.66	2.34	7.27	1.14	5.64	7.16	2.51	.60	.00	.00	.00	.00	.00
43	D10342200	37.100	121.333	1350	GILROY 14 ENE	27.77	1.79	7.67	1.37	6.94	7.16	2.31	.53	.00	.00	.00	.00	.00T
49	E20345504	38.366	122.633	1100	GLEN ELLEN 4 W	59.29	5.91	8.97	4.91	19.20	13.16	5.07	.74	.16	.00	.00	.00	1.17
35	D20350200	36.533	122.283	2350	GONZALES 9ENE	26.22F	1.76	6.29	2.13	4.67	7.18	3.41	.78	.00	.00	.00	.00	.00E
49	F90357800	38.433	122.883	210	GRATON 1 W	52.88	4.28	9.46	6.56	18.40	8.90	4.24	.11	.03	.00	.00	.00	.90
27	D20359100	36.323	121.243	280	GREENFIELD BAKER	17.14	.90	4.17	1.12	3.41	5.59	1.77	.19	.00	.00	.00	.00	.00
49	F90368501	38.550	123.016	680	GUERNEVILLE 4 NW	65.41	7.65	16.90	2.85	22.00	10.31	3.90	.25	.10	.00	.00	.00	1.45
41	E80371400	37.461	122.433	60	HALF MOON BAY	38.15	6.90	6.49	3.17	8.78	7.33	4.28	.23	.21	.05	.00	.09	.62
27	D30372200	35.883	120.908	725	HAMES VALLEY	21.38	2.90	4.34	.75	5.25	5.66	2.37	.11	.00	.00	.00	.00T	.00
60	E40386300	37.652	121.985	715	HAYWARD 6 ESE	37.62	3.77	7.75	3.57	10.36	7.25	4.24	.40	.00	.00	.00	.00	.28
60	E40386302	37.646	122.094	55	HAYWARD CORP YARD	27.74	3.54	5.64	2.73	6.43	6.25	2.28	.84	.00	.00	.00	.00	.03
49	F90387500	38.616	122.833	101	HEALDSBURG	52.07	4.17	9.89	5.32	18.39	9.54	3.83	.15	.03	.00T	.00	.00T	.75
49	F90387505	38.600	122.983	1000	HEALDSBURG 7 WSW	96.80	10.90	17.70	12.60	28.70	18.70	7.30	.60	.30	.00	.00	.00	.00
49	F90387509	38.700	122.966		HEALDSBURG 8NW	64.40	6.30	10.60	6.70	18.30	14.80	6.20	.40	.10	.00	.00	.00	1.00
49	F90387800	38.616	122.833	102	HEALDSBURG 2	50.43	4.25	9.91	5.29	16.91	9.37	3.79	.17	.01	.00	.00	.00	.73
49	F90387880	38.600	122.900		HEALDSBURG UNKEFER	.00-	10.90	17.70	12.60	28.70	18.40	7.30	.60	.10	.00	.00-	.00-	.00-

TABLE A-1 (Cont.)

PRECIPITATION IN CENTRAL COASTAL AREA DURING WATER YEAR 1973

CO	STA NO	LAT	LONG	ELEV	STATION NAME	TOTAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
49	F80388900	38.656	123.210	500	HEDGEPETH RANCH	65.88	5.24	8.82	8.60	23.58	11.92	5.05	.56	.10	.00	.00	.00	2.01
35	D10392500	36.416	120.916	2160	HERNANDEZ 2 NW	25.70	1.98	5.23	1.88	4.72	8.29	3.46	.14	.00T	.00	.00	.00	.00
35	D10392800	36.300	120.700	2765	HERNANDEZ 7 SE	.00-	2.40	6.00	1.60	5.90	.00-	.00-	.10	.10	.00	.00	.00	.00
35	D10402200	36.833	121.416	279	HOLLISTER 1 SW	20.02	1.40	5.20	1.53	4.59	4.62	2.40	.25	.03	.00	.00	.00	.00
35	D10402500	36.850	121.400	284	HOLLISTER 2	21.20	1.50	5.60	1.70	4.90	4.50	2.70	.30	.00	.00	.00	.00	.00
35	D10403500	36.916	121.233	2578	HOLLISTER 10 ENE	.00-	1.77	7.78	1.81	.00-	.00-	.00-	.00-	.02	.00	.00	.00	.13
49	F90448000	38.666	122.666	1800	KELLOGG	.00-	4.33	9.57	6.32	20.25	11.05	4.04	.29	.05	.00	.00	.00-	.00-
21	E20450000	37.946	122.550	80	KENTFIELD	66.83	8.54	12.41	8.17	19.60	12.19	5.04	.06	.02	.00	.00	.00	.80
21	F90450200	37.998	122.708	360	KENT LAKE	104.46	12.99	17.65	10.71	32.81	18.75	9.47	.06	.15	.00	.00	.00	1.87
27	D20455500	36.200	121.133	320	KING CITY	19.19	1.46	4.28	.79	4.25	6.47	1.94	.00	.00	.00	.00	.00T	.00
07	E40463300	37.916	122.100	540	LAFAYETTE 2 NNE	33.00	3.27	5.93	3.02	10.86	6.55	2.73	.31	.01	.00T	.00	.00	.32
21	F90465200	37.946	122.594	785	LAGUNITAS LAKE	73.26	8.97	13.57	6.31	20.38	16.55	6.40	.12	.00	.00	.00	.00	.96
41	E80466000	37.316	122.266	670	LA HONDA	45.06	7.69	8.87	2.93	10.30	9.55	4.92	.19	.06	.00T	.00	.00	.55
41	E80466050	37.266	122.250	350	LA HONDA MONOR CAMP 1	.00-	8.05	8.08	4.49	14.09	14.03	5.85	.26	.11	.01	.00-	.00-	.00-
60	E50499600	37.691	121.805	405	LIVERMORE SEWAGE PLT	22.82	3.19	5.06	2.17	5.05	4.26	2.54	.44	.04	.00	.00	.00	.07
60	E50499700	37.650	121.783	545	LIVERMORE 2 SSW	22.47	2.98	4.91	2.22	5.50	3.83	2.63	.29	.03	.00T	.00	.00	.08
60	E50499701	37.691	121.838	365	LIVERMORE 3W	22.22	2.59	5.06	2.17	5.05	4.26	2.54	.44	.04	.00	.00	.00	.07
60	E50499702	37.655	121.744	640	LIVERMORE 2 SE	19.23E	2.22	4.17	2.03	4.68	3.24	2.40	.39	.00	.00	.00	.00	.10E
60	E50499704	37.694	121.815	395	LIVERMORE 2 W	23.53	3.37	4.90	1.70	5.97	4.73	2.41	.41	.00	.00	.00	.00	.04
27	D30501700	35.966	121.083	1104	LOCKWOOD 2 N	21.77	2.33	4.36	.68	5.69	6.29	2.42	.00	.00	.00	.00	.00	.00
43	E60512300	37.216	121.983	428	LOS GATOS	34.71	3.20	6.81	1.90	9.19	10.87	2.71	.00T	.01	.00	.00	.00	.02
44	D00512500	37.183	122.033	2215	LOS GATOS 4 SW	67.44	6.53	12.93	5.38	16.85	20.20	5.01	.16	.04	.00	.00	.00	.34
27	D40518400	35.883	121.450	360	LUCIA WILLOW SPRINGS	47.08	4.92	10.11	1.29	12.59	13.27	4.76	.12	.00	.00	.00	.00	.02
48	E30533300	38.100	122.269	52	MARE ISLAND NAVY	29.45	2.89	5.48	2.50	10.68	5.22	2.29	.06	.02	.00	.00	.00	.31
07	F40537100	37.966	122.133	225	MARTINEZ 3 S	31.26	3.74	5.88	2.31	10.23	6.15	2.09	.54	.00	.06	.00	.00	.26
07	E40537200	37.966	122.100	280	MARTINEZ 3 SSE	29.33	3.52	5.77	2.57	9.01	5.71	2.32	.37	.00	.00	.00	.00	.06
7	E40537207	38.005	122.124	240	MARTINEZ HARBOR VIEW	.00-	2.96	4.90	2.10	8.20	4.95	1.89	.00-	.00T	.00	.00	.00	.00-
07	F40537800	38.016	122.116	40	MARTINEZ WATER PLANT	26.89	2.99	5.16	2.21	9.31	5.11	1.76	.14	.00T	.00	.00	.00	.21
41	E70562680	37.608	122.404	80	MILLBRAE COSTENOAT	.00-	6.76	7.00	3.52	10.75	8.22	3.70	.13	.08	.00	.00-	.00-	.00-
43	E60563700	37.116	121.918	1750	MILLBERRY	.00-	.40	2.60	1.60	3.20	9.10	.00-	.00	.10	.00	.00	.40	.00
21	E20564705	37.896	122.526	150	MILL VALLEY	.00-	7.15	10.55	5.45	15.85	8.85	5.30	.00	.25	.00	.00-	.00-	.00-
60	E50571851	37.524	121.884	1400	MISSION CRK T K RCH	33.72	3.30	6.70	2.78	7.21	8.55	4.34	.30	.00	.00	.00	.00	.54
27	D40579500	36.600	121.900	335	MONTEREY	27.56	2.46	5.95	2.08	6.05	5.88	4.52	.13	.06	.02	.02	.05	.34
27	D40579600	36.583	121.883	120	MONTEREY AP	.00-	.00-	4.42	1.76	4.40	4.65	1.77	.13	.00T	.00	.00T	.00T	.04
43	E60584400	37.133	121.616	225	MORGAN HILL 2 E	29.23	2.88	6.25	1.33	7.41	8.63	2.41	.27	.01	.00	.00	.00	.04
43	D10584600	37.150	121.766	640	MORGAN HILL 6 WSW	.00-	.00-	.00-	1.90	12.42	13.62	3.48	.06	.00	.00-	.00-	.00-	.00-
43	D10585300	37.133	121.650	350	MORGAN HILL S C S	.00-	3.00	7.00	1.20	8.00	9.60	.00-	.00	.00	.00	.00	.00	.00
07	E40591500	37.868	121.934	2070	MOUNT DIABLO NORTH GAT	33.69	3.36	7.17	3.17	9.36	6.89	3.43	.15	.00	.00T	.00	.00T	.16
43	E50593300	37.333	121.650	4206	MOUNT HAMILTON	27.75	2.20	6.16	2.91	5.53	5.59	3.98	.50	.10	.00T	.00	.00	.78
44	D10597300	37.016	121.716	1800	MOUNT MADONNA	44.84	2.88	8.69	3.99	10.53	12.98	5.62	.00	.00	.00	.00	.00	.15
21	E20599600	37.900	122.600	1480	MT TAMALPAIS 2 SW	.00-	.00-	.00-	.00-	20.00	10.50	6.50	.20	.50	.00	.10	.00	3.20
21	E20602700	37.900	122.566	170	MUIR WOODS	56.24	6.11	9.87	6.32	15.85	8.75	5.26	.16	.65	.00T	.13	.00	3.14
28	E30607400	38.277	122.263	73	NAPA STATE HOSPITAL	34.30	3.34	6.95	3.39	11.37	5.61	3.10	.11	.02	.00	.00	.00	.41
23	F90610500	39.163	123.563	220	NAVARRO 1 NW	43.83	2.40	5.08	7.21	14.02	7.94	5.34	.46	.08	.00	.00	.00	1.30
60	E50614400	37.521	122.028	14	NEWARK	22.10	2.87	5.90	1.70	3.79	5.33	2.05	.39	.03	.00	.00	.00	.04
60	F50614402	37.516	122.031	10	NEWARK 1 S	22.20	2.87	5.90	1.70	3.79	5.43	2.05	.39	.03	.00	.00	.00	.04
21	F90618700	38.056	122.696	205	NICASIO	54.22	7.29	8.00	4.99	17.11	11.72	3.93	.56	.00	.00	.00	.00	.62
60	F50619902	37.568	121.983	62	NILES 1 SW	28.09	3.27	6.03	2.33	6.54	6.10	3.32	.40	.00	.00	.00	.00	.10
60	E50619907	37.560	121.953	75	NILES 2SE	29.24	2.90	6.99	2.12	6.62	6.65	3.24	.51	.00	.00	.00	.00	.21
21	E20629000	38.133	122.716	350	NOVATO 8 WNW	.00-	6.59	6.72	3.15	2.70	11.08	3.30	.12	.00	.00	.00	.00	.00-
21	E20629001	38.105	122.536	35	NOVATO	42.03	6.13	5.75	3.18	12.79	10.89	3.18	.11	.00	.00	.00	.00	.00
21	E20629002	38.108	122.561	18	NOVATO FIRE HOUSE	42.03	6.13	5.75	3.18	12.79	10.89	3.18	.11	.00	.00	.00	.00	.00
60	E50630000	37.561	121.683	740	N 3 RANCH OFFICE	27.45	2.35	4.94	2.27	7.14	6.78	3.44	.53	.00	.00	.00	.00	.00
60	E40633260	37.838	122.220	500	OAKLAND GLENWOOD GLADE	.00-	4.64	7.26	3.55	12.88	7.07	.00-	.00-	.02	.00	.00	.00	1.09
60	F40633500	37.733	122.200	3	OAKLAND WB AP	28.25	3.89	5.24	2.51	7.37	5.94	2.78	.05	.05	.00T	.00T	.00	.42
60	E40633600	37.850	122.266	200	OAKLAND KEFNEY	34.23	4.25	6.39	3.20	10.43	6.31	2.95	.02	.04	.00	.00	.00	.64
28	E30635100	38.446	122.418	165	OAKVILLE 1 WNW	44.43	3.77	7.11	4.42	16.09	9.12	3.14	.25	.07	.00	.00	.00	.46
28	E30635600	38.398	122.465	1685	OAKVILLE 4 SW NO.2	51.61	4.31	8.22	4.05	18.23	10.80	4.40	.60	.10	.00	.00	.00	.90
49	F90637000	38.412	122.961	960	OCCIDENTAL	66.28	5.64	11.82	7.41	23.16	10.59	5.52	.09	.20	.00	.00	.00	1.85
23	F80651700	38.916	123.301	1300	ORNBAUN MAILLIARD	.00-	3.13	6.13	6.44	13.90	.00-	.00-	.00-	.00-	.00-	.00-	.00-	.00-
35	D10661000	36.733	121.366	950	PAICINES OHRWALL RCH	21.37	1.82	4.16	1.87	4.88	5.39	3.14	.11	.00	.00	.00	.00	.00
43	E60664600	37.445	122.139	43	PALO ALTO CITY HALL	25.75	3.72	6.31	1.49	5.21	6.59	2.27	.16	.00	.00	.00	.00	.00
27	D20665000	36.350	121.500	1835	PALOMA	38.99	5.01	7.39	3.32	6.97	11.43	4.24	.48	.05	.00	.00	.00T	.10
27	D30670300	35.883	120.433	1482	PARKFIELD	21.30	.94	3.95	.59	5.73	7.08	2.75	.26	.00	.00	.00	.00	.00
49	E20682601	38.216	122.713	240	PETALUMA BURNS	.00-	5.52	6.09	4.96	13.98	10.17	3.02	.22	.03	.00	.00-	.00-	.00-
23	F80685101	39.091	123.474	240	PHILO 2 NW	45.47	2.31	5.59	6.88	14.86	8.97	4.89	.28	.10	.00	.00	.00	1.59
21	E20685300	37.955	122.573	175	PHOENIX LAKE DAM	68.40	8.72	12.44	5.47	19.61	15.72	5.52	.20	.00	.00	.00	.00	.72
60	F40685651	37.816	122.233	340	PIEDMONT	36.48	4.36	6.38	3.04	12.01	6.81	3.13	.00	.00	.00	.00	.00	.75
41	E80686300	37.550	122.416	625	PILARCITOS	54.87	7.62	9.45	6.31	13.49	9.81	6.62	.19	.16	.00	.05	.00	1.17
35	D20692600	36.483	121.183	1310	PINNACLES NAT MON	27.65	2.23	5.95	2.00	4.61	9.43	3.25	.16	.00T	.00	.00	.00T	.02
60	E50699101	37.666	121.866	353	PLEASANTON SP CO	31.95	3.19	5.91	3.20	9.62	5.89	3.54	.50	.00	.00	.00	.00	.10
60	E50699104	37.698	121.836	360	PLEASANTON 3 NNE	25.16	3.16	4.98	2.28	6.43	5.36	2.55	.36	.00	.00	.00	.00	.04
60	E50699106	37.679	121.848	370	PLEASANTON 2NE	26.77	3.64	4.98	2.56	7.07	5.51	2.58	.35	.00	.00	.00	.00	.08
60	E50699110	37.679	121.866	352	PLEASANTON 1 N	26.19	3.15	5.05	2.23	7.32	5.58	2.48	.29	.03	.00	.00	.00	.06
23	F80700900	38.916	123.700	122	POINT ARENA	.00-	3.61	7.37	6.35	15.22	7.47	5.97	.43	.40	.00-	.05	.00	1.58
07	E40707000	38.016	122.016	50	PORT CHICAGO NAD	26.32	3.63	4.64	1.88	8.26	4.94	1.48	.46	.84	.00	.00	.00	.19
41	E80708600	37.244	122.211	422	PORTOLA STATE PARK	.00-	8.82	9.21	3.48	14.42	13.92	5.46	.15	.12	.06	.00-	.00-	.00-
23	F90710800	39.300	123.066	1100	POTTER VALLEY 3 SE	33.72	2.15	4.67	5.93	10.64	4.88	4.19	.31	.10	.00	.00	.00	.85
23	F90710900	39.366	123.133	1014	POTTER VALLEY PH	45.31	2.82	6.86	8.33	13.81	6.53	5.27	.36	.20	.00	.07	.00	1.06
27	D20715000	36.183	120.700	2300	PRIEST VALLY	30.48	2.93	6.17	1.24	6.47	9.05	4.26	.17	.07	.00	.00	.12	.00
35	D10719000	36.858	121.196	1630	QUIEN SABE HAY CAMP	26.29	1.60	6.51	2.22	5.11	6.14	4.08	.36	.05	.00T	.00	.00	.22
43	E50724611	37.376	121.584	1820	RANCHO ARROYO HAYO	28.87	2.95	6.15	1.68	6.84	8.17	2.67	.28	.00	.00	.00	.00	.13
41	E60733900	37.483	122.233	31	REDWOOD CITY	28.19	4.19	6.29	1.80	7.61	6.07	2.09	.11	.00T	.00	.00	.00	.03
07	E40741400	37.933	122.350	55	RICHMOND	35.67	4.57	6.48	3.37	11.68	6.58	2.53	.14	.02	.00T	.00	.00	.30
28	E30764300	38.506	122.461	225	SAINT HELENA	39.15	3.35	7.70	3.75	13.37	6.88	3.18	.09	.01	.00	.00	.00	.82
21	F30764600	38.500	122.533	1792	SAINT HELENA 4 WSW	.00-	3.90	9.20	2.50	.00-	.00-	5.70	.20	.20	.00	.00	.00	2.20
27	D20766800	36.666	121.616	80	SALINAS 2 E	23.32	1.54	4.66	2.86	4.93	5.30	3.97	.04	.02	.00	.00	.00	.00T
27	D20766900	36.666	121.600	80	SALINAS FAA AP	20.35	1.54	4.11	1.79	4.18	4.92	3.69	.02	.02	.00T	.00T	.01	.07
41	E70770400	37.583	122.400	377	SAN ANDREAS LAKE	44.99	6.86	7.84	4.19	11.65	8.82	4.70	.42	.03	.00	.00	.00	.48
21	F20770702	37.943	122.562	45	SAN ANSELMO FS	53.47	6.92	10.54	3.88	15.51	12.45	3.49	.14	.00	.00	.00	.00	.54

TABLE A-1 (Cont.)

PRECIPITATION IN CENTRAL COASTAL AREA DURING WATER YEAR 1973

CO	STA NO	LAT	LONG	ELEV	STATION NAME	TOTAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
27	D20771600	36.033	120.900	440	SAN ARDO	19.18	1.83	3.85	.59	4.83	5.22	2.64	.22	.00	.00	.00	.00T	.00
35	D10771900	36.508	121.081	1355	SAN BENITO	22.87	1.62	4.96	1.38	4.81	7.13	2.97	.00	.00	.00	.00	.00	.00
41	E70772650	37.611	122.432	425	SAN BRUNO BUCKER	.00-	6.59	6.83	3.69	10.04	8.31	3.58	.16	.00	.00	.00-	.00-	.00-
41	E70772800	37.505	122.245	5	SAN CARLOS FIRE STA 2	.00-	4.06	5.67	1.87	7.21	6.22	1.96	.00-	.00T	.00T	.00	.00	.01
27	D40773100	36.436	121.708	600	SAN CLEMENTE DAM	32.85	2.85	5.79	2.66	7.59	9.20	4.38	.29	.02	.00	.00	.00	.07
43	D10775500	37.016	121.333	365	SAN FELIPE HIGHWAY STA	.00-	1.75	6.86	1.20	5.39	.00-	2.57	.88	.00	.00	.00	.00	.00-
80	E80776700	37.766	122.500	300	SAN FRANCISCO SUNSET	32.31	4.87	5.97	3.06	9.26	6.29	2.44	.01	.08	.00	.00	.00T	.33
41	E70776900	37.616	122.383	8	SAN FRANCISCO WB AP	31.08	5.24	5.15	2.40	8.32	6.82	2.93	.11	.07	.00T	.00T	.00T	.04
80	E70777200	37.783	122.416	52	SAN FRANCISCO F O B	34.07	5.41	6.40	3.53	9.38	6.32	2.63	.02	.08	.00	.00	.00	.30
41	E80780700	37.303	122.360	245	SAN GREGORIO 2 SE	40.32	5.92	9.19	3.26	8.68	8.21	4.23	.04	.18	.00	.00T	.09	.52
43	E60782100	37.350	121.900	70	SAN JOSE	22.79	2.19	5.48	1.18	5.12	5.97	2.75	.05	.01	.00T	.00	.00	.04
43	E60782401	37.316	121.950	90	SAN JOSE DECID F F S	22.25	1.80	5.61	1.01	4.75	6.35	2.70	.03	.00	.00	.00	.00	.00T
43	E60782403			220	SAN JOSE HENDRICKS	.00-	8	8.65	1.03	6.73	8.07	1.86	.03	.00	.00	.00	.00	.00T
35	D10783400	36.816	121.516	615	SAN JUAN BAUTIST 3SSE	.00-	2.55	6.66	1.81	6.36	.00-	3.39	.00-	.00	.00	.00	.00	.00
35	D10783500	36.844	121.533	200	SAN JUAN BAUTISTA MI	23.03	1.13	6.44	1.77	5.30	5.06	3.32	.00	.01	.00	.00	.00	.00
41	E70786400	37.566	122.316	30	SAN MATEO	27.27	3.50	4.24	2.53	7.13	7.12	2.68	.00	.00	.00	.00	.00	.07
21	E30788000	37.966	122.533	31	SAN RAFAEL	55.27	6.98	9.92	6.29	16.99	11.07	3.66	.16	.00	.00	.00	.00	.20
43	E60791200	37.347	121.940	85	SANTA CLARA UNIVERSITY	.00-	2.17	5.83	1.99	5.18	6.83	3.01	.00-	.00-	.00-	.00	.00	.02
44	D00791600	36.983	122.016	125	SANTA CRUZ	43.67	3.41	10.54	3.38	7.84	12.99	5.01	.05	.04	.00	.00	.00	.41
49	F90796400	38.439	122.753	20	SANTA ROSA SEWAGE PT	40.43	3.50	6.95	4.91	14.03	6.98	3.16	.22	.03	.00	.00	.00	.65
49	F90796449	38.375	122.767	75	SANTA ROSA LAGUNA PLT	41.62	4.06	6.58	4.73	13.46	8.35	3.55	.16	.05	.00	.00	.00	.68
49	F90796500	38.450	122.700	167	SANTA ROSA	42.91	3.47	6.87	5.12	15.38	7.17	3.48	.65	.03	.00T	.00	.00	.74
49	F90796505	38.400	122.700	160	SANTA ROSA 2S	.00-	3.36	6.39	1.71	15.11	7.55	3.14	.38	.00	.00	.00-	.00-	.00-
43	E60799802	37.258	122.126	2600	SARATOGA GAP MAINT	.00-	8.44	13.88	3.24	17.89	18.90	5.08	.00	.00	.00	.00-	.00-	.00-
49	F90807200	38.351	122.811	145	SEBASTOPOL 4 SSE	.00-	.00-	.00-	.00-	.00-	.00-	.00-	.00-	.00-	.00-	.00	.00	.70
49	F90827200	38.677	123.134	1930	SKAGGS SPRING LAS LOMA	73.36	5.48	10.64	7.15	25.39	15.36	6.14	.44	.34	.00	.00	.10	2.32
27	D20827600	36.083	120.666	1730	SLACK CANYON	21.80	2.63	4.12	.63	5.26	6.63	2.49	.04	.00	.00	.00	.00	.00
27	D20833800	36.433	121.316	204	SOLEDAD	17.83	1.70	3.74	1.50	3.10	5.31	2.48	.00	.00	.00	.00	.00	.00
49	E20835100	38.283	122.450	20	SONOMA	42.65	4.58	6.92	4.29	13.79	8.60	3.76	.03	.05	.00	.00	.00	.63
49	E20835103	38.350	122.516	440	SONOMA ST HOSPITAL	60.94	5.70	9.95	6.35	20.40	11.95	5.07	.40	.07	.00	.00	.00	1.05
49	E20835108	38.283	122.533	500	SONOMA 4 W	53.21	3.75	10.30	5.20	17.50	9.87	5.54	.17	.05	.00	.00	.00	.83
27	D20844600	36.600	121.683	60	SPRECKELS HWY BRIDGE	21.92	1.82	4.65	2.18	3.86	5.36	3.84	.16	.02	.00T	.00T	.00T	.03
27	D20844601	36.620	121.657	55	SPRECKELS	18.94	1.30	4.15	1.91	3.51	4.43	3.48	.11	.03	.00	.00	.00	.02
44	D10868000	36.900	121.833	85	SUNSET BEACH STATE PAR	.00-	2.50	6.30	2.20	5.40	.00-	.00-	.00-	.00	.00	.00	.00	.10
23	F90877601	39.133	123.183	413	TALMAGE	.00-	3.28	5.93	6.72	12.95	7.83	3.82	.14	.08	.00	.00-	.00-	.00-
23	F90877602	39.133	123.150		TALMAGE SCS NO 13	.00-	3.32	5.02	5.15	10.71	6.78	2.62	.19	.04	.00	.00-	.00-	.00-
21	E20877850	37.878	122.543		TAM VALLEY GLESSNER	.00-	7.34	11.31	6.77	17.76	9.68	5.77	.09	.44	.00	.00-	.00-	.00-
40	D30884900	35.548	120.705	773	TEMPLETON	28.27	1.44	4.13	1.34	8.00	9.84	3.52	.00	.00	.00	.00	.00	.00
49	F90888500	38.800	122.825	1668	THE GEYSERS	65.35	5.71	9.04	5.79	22.71	15.82	4.74	.20	.07	.00	.00	.15	1.12
21	E20892002	37.901	122.483	65	TIBERON COMEN	.00-	5.68	9.71	4.65	13.74	8.63	3.59	.02	.02	.00	.00-	.00-	.00-
21	F90895400	38.247	122.902	80	TOMALES	34.55	3.19	5.15	3.96	12.64	6.68	2.72	.13	.08	.00	.00	.00	.00
23	F90912200	39.150	123.200	623	UKIAH	41.75	3.25	5.78	7.04	12.62	7.75	4.00	.22	.10	.00	.00	.00	.99
23	F90912400	39.133	123.283	1900	UKIAH 4 WSW	54.21	4.01	7.67	9.19	15.70	9.48	5.67	.47	.18	.00	.00	.00T	1.84
60	E40918500	37.766	122.166	390	UPPER SAN LEANDRO FIL	.00-	3.70	7.02	3.85	11.00	6.89	3.77	.09	.00-	.00	.00	.00	.79
60	E40918501	37.774	122.164	394	UPPER SAN LEANDRO FILT	37.17	3.70	7.02	3.85	11.06	6.89	3.77	.09	.00	.00	.00	.00	.79
35	D10918900	36.633	121.033	2050	UPPER TRES PINOS	.00-	1.03	4.24	1.51	.00-	6.37	2.61	.10	.00	.00	.00	.00	.00
49	F90927300	38.616	123.016	1260	VENADO	74.30	6.60	10.70	8.00	26.20	15.00	5.60	.30	.20	.00	.00	.00	1.70
28	E30930500	38.383	122.366	170	VETERANS HOME	46.95	5.12	7.22	4.53	16.10	9.94	3.26	.17	.05	.00	.00	.00	.56
07	E40942000	37.950	122.083	128	WALNAR SCHOOL	.00-	3.29	5.25	2.33	8.96	4.64	2.10	.39	.00	.00	.00	.00	.00-
07	E40942300	37.883	122.033	245	WALNUT CREEK 2 ESE	28.35	2.76	5.45	2.50	8.96	6.00	2.34	.15	.00	.00	.00	.00	.19
07	E40942600	37.900	122.016	220	WALNUT CREEK 2 ENE	24.49	2.55	4.46	2.00	7.93	5.34	1.96	.14	.00	.00	.00	.00	.11
07	E40942700	37.906	121.994	265	WALNUT CREEK 4 E	25.43	2.59	4.80	2.10	7.57	5.94	2.20	.15	.00T	.00T	.00	.00	.08
49	F90944000	38.716	122.981	224	WARM SPRINGS DAM	.00-	4.95	8.05	5.54	17.69	11.37	4.05	.42	.06	.00	.00-	.00-	.00-
44	D10947300	36.933	121.766	95	WATSONVILLE WATERWORKS	30.12	2.62	6.92	2.10	6.38	8.15	3.77	.05	.00	.01	.00	.00	.12
60	E50952500	37.663	121.723	775	WENTE WINERY	20.22	2.09	4.27	2.28	4.80	3.75	2.54	.26	.00	.00	.00	.00	.23
49	F90975600	38.500	122.880		WOHLER PUMPING PLANT	58.83	5.05	10.38	6.36	21.26	9.87	4.21	.24	.20	.00	.00	.00	1.26
21	F90977000	38.006	122.641	430	WOODACRE	57.44	7.26	9.57	5.63	17.02	12.88	4.88	.17	.03	.00	.00	.00	.00
41	E70979200	37.433	122.250	380	WOODSIDE FS 1	.00-	.00-	.00-	.00-	10.22	7.83	.00-	.24	.03	.00	.00	.00	.40
43	E60981400	37.133	121.950	1600	WRIGHTS	58.73	4.85	11.58	3.34	17.28	16.58	4.73	.12	.00	.00	.00	.00	.25
23	F80985100	38.905	121.312	1120	YORKVILLE	64.70	5.10	9.10	9.30	21.20	12.90	5.30	.10	.10	.00	.00	.10	1.50

Appendix B

SURFACE WATER MEASUREMENTS

This appendix contains surface water data for the period from October 1, 1972, through September 30, 1973. These data consist of the amounts of water imported to the report area; daily gage heights; daily tides; and corrections and revisions to previously published reports of surface water data. Station locations are shown on Figure D-1, sheet 2.

In addition to data collected and published by the Department of Water Resources in this appendix, the U. S. Geological Survey collects and publishes data on many additional gaging stations for the same report area. This work is done under a federal-state cooperative contract or through local cooperative arrangements with other local or governmental agencies. The data published in the following reports, together with this report, present a comprehensive analysis of water resources for the area:

1. "Water Resources Data for Colifornia, Part 1: Surface Water Records, Volume I: Colorado River Basin, Southern Great Basin, and Pacific Slope Basins excluding Central Valley". U. S. Geological Survey.

2. Bulletin No. 120, "Water Conditions in California, Fall Issue". Department of Water Resources.

3. Bulletin No. 157, "Index to Stream Gaging Stations in and Adjacent to California, 1970". Department of Water Resources. This index contains the period of record -- with the number of years missing -- and more information for stations in the report area. The index also identifies the agency from which a particular record may be obtained.

TABLE B-1

SURFACE WATER IMPORTS TO THE CENTRAL COASTAL AREA

IMPORT	1973 Water Year												TOTAL
	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	
CITY OF VALLEJO FROM CACHE SLOUGH a													
Total acre-feet	1,075	986	876	771	1,038	783	1,212	1,459	1,621	1,533	1,459	1,443	14,25
Average cubic feet per second	17	17	14	13	19	13	20	24	27	25	24	24	2
Monthly quantities in percent of seasonal	7.6	6.9	6.1	5.4	7.3	5.5	8.5	10.2	11.4	10.8	10.2	10.1	
CONTRA COSTA CANAL b													
Total acre-feet	6,896	4,472	4,136	3,867	3,554	4,085	4,968	11,719	11,538	14,311	13,363	9,951	92,86
Average cubic feet per second	112	75	67	63	64	66	83	191	194	233	217	167	12
Monthly quantities in percent of seasonal	7.4	4.8	4.5	4.2	3.8	4.4	5.4	12.6	12.4	15.4	14.4	10.7	
HETCH HETCHY AQUEDUCT c													
Total acre-feet	22,320	14,233	9,455	2,299	17,421	12,357	15,739	21,790	21,351	25,158	25,481	24,411	212,01
Average cubic feet per second	363	239	154	37	314	201	264	354	359	409	414	410	29
Monthly quantities in percent of seasonal	10.5	6.7	4.5	1.1	8.2	5.8	7.4	10.3	10.1	11.9	12.0	11.5	
MOKELUMNE RIVER AQUEDUCT d													
Total acre-feet	18,792	16,579	14,408	7,516	8,133	10,125	14,750	18,613	20,810	22,274	22,102	18,634	192,73
Average cubic feet per second	306	279	234	122	146	165	248	303	350	362	359	313	26
Monthly quantities in percent of seasonal	9.8	8.6	7.5	3.9	4.2	5.2	7.6	9.6	10.8	11.6	11.5	9.7	
POTTER VALLEY POWERHOUSE FROM EEL RIVER e													
Total acre-feet	17,320	17,950	12,380	16,900	16,850	16,980	18,540	14,650	8,400	9,140	8,990	16,190	174,29
Average cubic feet per second	282	302	201	275	303	276	312	238	141	149	146	272	24
Monthly quantities in percent of seasonal	9.9	10.3	7.1	9.7	9.7	9.8	10.6	8.4	4.8	5.2	5.2	9.3	
PUTAH SOUTH CANAL b *													
Total acre-feet	5,077	2,477	2,297	1,492	1,743	3,999	12,714	35,673	37,508	37,324	35,651	20,960	196,91
Average cubic feet per second	83	42	37	24	31	65	214	580	630	607	580	352	27
Monthly quantities in percent of seasonal	2.6	1.3	1.2	0.8	0.9	2.0	6.4	18.1	19.0	19.0	18.1	10.6	
SOUTH BAY AQUEDUCT													
Total acre-feet	6,732	8,229	9,193	3,556	263	397	4,602	11,515	12,714	15,008	16,550	8,406	97,16
Average cubic feet per second	109	138	150	58	5	6	77	187	214	244	269	141	13
Monthly quantities in percent of seasonal	6.9	8.5	9.5	3.7	0.3	0.4	4.7	11.9	13.1	15.4	17.0	8.6	

a Data furnished by City of Vallejo.
b Data furnished by U. S. Bureau of Reclamation.
c Data furnished by the City of San Francisco.
d Data furnished by East Bay Municipal Utility District.
e Data furnished by U. S. Geological Survey.
* Amounts are total diversion into the canal; an unknown portion of this is imported to the Central Coastal Area.

TABLE B-2
DAILY GAGE HEIGHT
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	E31400	RECTOR RESERVOIR NEAR YOUNTVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	344.98	345.66	NR	NR	370.35	NR	370.20E	370.02	366.94	362.98	358.42E	353.83E	1
2	344.98	345.65	NR	NR	370.37	NR	370.15	370.00	366.81	362.82	358.28	353.69E	2
3	344.97	345.72	NR	363.07	370.52	NR	370.14	370.00	366.67	362.68	358.12	353.53E	3
4	344.97	345.73	NR	363.12	370.63	NR	370.14	369.97	366.54	362.54	357.99	353.38E	4
5	344.97	345.75	NR	363.21	370.56	370.29	370.13	369.96	366.47	362.39	357.82	353.28E	5
6	344.94	345.76	354.72	363.27	370.80	370.35	370.12	369.96	366.33	362.23	357.68	353.04E	6
7	344.93	345.82	354.91	363.33	370.62	370.33	370.12	369.96	366.18	362.08	357.55	352.92E	7
8	344.92	NR	354.96	363.75	370.50	370.32	370.12	369.90	366.04	361.95	357.39	352.76E	8
9	344.95	NR	NR	367.23	370.60	370.30	370.11	369.84	365.88	361.82	357.25	352.61E	9
10	344.96	NR	NR	368.83	370.69	370.29	370.11	369.73	365.77	361.68	357.12	352.47E	10
11	345.03	NR	NR	370.92	370.53	370.26	370.11	369.62	365.56	361.57	356.97E	352.32E	11
12	345.09	NR	NR	370.70	370.60	370.24	370.11	369.49	365.40	361.42	356.79E	352.18E	12
13	345.11	NR	NR	370.40	370.48	370.21	370.11	369.38	365.26	361.29	356.65E	352.01E	13
14	345.17	NR	NR	370.30	370.54	370.21	370.11	369.25	365.10	361.17	356.53E	351.99	14
15	345.30	NR	NR	370.38	370.45	370.20	370.11	369.13	364.99	361.04	356.37E	351.82	15
16	345.44	NR	NR	370.78	370.38	370.20	370.11	369.01	364.86	360.89	356.25E	351.69	16
17	345.57	NR	NR	370.50	370.34	370.22	370.11	368.87	364.72	360.72	356.07E	351.58	17
18	345.60	NR	NR	370.81	370.30	370.21	370.11	368.74	364.60	360.60	355.96E	351.43	18
19	345.61	NR	NR	370.45	370.28	370.22E	370.11	368.62	364.50	360.43	355.78E	351.30	19
20	345.62	NR	NR	370.35	370.27	370.25E	370.09	364.49	364.38	360.29	355.65E	351.18	20
21	345.63	NR	NR	370.35	370.26	370.26E	370.09	368.37	364.25	360.13	355.45E	351.06	21
22	345.64	NR	NR	370.32	370.29	370.27E	370.09	368.23	364.12	359.98	355.28E	350.97	22
23	345.67	NR	NR	370.29	370.28	370.28E	370.08	368.11	364.02	359.81	355.15E	350.84	23
24	345.70	NR	NR	370.27	NR	370.28E	370.08	367.99	363.90	359.64	355.02E	350.71	24
25	345.70	NR	NR	370.34	NR	370.28E	370.08	367.89	363.80	359.48	354.86E	350.56	25
26	345.70	NR	NR	370.31	NR	370.27E	370.08	367.76	363.68	359.37	354.73E	350.43	26
27	345.69	NR	NR	370.31	NR	370.26E	370.09	367.62	363.57	359.25	354.57E	350.26	27
28	345.69	NR	NR	370.30	NR	370.23E	370.05	367.50	363.42	359.10	354.43E	350.12	28
29	345.67	NR	NR	370.32		370.21E	370.04	367.36	363.28	358.92E	354.27E	349.97	29
30	345.67	NR	NR	370.40		370.20E	370.03	367.23	363.11	358.75E	354.13E	349.84	30
31	345.67		NR	370.37		370.20E		367.09		358.60E	353.97E		31

E — ESTIMATED

NR — NO RECORD

NF — NO FLOW

MAXIMUM INSTANTANEOUS GAGE HEIGHTS

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
1-18-73	0715	372.69									

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
38 26 24	122 20 36	SE 19 7N 4W					MAY 1948-DATE	5-48		0.00	USCGS

Rector Reservoir is located on Rector Creek about 3 miles northeast of Yountville. Gaging station is located on the outlet tower of the reservoir. Elevation of reservoir floor is 250 feet. Spillway elevation is 370 feet.

TABLE B-3 (CONTINUED)

DAILY TIDES

891110 SACRAMENTO RIVER AT COLLINSVILLE
(OCTOBER 1, 1972, THROUGH MARCH 30, 1973)

DATE	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		DATE
1	2.07	5.38	1.94	5.41	4.55	2.92	4.54	3.65	NR	NR	NR	NR	1
	3.60	6.16	2.04		6.04	1.99	6.15	1.64					
2	2.19	5.43	4.70	2.09	4.90	3.46	4.87	3.84	5.32	3.76	5.61	3.76	2
	3.28	6.13	5.47	1.94	6.39	2.07	6.50	1.98	6.52		6.41	2.44	
3	2.31	5.63	4.89	2.59	5.05	3.67	5.22	3.89	2.09	5.63	5.77	3.58	3
	3.14		5.87	2.09	6.53	2.40	6.54	1.84	3.84	6.80	6.77	2.83	
4	6.03	2.55	5.15	3.05	5.49	4.08	5.06	3.84	2.46	6.05	6.23	3.51	4
	5.81	2.84	6.06	2.00	6.85	2.14	6.47	1.72	3.88	6.92	6.69	2.89	
5	5.74	2.40	4.90	3.01	5.15	3.95	5.04	3.63	2.56	6.05	6.38	3.30	5
	5.69	2.38	5.88	1.67	6.54	1.97	6.29	1.65	3.44		6.46	2.96	
6	5.51	2.53	4.78	3.20	5.71	4.33	4.98	3.47	6.28	2.46	6.69	3.39	6
	5.82	2.31	6.06	1.75	6.77	2.16	6.19	1.74	6.27	3.58	6.48	3.21	
7	5.54	2.92	4.94	3.64	5.41	4.33	5.21	3.41	6.40	3.28	6.76	3.01	7
	6.26	2.59	6.39	1.86	6.85	2.21	5.93	1.68	6.78		6.02	3.44	
8	5.56	3.26	4.79	3.54	5.33	4.17	5.17	3.19	NR	NR	6.95	2.84	8
	6.22	2.37	5.85	1.48	6.36	1.74	5.73				5.74	3.78	
9	5.37	3.37	4.63	3.64	4.96	3.85	NR	NR	5.30	3.36	6.98	2.77	9
	6.36	2.39	5.81		5.84				6.65	2.97	5.30		
10	5.29	3.65	1.61	4.98	1.55	4.91	NR	NR	5.31	4.38	3.84	6.62	10
	6.27	2.31	4.03	5.92	3.75	5.47			7.27	3.29	2.61	5.38	
11	5.13	3.85	2.03	5.38	1.57	5.20	NR	NR	5.53	4.81	4.32	6.72	11
	6.15		4.35	5.80	3.70	5.29			7.62		2.45	5.15	
12	2.17	4.94	1.73	4.93	1.65	5.23	NR	NR	3.58	5.81	4.36	6.38	12
	4.11	6.12	3.89	5.15	3.25	4.61			4.91	7.41	2.22	5.20	
13	2.06	4.81	1.57	5.18	1.53	5.37	NR	NR	3.22	6.09	4.36	6.20	13
	4.22	6.09	4.38	5.57	2.83	4.33			5.00	7.36	1.84	4.96	
14	2.15	4.96	2.27	5.81	1.89	5.33	NR	NR	2.91	5.99	3.44	5.80	14
	4.37	5.80	3.84	5.30	1.85	3.80			4.61	7.60	1.52		
15	2.34	5.33	2.21	5.86	2.05	5.60	NR	NR	3.00	6.06	5.14	3.18	15
	4.63	5.81	3.34	5.54	1.67	3.99			4.17	7.29	5.94	1.65	
16	2.04	5.19	2.71	6.29	2.55	6.00	NR	NR	2.73	6.11	5.35	2.82	16
	3.88	5.39	3.00	5.36	1.50				3.85	7.08	6.02	1.94	
17	1.90	5.28	2.95	6.66	4.36	3.15	NR	NR	2.67	6.18	5.79	2.70	17
	3.27	5.47	2.76		6.71	1.76			3.57	6.82	6.03	2.22	
18	2.11	5.53	5.50	3.17	4.77	3.35	NR	NR	2.62	6.20	5.90	2.38	18
	2.92	5.60	6.86	2.46	6.86	1.76			3.34	6.58	5.79	2.27	
19	2.49	5.90	5.39	3.35	5.16	3.58	NR	NR	2.74	6.37	6.02	2.29	19
	2.78		7.00	2.10	7.11	1.75			3.17	6.14	5.90	2.92	
20	5.71	2.69	5.32	3.38	5.15	3.52	NR	NR	2.85	6.37	6.56	2.56	20
	6.09	2.51	6.96	1.84	7.04	1.70			3.13		5.81	2.88	
21	5.53	2.68	5.26	3.54	5.25	3.59	NR	NR	5.83	3.14	6.26	2.35	21
	6.12	2.00	6.99	1.71	7.04	1.98			6.47	3.13	5.51	3.12	
22	5.21	2.75	5.32	3.70	5.82	3.86	NR	NR	5.63	3.61	6.05	1.84	22
	6.31	1.81	7.05	1.80	6.99				6.49	2.98	4.86	3.22	
23	5.14	2.94	5.42	3.73	2.00	5.61	NR	NR	5.06	3.73	5.80	1.85	23
	6.49	1.73	6.93		3.47	6.42			6.23	2.90	4.64	3.58	
24	5.14	3.26	1.84	5.39	1.94	5.62	NR	NR	5.04	4.60	5.62	1.86	24
	6.69	1.84	3.66	6.40	3.16	5.60			6.86	3.55	4.48	3.85	
25	5.15	3.50	1.61	5.24	1.60	5.42	NR	NR	5.00	4.52	5.54	2.03	25
	6.68		3.31	5.70	2.89	5.05			6.19	2.79	4.55		
26	1.91	5.27	1.42	5.21	1.72	5.51	NR	NR	NR	NR	4.16	5.42	26
	3.86	6.75	3.21	5.39	2.69	4.65					2.07	4.68	
27	2.05	5.33	1.67	5.60	2.31	6.06	NR	NR	NR	NR	4.20	5.19	27
	3.93	6.35	3.09	5.09	2.88	4.81					1.84	4.63	
28	1.90	5.28	2.00	5.72	3.07	6.17	NR	NR	NR	NR	3.65	4.78	28
	3.71	5.99	2.72	4.75	2.32	4.24					1.29		
29	1.74	5.06	2.22	5.58	3.09	6.03	NR	NR			4.30	2.95	29
	3.05	5.01	2.14	4.49	1.99						4.53	1.26	
30	1.17	4.74	2.55	5.81	4.31	3.39	NR	NR			4.53	2.64	30
	2.43	4.80	1.98		5.96	1.68					4.87	1.40	
31	1.62	5.21			4.41	3.53	NR	NR			4.93	2.23	31
	2.34	4.81			6.06	1.47					4.99	1.63	
MAXIMUM	6.75		7.05		7.11		NR		NR		NR		MAXIMUM
MINIMUM	1.17		1.42		1.47		NR		NR		NR		MINIMUM

NR - NO RECORD

LOCATION: LAT. 38 04 25, LONG. 121 51 18, SW SEC. 27, T3N, R1E, MO8&M
0.4 MILE SOUTHWEST OF COLLINSVILLE, 3.3 MILES NORTHEAST OF PITTSBURG.

PERIOD OF RECORD: 1929 TO DATE

TABLE 8-3 (CONTINUED)

DAILY TIDES

B91110 SACRAMENTO RIVER AT COLLINSVILLE
(APRIL 1, 1973, THROUGH SEPTEMBER 30, 1973)

DATE	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DATE
1	5.13	1.87	6.09	1.52	7.18	1.76	6.76	1.44	5.93	1.95	2.30	4.98	1
	4.84	1.34	4.87	2.44	5.33	3.71	5.03	3.08	5.59	2.70	2.56	5.87	
2	4.93	1.19	6.16	1.28	7.15	1.71	6.55	1.51	5.50	2.02	2.20	4.70	2
	4.51	1.39	4.78	2.65	5.30	3.58	5.07	2.87	5.72		2.86	5.76	
3	5.25	0.99	6.31	1.11	6.94	1.66	6.02	1.36	2.63	5.19	2.08	4.45	3
	4.44	1.58	4.88	3.08	5.35	3.49	5.10	2.71	2.23	5.76	3.22	5.73	
4	5.55	0.98	6.63	1.38	6.58	1.59	5.55	1.27	2.43	4.81	2.13	4.63	4
	4.62	2.12	5.17	3.34	5.36	3.39	5.18		2.52	5.97	3.97	6.24	
5	5.97	1.14	6.60	1.22	6.20	1.48	2.51	5.11	2.46	4.64	2.27	4.72	5
	4.84	2.75	5.00	3.34	5.29		1.63	5.54	3.07	6.12	3.84	5.76	
6	6.34	1.37	6.40	0.99	3.02	5.45	2.59	4.75	2.35	4.54	1.76	4.45	6
	4.81	3.04	4.78	3.11	1.27	5.35	1.87	5.66	3.59	6.17	3.53	5.53	
7	6.25	1.10	5.99	1.08	2.74	4.86	2.25	4.25	2.21	4.59	1.54	4.51	7
	4.57	3.14	5.00		1.37	5.49	2.13	5.70	3.81	6.19	3.24	5.46	
8	5.90	0.96	3.12	5.55	2.41	4.53	1.97	4.03	2.10	4.72	1.40	4.64	8
	4.52		0.88	4.88	1.79	5.78	2.62	5.83	3.95	6.12	2.99	5.55	
9	3.38	5.71	2.75	5.00	2.21	4.41	1.79	4.10	1.90	4.70	1.53	4.92	9
	1.01	4.70	0.93	4.99	2.50	6.05	3.14	6.05	3.72	6.13	3.17		
10	3.37	5.45	2.41	4.60	2.11	4.56	1.87	4.47	1.72	4.71	5.87	2.07	10
	1.09	4.98	1.09	5.24	3.07	6.32	3.58	6.23	3.53		5.16	2.79	
11	3.15	5.37	2.16	4.62	2.08	4.75	1.82	4.69	6.12	1.77	5.65	1.92	11
	1.28	5.13	1.61	5.64	3.41	6.35	3.83	6.40	4.87	3.53	5.13	2.48	
12	2.69	5.27	2.12	4.78	1.76	4.71	1.81	4.90	6.21	1.82	5.55	1.98	12
	1.53		2.17	5.85	3.46		3.90		4.92	3.23	5.30	2.33	
13	5.40	2.39	2.05	4.95	6.32	1.67	6.51	2.02	6.07	1.77	5.40	2.17	13
	5.23	1.71	2.55		4.78	3.70	5.11	4.15	4.88	2.88	5.52	2.24	
14	5.43	1.86	6.05	1.89	6.31	1.58	6.65	2.10	5.94	1.82	5.20	2.24	14
	4.94	1.75	5.01	2.96	4.65	3.49	5.16	3.90	5.01	2.77	5.63	2.00	
15	5.51	1.66	6.14	1.64	6.03	1.22	6.53	1.89	5.78	1.97	4.98	2.43	15
	4.94	1.97	4.78	2.99	4.63	3.69	5.04	3.72	5.16	2.71	5.82	1.96	
16	5.61	1.46	6.03	1.42	6.24	1.39	6.36	1.84	5.55	1.95	4.84	2.71	16
	4.85	2.21	4.69	3.10	4.73	3.69	5.09	3.52	5.31	2.53	5.98		
17	5.75	1.42	6.05	1.41	6.16	1.27	6.14	1.83	5.26	2.09	1.90	4.64	17
	4.88	2.78	4.71	3.38	4.57	3.36	5.11	3.35	5.51	2.44	2.89	6.00	
18	5.66	1.07	6.19	1.48	5.66	1.01	5.92	1.82	5.02	2.31	1.76	4.50	18
	4.57	2.88	4.98	3.89	4.49	3.26	5.16	3.11	5.65		3.24	6.06	
19	5.77	0.97	6.42	1.65	5.52	1.10	5.54	1.78	2.26	4.67	1.69	4.56	19
	4.44	2.87	5.04	3.83	4.70	3.30	5.20	2.89	2.51	5.77	3.58	6.06	
20	5.41	0.83	6.13	1.39	5.35	1.16	5.16	1.88	1.99	4.31	1.59	4.60	20
	4.21	3.08	4.81	3.72	4.81	3.16	5.40		2.77	5.93	3.33	5.87	
21	5.42	0.85	5.82	1.39	5.11	1.36	2.71	4.64	1.88	4.24	1.40	4.66	21
	4.27	3.32	4.96	3.87	5.14		1.90	5.52	3.31	6.09	2.98	5.81	
22	5.35	0.97	5.63	1.36	3.30	4.88	2.34	4.24	1.68	4.24	1.51	4.95	22
	4.49	3.77	4.94		1.66	5.28	2.21	5.82	3.39	6.20	2.88	5.81	
23	5.38	1.17	3.73	5.17	2.70	4.28	2.10	4.04	1.52	4.48	1.59	5.06	23
	4.59		1.34	5.04	1.72	5.41	2.69	5.94	3.53	6.24	2.55		
24	3.95	5.13	3.41	4.69	2.21	4.04	1.72	3.95	1.44	4.56	5.68	1.82	24
	1.20	4.65	1.32	5.12	2.17	5.77	2.95	6.06	3.19	6.30	5.38	2.35	
25	3.83	4.85	3.10	4.50	1.89	4.02	1.43	4.14	1.55	4.81	5.52	1.74	25
	1.31	4.86	1.70	5.46	2.54	6.09	3.29	6.42	2.93		5.32	1.87	
26	3.54	4.69	2.64	4.23	1.64	4.21	1.52	4.57	6.25	1.62	5.24	1.82	26
	1.43	5.14	1.77	5.51	3.04	6.42	3.69	6.97	5.13	2.92	5.34	1.65	
27	3.09	4.87	2.04	4.13	1.62	4.51	1.94	5.07	6.28	1.79	5.05	2.04	27
	1.75	5.51	1.92	5.62	3.42	6.83	3.71		5.17	2.47	5.53	1.64	
28	2.68	4.99	1.55	4.20	1.80	4.99	6.97	1.97	5.90	1.69	5.00	2.39	28
	2.06	5.75	2.31	6.03	3.77		5.16	3.43	5.29	2.29	5.75	1.73	
29	2.15	4.87	1.55	4.60	7.06	1.69	6.85	1.90	5.72	1.90	4.97	2.77	29
	2.14		2.93	6.58	5.01	3.57	5.19	3.10	5.59	2.45	5.86	1.87	
30	5.98	1.85	1.83	5.21	6.97	1.57	6.54	1.82	5.66	2.43	4.96	3.20	30
	5.02	2.32	3.75		5.04	3.32	5.25	2.82	5.91	2.46	6.03		
31			7.19	1.94			6.30	1.82	5.35	2.51			31
			5.34	3.78			5.41	2.71	5.95				
MAXIMUM	6.34		7.19		7.18		6.97		6.30		6.24		MAXIMUM
MINIMUM	0.83		0.88		1.01		1.27		1.44		1.40		MINIMUM

MAXIMUM GAGE HEIGHT OF RECORD; 9.2 - 4/6/58

ZERO OF GAGE: 1929 -3.05 USCGS
1964 -3.54 USCGS
1964 TO DATE -3.00 USCGS

TABLE B-3 (CONTINUED)

DAILY TIDES

E03300 SUISIN BAY AT BENICIA
(OCTOBER 1, 1972, THROUGH MARCH 30, 1973)

DATE	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		DATE
1	-1.84	2.58	-1.72	2.85	-0.23	3.42	1.76	0.55	2.33	0.52	0.77	3.54	1
	0.19	3.32	-1.63	1.99	-1.80	2.18	3.45	-2.40	3.64	-2.72	-2.11		
2	-1.64	2.73	-1.44	2.94	0.27	3.74	2.13	0.70	2.53	0.32	2.66	-0.01	2
	-0.15	3.38	-1.80	2.23	-1.83		3.77	-2.12	3.79	-2.59	3.51	-2.28	
3	-1.50	2.93	-0.82	3.35	2.34	0.47	2.41	0.67	2.87	0.33	2.84	-0.34	3
	-0.46	3.25	-1.67		3.91	-1.47	3.75	-2.25	4.08	-2.15	3.90	-1.93	
4	-1.32	3.17	2.46	-0.31	2.72	0.85	2.30	0.69	3.33	0.24	3.31	-0.71	4
	-0.83	3.05	3.45	-1.91	4.14	-1.86	3.76	-2.44	4.16	-1.97	3.80	-1.83	
5	-1.33	3.12	2.14	-0.36	2.37	0.76	2.33	0.44	3.31	-0.45	3.51	-1.06	5
	-1.31		3.27	-2.23	3.91	-2.05	3.61	-2.46	3.52	-1.93	3.60	-1.62	
6	2.87	-1.10	2.11	0.00	3.10	1.24	2.30	0.25	3.61	-0.29	3.91	-0.90	6
	3.32	-1.42	3.38	-2.15	4.09	-1.84	3.48	-2.32	3.68	-0.70	3.62	-1.20	
7	2.93	-0.58	2.24	0.48	2.71	1.17	2.52	0.14	4.04	-0.61	3.94	-1.60	7
	3.70	-1.18	3.65	-2.06	4.09	-1.83	3.20	-2.34	2.99	-0.83	3.10	-0.61	
8	2.85	-0.17	2.04	0.40	2.59	1.03	2.57	-0.06	3.72	-0.99	4.18	-1.79	8
	3.64	-1.43	3.12	-2.43	3.67	-2.27	3.16	-1.71	2.40	-0.29	2.78	-0.05	
9	2.70	0.13	1.91	0.52	2.26	0.74	3.42	0.87	3.74	-1.14	4.09	-1.92	9
	3.76	-1.34	3.06	-2.22	3.19	-2.36	3.31	-1.35	2.37	1.04	2.36	0.27	
10	2.63	0.44	2.36	0.91	2.31	0.71	3.31	-0.38	4.30	1.00	3.72	-1.94	10
	3.57	-1.44	3.19	-1.69	2.84	-2.27	2.12	-1.37	2.58		2.43	0.95	
11	2.47	0.72	2.50	1.08	2.54	0.54	3.40	-0.61	1.58	4.62	3.76	-1.95	11
	3.42	-1.52	2.84	-1.97	2.59	-2.06	1.90	-0.47	-1.05	2.79	2.15		
12	2.25	1.02	2.18	0.85	2.64	0.12	3.67	-1.26	1.49	4.44	1.09	3.47	12
	3.34	-1.59	2.44		1.95	-2.02	1.56		-1.62	3.09	-2.11	2.23	
13	2.04	1.18	-2.06	2.62	2.73	-0.47	-0.01	3.68	1.46	4.41	0.94	3.29	13
	3.32		1.43	3.06	1.63		-1.89	1.64	-2.33	2.96	-2.72	2.03	
14	-1.39	2.26	-1.03	3.12	-1.47	2.81	0.52	3.85	0.88	4.72	0.01	3.00	14
	1.34	3.08	0.62	2.57	-1.54	1.13	-2.30	2.27	-2.41		-3.12	2.36	
15	-1.10	2.55	-1.30	3.24	-1.10	3.07	1.15	4.68	3.03	0.14	-0.50	3.15	15
	1.52	3.08	0.01	2.69	-1.94	1.30	-1.77	3.39	4.35	-2.64	-2.96	2.60	
16	-1.39	2.48	-0.91	3.66	-0.57	3.52	2.24	5.81	3.15	-0.33	-1.10	3.24	16
	0.81	2.72	-0.67	2.52	-2.32	1.68	-1.31		4.22	-2.55	-2.55		
17	-1.64	2.65	-0.71	3.99	0.00	4.20	3.69	1.23	3.28	-0.74	3.12	-1.44	17
	0.07	2.63	-1.21	2.68	-2.27		5.34	-1.70	3.99	-2.46	3.25	-2.29	
18	-1.59	2.92	-0.51	4.25	2.11	0.18	4.28	2.19	3.37	-0.99	3.23	-1.84	18
	-0.50	2.85	-1.72		4.32	-2.45	5.89	-1.53	3.77	-2.03	3.13	-1.93	
19	-1.29	3.27	2.60	-0.24	2.45	0.33	3.83	0.45	3.57	-1.16	3.42	-1.89	19
	-0.88	2.99	4.37	-2.21	4.51	-2.70	4.97	-2.22	3.31	-1.53	3.34	-0.84	
20	-0.99	3.52	2.59	-0.10	2.42	0.21	3.42	-0.03	3.60	-1.11	3.86	-1.75	20
	-1.29		4.40	-2.60	4.43	-2.87	4.33	-2.12	2.98	-0.84	3.00	-1.12	
21	2.85	-0.99	2.57	0.20	2.50	0.23	3.80	-0.29	3.64	-0.98	3.61	-1.85	21
	3.63	-1.94	4.41	-2.78	4.39	-2.52	3.85	-1.92	2.74	-0.03	2.67	-0.70	
22	2.57	-0.83	2.60	0.38	3.09	0.35	3.58	-0.46	3.57	-1.06	3.28	-2.47	22
	3.88	-2.25	4.46	-2.62	4.31	-2.48	3.00	-1.71	2.14	0.35	2.02	-0.22	
23	2.52	-0.50	2.75	0.43	2.89	-0.10	3.28	-0.75	3.34	-0.93	2.99	-2.32	23
	4.06	-2.39	4.36	-2.48	3.72	-2.36	2.29	-1.10	2.17	1.46	1.80	0.35	
24	2.52	-0.10	2.78	0.40	2.92	-0.52	3.29	-0.53	4.02	-0.17	2.76	-2.10	24
	4.24	-2.30	3.76	-2.59	2.87	-2.54	1.95	-0.29	2.16		1.56	0.65	
25	2.53	0.26	2.59	0.01	2.78	-0.72	3.35	-0.65	1.37	3.28	2.63	-1.76	25
	4.13	-2.22	2.97	-2.65	2.30	-2.17	1.59		-0.79	1.88	1.57	1.00	
26	2.58	0.56	2.62	-0.05	2.88	-0.87	0.02	2.99	1.44	3.32	2.52	-1.59	26
	4.07	-1.96	2.69		1.89	-1.21	-1.09	1.16	-0.80	2.20	1.69		
27	2.63	0.68	-2.21	3.00	3.38	-0.64	0.31	2.77	1.41	3.55	1.09	2.32	27
	3.59		-0.28	2.35	1.97		-1.63	1.14	-0.93	2.72	-1.87	1.53	
28	-2.04	2.58	-1.67	3.16	-0.26	3.29	0.60	2.88	1.54	3.74	0.45	1.78	28
	0.44	3.09	-0.81	1.99	-1.44	1.36	-1.72	1.89	-1.61	2.70	-2.53	1.37	
29	-2.15	2.33	-1.22	3.06	-0.13	3.20	1.37	3.82			-0.23	1.71	29
	-0.21	2.17	-1.40	1.71	-1.87	1.47	-1.57				-2.66	1.69	
30	-2.66	2.15	-0.70	3.21	0.27	3.19	2.50	1.48			-0.77	2.11	30
	-0.86	2.02	-1.73	1.84	-2.26	1.60	3.78	-2.12			-2.55	2.16	
31	-2.14	2.66			0.39	3.27	2.55	1.13			-1.46	2.13	31
	-1.14	2.05			-2.54		3.68	-2.70			-2.59	2.30	
MAXIMUM	4.24		4.46		4.51		5.89		4.72		4.18		MAXIMUM
MINIMUM	-2.66		-2.78		-2.87		-2.70		-2.72		-3.12		MINIMUM

LOCATION: LAT. 38 02 27, LONG. 122 08 04, SW SEC. 6, T2N, R2W
ON CHANNEL SIDE OF WHARF IMMEDIATELY SOUTHEAST OF BENICIA.

PERIOD OF RECORD: 1929 TO DATE
INTERMITTENT 1929 TO 1940

TABLE 8-3 (CONTINUED)

DAILY TIDES

E03300 SUISIN BAY AT BENICIA
(APRIL 1, 1973, THROUGH SEPTEMBER 30, 1973)

DATE	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DATE
1	-2.21	2.04	-2.52	2.17	NR	NR	4.12	-2.93	3.08	-2.21	2.18	-0.89	1
	-2.87		-1.15				2.30	-0.31	2.84	-1.05	3.23	-1.50	
2	2.26	-3.02	3.47	-3.08	NR	NR	3.90	-2.82	2.59	-1.90	1.77	-0.54	2
	1.89	-2.65	2.02	-0.80			2.33	-0.58	3.05	-1.03	3.00		
3	2.66	-3.33	NR	NR	NR	NR	3.32	-2.81	2.25	-1.52	-1.71	1.50	3
	1.85	-2.29					2.42	-0.79	3.07	-1.20	0.01	2.87	
4	2.99	-3.43	NR	NR	NR	NR	2.77	-2.63	1.82	-1.04	-1.68	1.58	4
	1.98	-1.54					2.53	-0.96	3.23		0.62	3.16	
5	3.39	-3.30	NR	NR	NR	NR	2.27	-2.15	-1.22	1.58	-1.47	1.72	5
	2.16	-0.81					2.82		-0.39	3.27	0.57	2.72	
6	3.63	-3.21	NR	NR	2.63	-2.70	-0.98	1.82	-1.33	1.48	-1.89	1.57	6
	2.05	-0.38			2.68		-1.78	2.86	0.29	3.26	0.36	2.64	
7	3.55	-3.31	NR	NR	-0.70	2.02	-1.26	1.33	-1.53	1.58	-2.28	1.69	7
	1.84	-0.11			-2.40	2.87	-1.23	2.95	0.52	3.19	0.04	2.57	
8	3.19	-3.39	NR	NR	-1.09	1.70	-1.55	1.06	-1.76	1.69	-2.33	1.96	8
	1.81	0.19			-1.66	3.14	-0.61	3.03	0.63	3.16	-0.16	2.84	
9	2.95	-3.20	NR	NR	-1.38	1.51	-1.86	1.22	-1.96	1.74	-2.25	2.25	9
	2.00				-0.81	3.30	-0.02	3.19	0.42	3.20	-0.15	2.95	
10	0.18	2.72	NR	NR	-1.51	1.66	-1.94	1.53	-2.14	1.87	-1.93	2.30	10
	-3.01	2.29			-0.27	3.41	0.37	3.36	0.28	3.23	-0.83	2.79	
11	-0.15	2.56	NR	NR	-1.70	1.84	-2.01	1.77	-2.09	2.03	-2.01	2.33	11
	-2.84	2.46			0.08	3.50	0.54	3.49	0.19	3.31	-1.22		
12	-0.89	2.40	NR	NR	-2.13	1.83	-2.04	2.00	-2.14	2.09	2.73	-1.90	12
	-2.63	2.78			0.12	3.48	0.64	3.57	-0.08	3.21	2.60	-1.45	
13	-1.28	2.49	NR	NR	-2.30	1.95	-2.13	2.15	-2.26	2.13	2.59	-1.78	13
	-2.26	2.81			0.34	3.47	0.75	3.65	-0.45		2.79	-1.65	
14	-2.08	2.26	NR	NR	-2.52	1.82	-2.02	2.19	3.09	-2.16	2.43	-1.54	14
	-2.12	2.86			0.22		0.41		2.29	-0.65	2.99	-1.90	
15	-2.43	2.24	NR	NR	3.22	-2.84	3.56	-2.19	2.93	-2.07	2.21	-1.20	15
	-1.87				1.84	0.34	2.09	0.24	2.42	-0.86	3.15	-1.97	
16	2.94	-2.66	NR	NR	3.33	-2.72	3.47	-2.19	2.73	-1.88	2.00	-0.85	16
	2.14	-1.55			1.92	0.35	2.19	0.04	2.61	-1.01	3.30	-2.05	
17	3.09	-2.83	NR	NR	3.30	-2.73	3.25	-2.17	2.45	-1.59	1.83	-0.46	17
	2.04	-0.98			1.76	0.08	2.22	-0.17	2.85	-1.13	3.24	-2.10	
18	2.85	-3.23	NR	NR	2.85	-2.97	2.95	-2.13	2.16	-1.36	1.66	-0.04	18
	1.76	-0.69			1.77	0.08	2.28	-0.45	2.98	-1.30	3.21		
19	2.95	-3.29	NR	NR	2.66	-2.80	2.56	-2.04	1.77	-0.93	-2.25	1.72	19
	1.64	-0.42			1.99	0.09	2.35	-0.64	3.11		0.32	3.21	
20	2.68	-3.51	NR	NR	2.50	-2.59	2.18	-1.90	-1.61	1.35	-2.22	1.82	20
	1.50	-0.07			2.13	-0.02	2.56	-0.82	-0.55	3.15	0.07	3.00	
21	2.65	-3.21	NR	NR	2.29	-2.28	1.72	-1.61	-1.81	1.36	-2.56	1.90	21
	1.48	0.16			2.45	-0.04	2.83		0.07	3.24	-0.28	2.99	
22	2.55	-2.91	NR	NR	1.89	-2.08	-1.09	1.30	-2.08	1.38	-2.46	2.24	22
	1.64	0.61			2.49		-1.17	3.07	0.17	3.31	-0.52	3.13	
23	2.50	-2.56	NR	NR	-0.73	1.36	-1.54	1.08	-2.35	1.54	-2.36	2.38	23
	1.73	0.79			-1.71	2.67	-0.61	3.14	0.20	3.41	-1.09	2.99	
24	2.24	-2.35	NR	NR	-1.20	1.12	-1.96	1.05	-2.59	1.78	-2.15	2.69	24
	1.81				-1.09	3.01	-0.27	3.26	-0.19	3.55	-1.41	2.83	
25	0.65	2.02	NR	NR	-1.68	1.09	-2.38	1.33	-2.55	2.10	-2.20	2.75	25
	-2.15	2.06			-0.69	3.42	0.08	3.67	-0.46	3.64	-1.95		
26	0.27	1.83	NR	NR	-2.09	1.35	-2.41	1.82	-2.50	2.41	2.66	-1.98	26
	2.00	2.32			-0.17	3.70	0.44	4.14	-0.63	3.55	2.85	-2.26	
27	-0.37	1.84	NR	NR	-2.29	1.70	-2.33	2.17	-2.36	2.45	2.46	-1.68	27
	-1.85	2.71			0.23	4.07	0.32	4.14	-1.20		3.02	-2.26	
28	-0.82	2.10	NR	NR	-2.38	2.12	-2.48	2.27	3.24	-2.34	2.38	-1.13	28
	-1.52	2.98			0.44	4.29	-0.09	4.07	2.71	-1.39	3.21	-2.17	
29	-1.41	2.07	NR	NR	-2.62	2.20	-2.59	2.40	3.08	2.00	2.24	-0.67	29
	-1.42	3.31			0.18	4.26	-0.42		3.03	-1.33	3.25	-2.05	
30	-1.98	2.25	NR	NR	-2.80	2.28	3.79	-2.60	2.83	-1.55	2.07	-0.25	30
	-1.25	3.47			-0.07		2.50	-0.73	3.20	-1.36	3.27	-1.87	
31			NR	NR			3.51	-2.39	2.54	-1.14			31
							2.73	-0.85	3.30	-1.42			
MAXIMUM	3.63		NR		NR		4.14		3.64		3.30		MAXIMUM
MINIMUM	-3.51		NR		NR		-2.93		-2.59		-2.56		MINIMUM

NR - NO RECORD

MAXIMUM GAGE HEIGHT OF RECORD : 5.7 - 4/6/58

ZERO OF GAGE : 1929 TO 1940 -2.21 USCGS
1940 TO 1942 -5.00 USCGS
1942 TO DATE 0.00 USCGS

TABLE B-4

CORRECTIONS AND REVISIONS TO PREVIOUSLY PUBLISHED REPORTS OF SURFACE WATER DATA

Location of Error or Revision					Change or Revision	
Report	Page	Mile & Bank	Name	Item	From	To
				1962		
Bulletin No. 23-62	394		Suisun Bay at Benicia Arsenal	Daily Maximum and Minimum Tides for the period 3-1-62 to 3-28-62, inclusive	Published values	2.00 feet lower than published values
				Maximum for March 1962	16.72	14.72
				1963		
Bulletin No. 130-63	B-7		Suisun Bay at Benicia Arsenal	Maximum Gage Height of Record	6.72	5.7
				Date of Maximum Gage Height of Record	3-5-62	4-6-58
				1964		
Bulletin No. 130-64	48		Suisun Bay at Benicia Arsenal	Maximum Gage Height of Record	6.72	5.7
				Date of Maximum Gage Height of Record	3-5-62	4-6-58
Bulletin No. 130-64	52		City of Vallejo from Cache Slough	Total acre-feet	Published values	Values published in Bulletin No. 130-66 Table B-2
				Average cubic feet per second	Published values	Values published in Bulletin No. 130-66 Table B-2
				Monthly quantities in percent of seasonal	Published values	Values published in Bulletin No. 130-66 Table B-2
				1967		
Bulletin No. 130-67	44		Sacramento River at Collinsville	Daily Maximum and Minimum Tides		Notation: In order to machine process the data it was necessary to avoid negative gage heights. Subtract 10.00 feet to obtain gage heights.
Bulletin No. 130-67	45		Suisun Bay at Benicia Arsnnal	Daily Maximum and Minimum Tides		Notation: In order to machine process the data it was necessary to avoid negative gage heights. Subtract 10.00 feet to obtain gage heights.

Appendix C

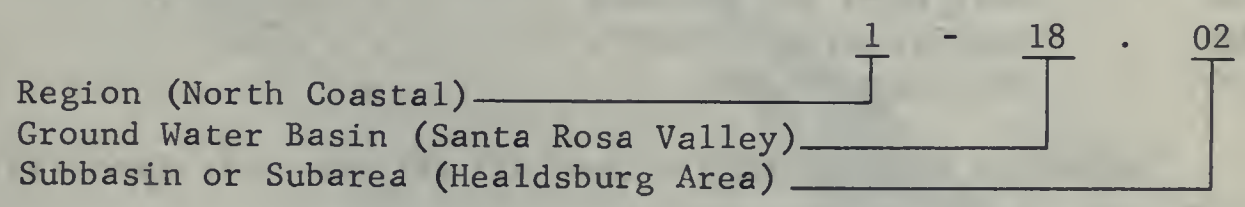
GROUND WATER MEASUREMENTS

This appendix contains summary and selected information concerning the level of ground water within 32 ground water basins or areas in the Central Coastal Area. Wells are selected to reflect the ground water conditions of the area. These wells are continuously reviewed and, when conditions dictate, replacement wells are located and measured.

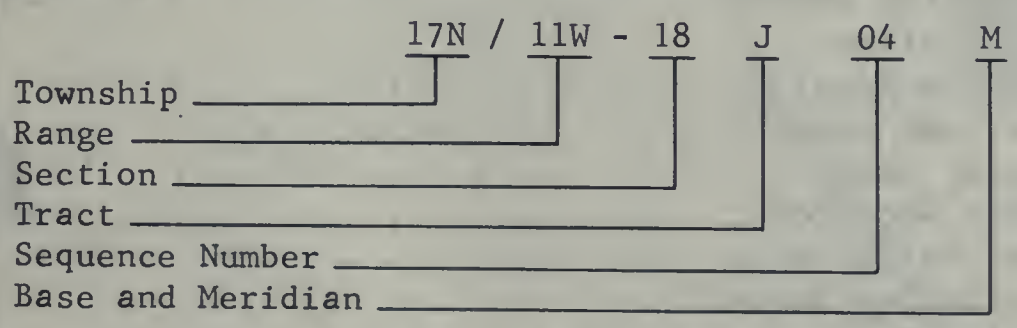
Earlier editions of this report contained a tabulation of individual measurements of ground water levels at wells. This type of data collected by the Department will be available at the various district offices of the Department. Please see the introduction at the front of this volume for the addresses of these district offices.

Table C-1 shows the average change in ground water levels for the various basins in the Central Coastal Area from spring 1972 to spring 1973. This table also shows the number of well measurements collected in the various areas. Figure C-2 contains graphical presentations of the average levels of ground water in the spring for the past several years. Figure C-3 is a graphical representation of the fluctuation of ground water level in certain selected wells for the past several years. An attempt has been made to select wells that represent conditions in the basin where the well is located. However, some caution in the use of these data is in order because ground water conditions can vary markedly with relatively small changes in horizontal location.

Two numbering systems are used by the Department to facilitate processing of water level measurement data. The two systems are the Region and Basin Designation and the State Well Numbering System. The regions used in Bulletin No. 130 are geographic areas defined in Section 13200 of the Water Code. This volume comprises the southern portion of North Coastal Region No. 1, the northern portion of Central Coastal Region No. 3, and all of San Francisco Bay Region No. 2. A decimal system of the form 0-00.00 has been selected according to geographic regions, ground water basins, and subbasins or subareas as follows:



The State Well Numbering System is based on township, range, and section subdivisions of the public land survey. The number of a well, assigned in accordance with this system, is referred to as the State Well Number, as illustrated below on the left.

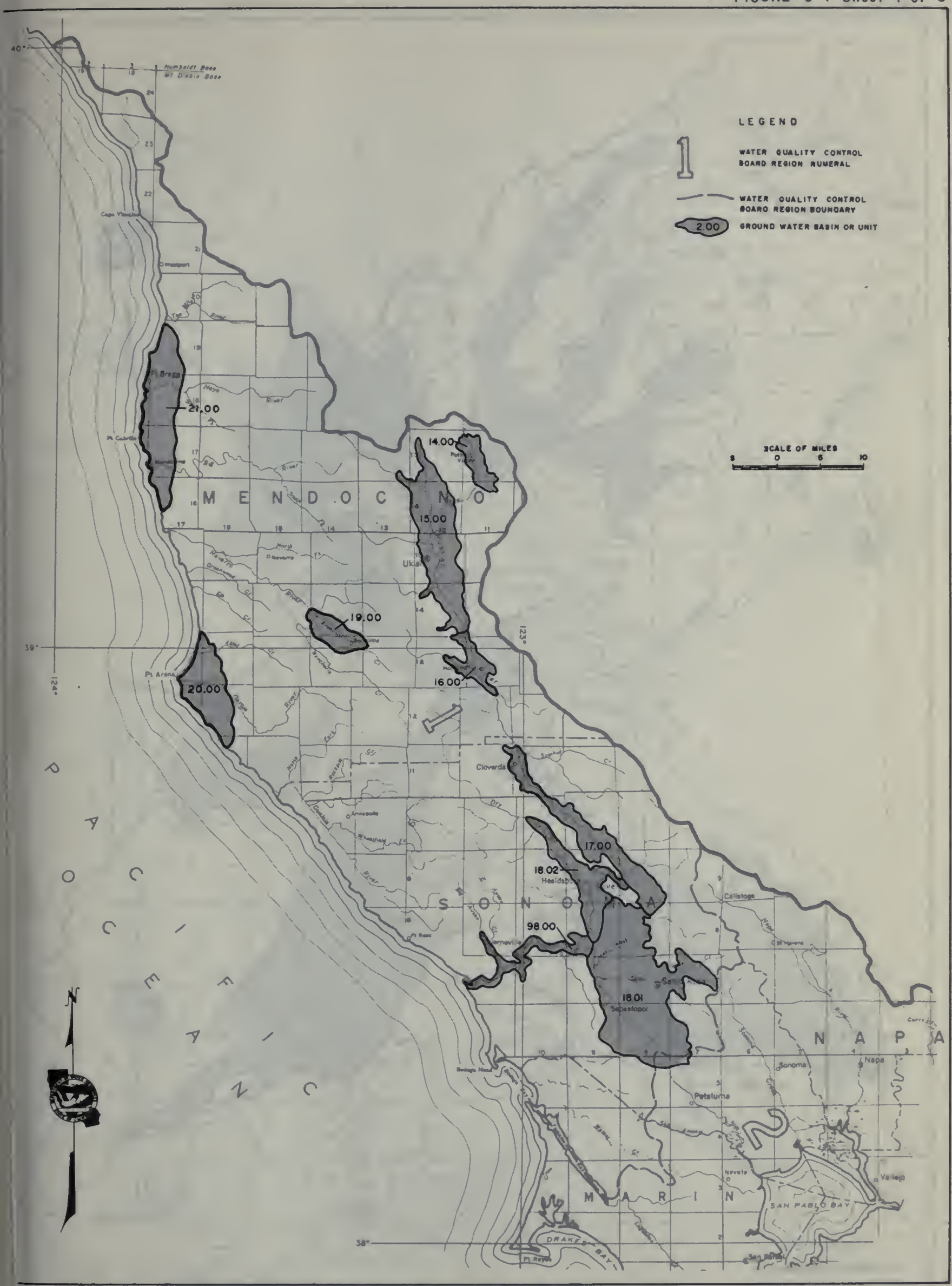


D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

This number identifies and locates the well. In the example, the well is in Township 17 North, Range 11 West, Tract J of Section 18, located in the Mount Diablo Base and Meridian. A section is divided into 40-acre tracts as shown above on the right. Sequence numbers in a tract are generally assigned in chronological order. The example designates the fourth well to be assigned a number in Tract J.

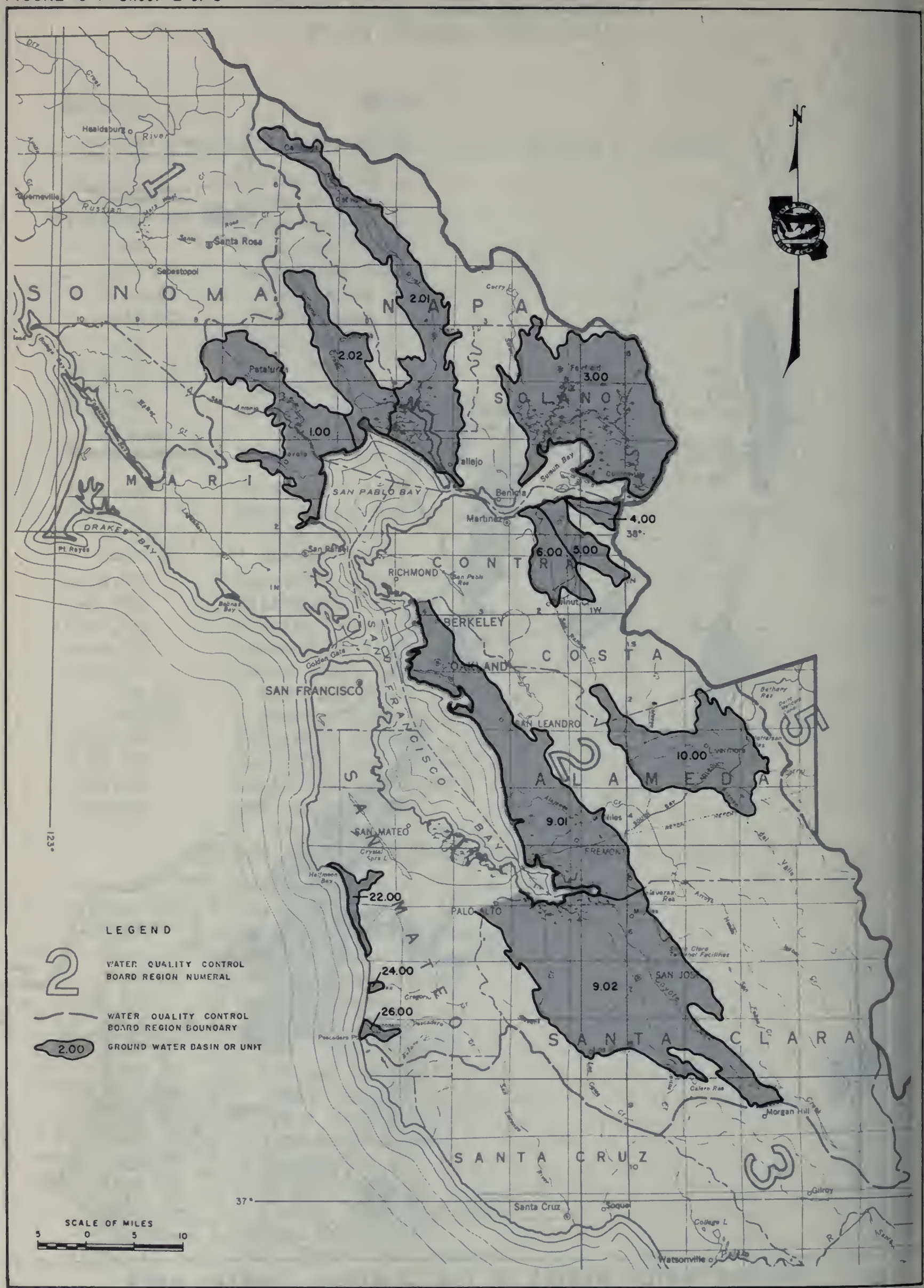
INDEX TO GROUND WATER MEASUREMENT DATA
IN THE CENTRAL COASTAL AREA

Number	Basin	Page
	NORTH COASTAL REGION 1-00.00 (Figure C-1, Sheet 1)	
1-14.00	Potter Valley	24, 2
1-15.00	Ukiah Valley	24, 25, 2
1-16.00	Sanel Valley	24, 25, 2
1-17.00	Alexander Valley	24, 25, 2
1-18.00	Santa Rosa Valley	
1-18.01	Santa Rosa Area	24, 25, 2
1-18.02	Healdsburg Area	24, 25, 2
1-19.00	Anderson Valley	
1-20.00	Point Arena	
1-21.00	Fort Bragg Terrace	
1-98.00	Lower Russian River Valley	2
	SAN FRANCISCO BAY REGION 2-00.00 (Figure C-1, Sheet 2)	
2-01.00	Petaluma Valley	24, 26, 3
2-02.00	Napa-Sonoma Valley	
2-02.01	Napa Valley	24, 26, 3
2-02.02	Sonoma Valley	24, 26, 3
2-03.00	Suisun-Fairfield Valley	24, 26, 3
2-04.00	Pittsburg Plain	24, 2
2-05.00	Clayton Valley	
2-06.00	Ygnacio Valley	24, 27, 3
2-09.00	Santa Clara Valley	
2-09.01	East Bay Area	24, 27, 3
2-09.02	South Bay Area	24, 27, 31, 3
2-10.00	Livermore Valley	24, 27, 3
2-22.00	Half Moon Bay Terrace	24, 27, 3
2-24.00	San Gregorio Valley	24, 28, 3
2-26.00	Pescadero Valley	24, 28, 3
	CENTRAL COASTAL REGION 3-00.00 (Figure C-1, Sheet 3)	
3-01.00	Soquel Valley	24, 28, 3
3-02.00	Pajaro Valley	2
3-03.00	Gilroy-Hollister Valley	
3-03.01	South Santa Clara County	24, 28, 3
3-03.02	San Benito County	24, 28, 3
3-04.00	Salinas Valley	
3-04.01	Pressure Area	24, 3
3-04.02	East Side Area	2
3-04.03	Forebay Area	2
3-04.04	Arroyo Seco Cone	2
3-04.05	Upper Valley Area	24, 3
3-04.06	Paso Robles Basin	2
3-04.08	Seaside Area	2
3-04.09	Langley Area	2
3-04.10	Corral De Tierra Area	2
3-07.00	Carmel Valley	2
3-26.00	West Santa Cruz Terrace	2

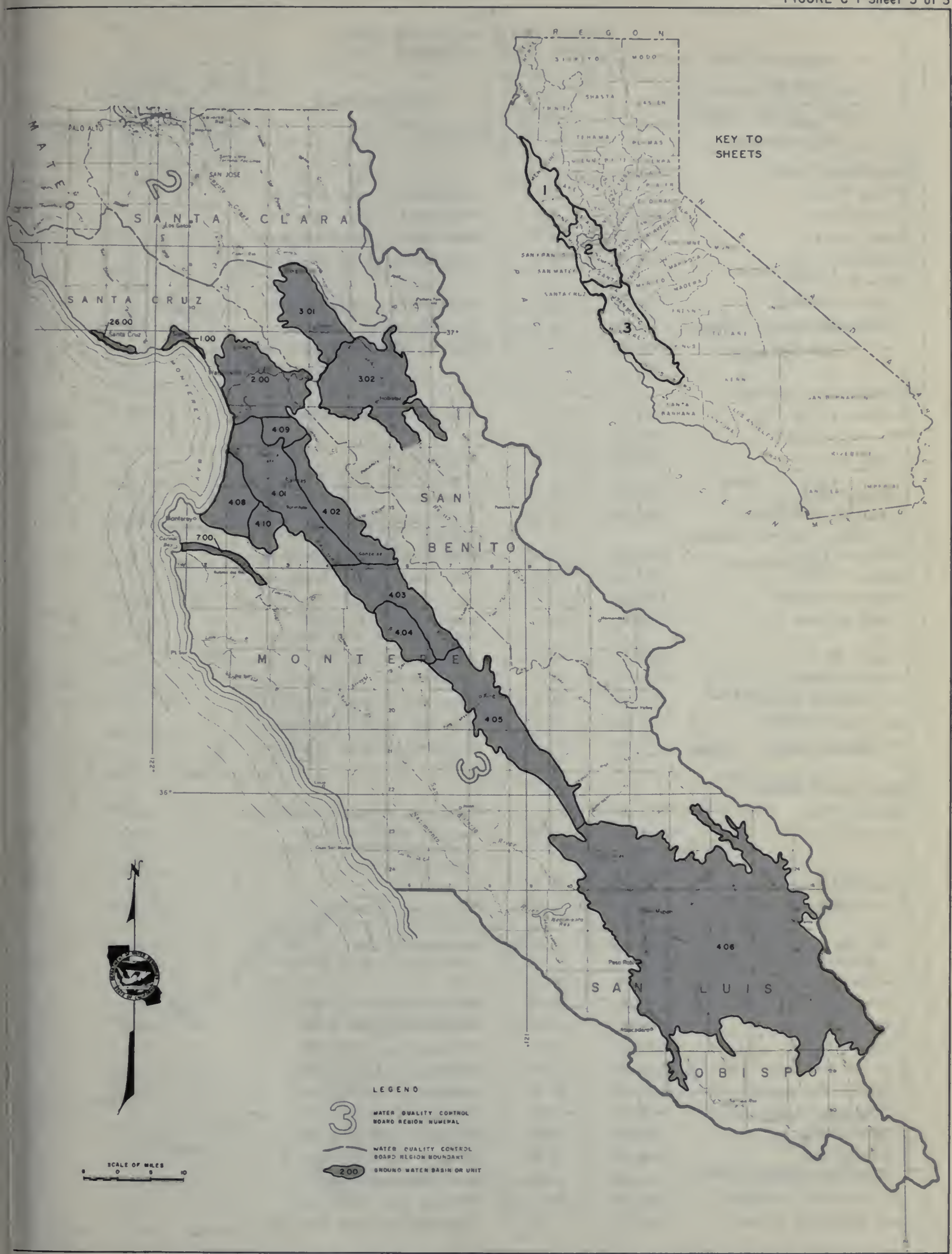


GROUND WATER BASINS IN THE CENTRAL COASTAL AREA

FIGURE C-1 Sheet 2 of 3



GROUND WATER BASINS IN THE CENTRAL COASTAL AREA



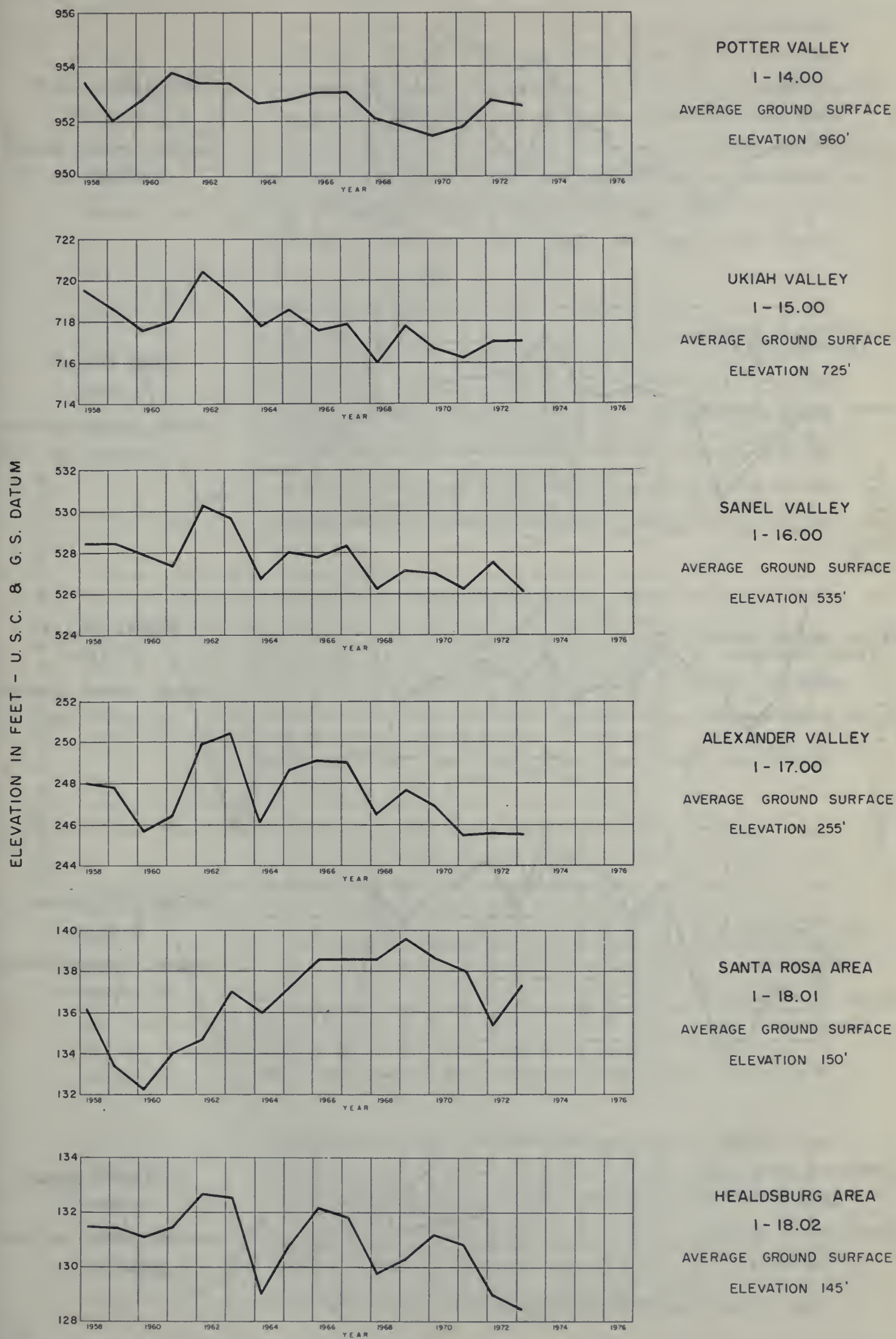
GROUND WATER BASINS IN THE CENTRAL COASTAL AREA

TABLE C-1

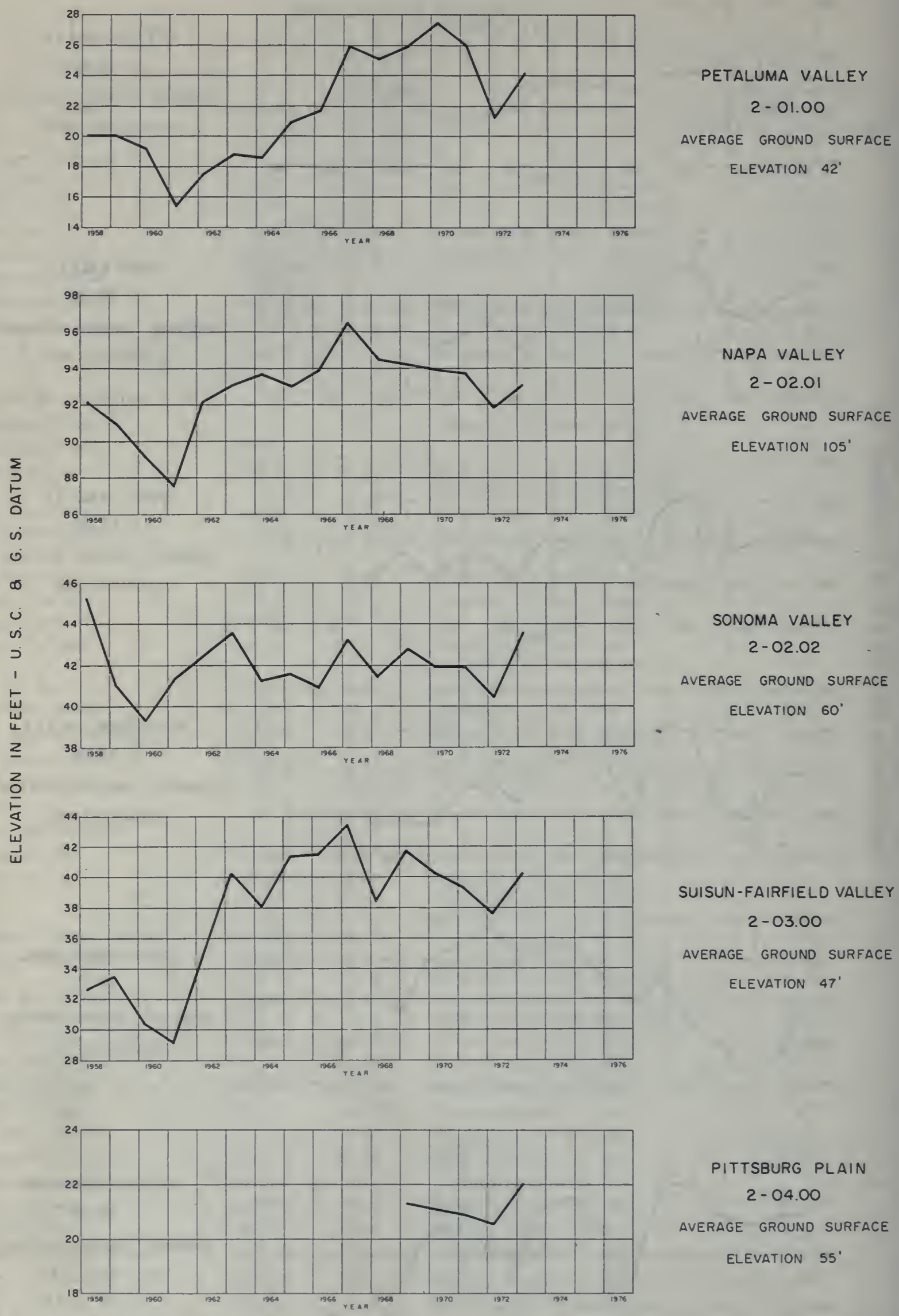
AVERAGE CHANGE OF GROUND WATER LEVELS
AND SUMMARY OF WELL MEASUREMENTS REPORTED

Ground Water Basin or Area		Average Change Spring 1972 to Spring 1973 in Feet	Measuring Agency	Number of Wells Reported		
Name	Number			Monthly 1972-73	Fall 1972	Spring 1973
NORTH COASTAL REGION						
Potter Valley	1-14.00	-0.3	Department of Water Resources		2	2
Ukiah Valley	1-15.00	0.0	Department of Water Resources		2	2
Sanel Valley	1-16.00	-1.4	Department of Water Resources		3	3
Alexander Valley	1-17.00	-0.1	Department of Water Resources		6	6
Santa Rosa Valley	1-18.00					
Santa Rosa Area	1-18.01	+2.0	Department of Water Resources		12	13
Healdsburg Area	1-18.02	-0.5	U. S. Geological Survey		9	9
Lower Russian River Valley	1-98.00		Department of Water Resources			2
SAN FRANCISCO BAY REGION						
Petaluma Valley	2-01.00	+3.0	Department of Water Resources		6	6
Napa-Sonoma Valley	2-02.00					
Napa Valley	2-02.01	+1.3	Napa County			98
			Department of Water Resources		6	6
Sonoma Valley	2-02.02	+3.2	Department of Water Resources		5	5
Suisun-Fairfield Valley	2-03.00	+2.5	Solano County		14	14
			Department of Water Resources	8		
Pittsburg Plain	2-04.00	+1.5	Department of Water Resources		6	5
Ygnacio Valley	2-06.00	+3.3	Department of Water Resources		5	5
Santa Clara Valley	2-09.00					
East Bay Area	2-09.01	+11.0	Alameda County FC & WCD	3	45	45
			Alameda County Water District		491	491
South Bay Area	2-09.02	+5.7	Santa Clara Valley WD	235		
Livermore Valley	2-10.00	+4.3	Alameda County FC & WCD	8	142	142
Half Moon Bay Terrace	2-22.00	+4.9	Department of Water Resources		8	8
San Gregorio Valley	2-24.00	+2.0	Department of Water Resources		5	5
Pescadero Valley	2-26.00	+5.2	Department of Water Resources		7	7
CENTRAL COASTAL REGION						
Soquel Valley	3-01.00	+2.0	Department of Water Resources		3	3
Pajaro Valley	3-02.00	-2.6*	Monterey County FC & WCD		39	
			Department of Water Resources		7	
			Santa Cruz County		49	
Gilroy-Hollister Valley	3-03.00	+0.7				
South Santa Clara County	3-03.01	+4.4	Santa Clara Valley WD		6	
			Department of Water Resources		17	
San Benito County	3-03.02	-0.6	San Benito County		68	
			Department of Water Resources		7	
Salinas Valley	3-04.00	+0.9				
Pressure Area	3-04.01	+3.4*	Monterey County FC & WCD		135	
East Side Area	3-04.02	-3.1*	Monterey County FC & WCD		67	
Forebay Area	3-04.03	-0.6*	Monterey County FC & WCD		42	
Arroyo Seco Cone	3-04.04	-2.9*	Monterey County FC & WCD		19	
Upper Valley Area	3-04.05	+1.7*	Monterey County FC & WCD		43	
Paso Robles Basin	3-04.06	+10.0	San Luis Obispo FC & WCD			36
Seaside Area	3-04.08	0.0*	Monterey County FC & WCD		12	
Langley Area	3-04.09	-5.9*	Monterey County FC & WCD		16	
Corral de Tierra Area	3-04.10	-4.2*	Monterey County FC & WCD		25	
Carmel Valley	3-07.00	+3.6	Monterey County FC & WCD		28	
West Santa Cruz Terrace	3-26.00		Department of Water Resources		3	2
TOTAL				254	1360	915

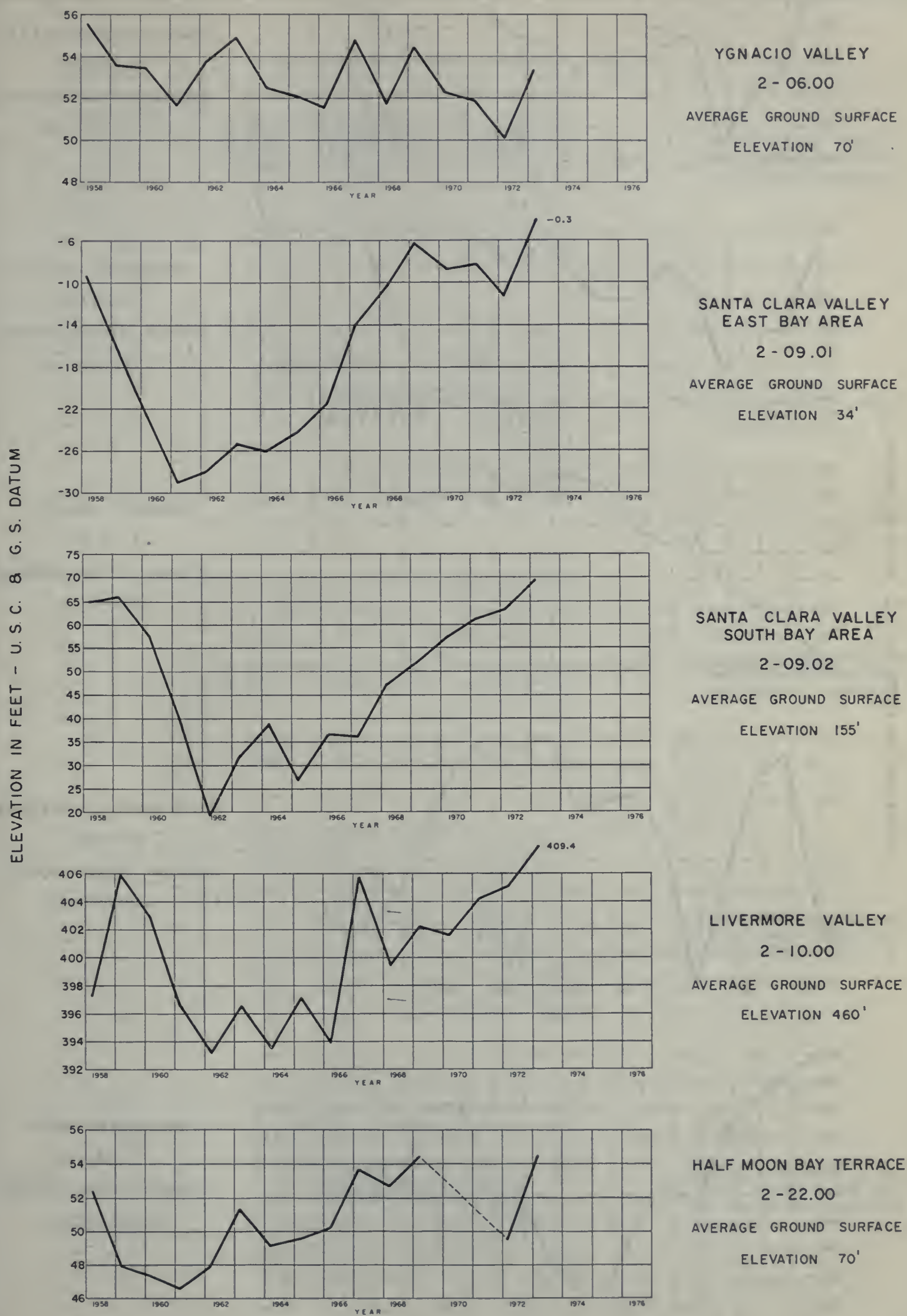
*Average change determined from water level measurements made during fall of 1971 and fall of 1972.



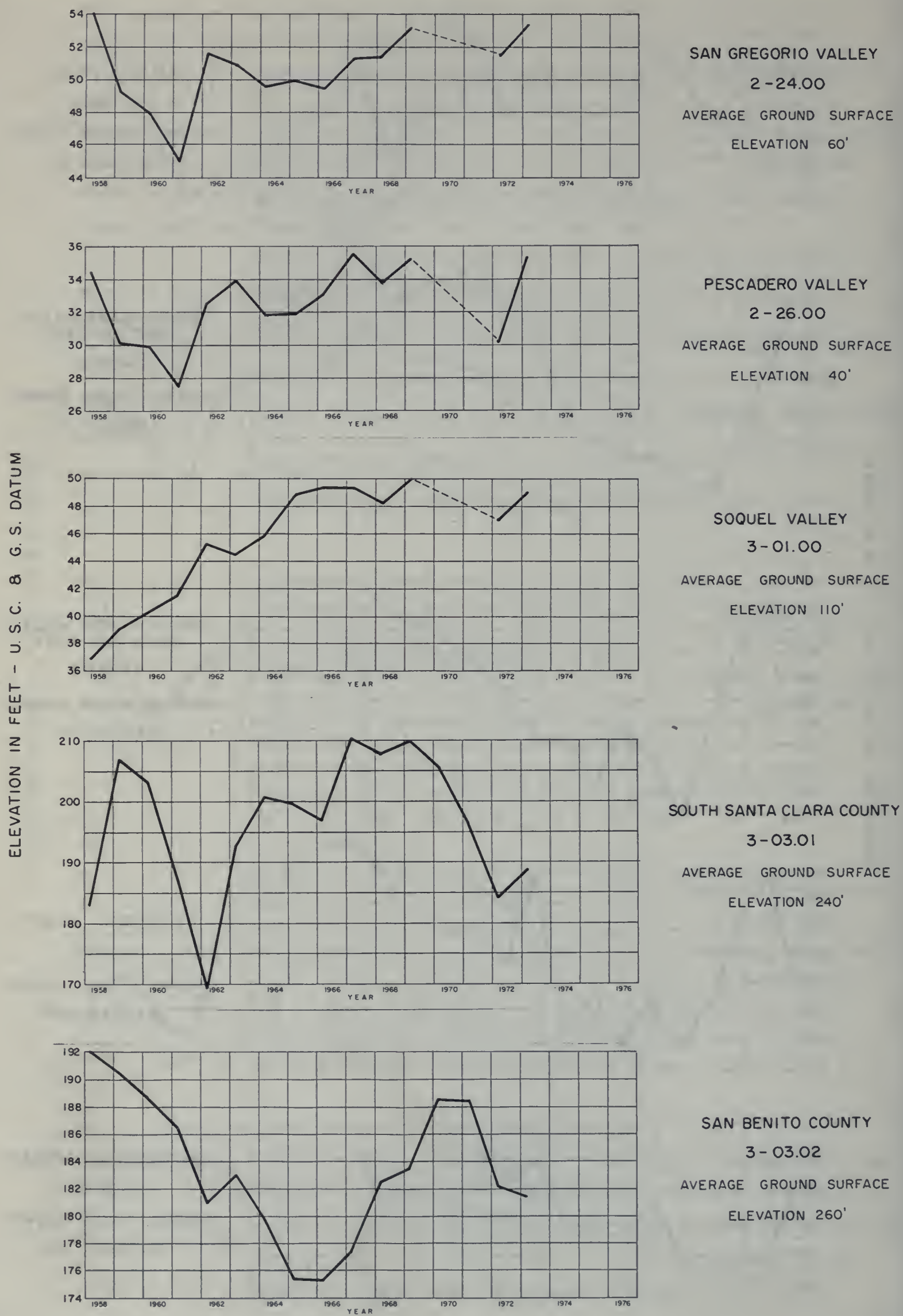
FLUCTUATION OF AVERAGE GROUND WATER LEVEL IN SELECTED AREAS



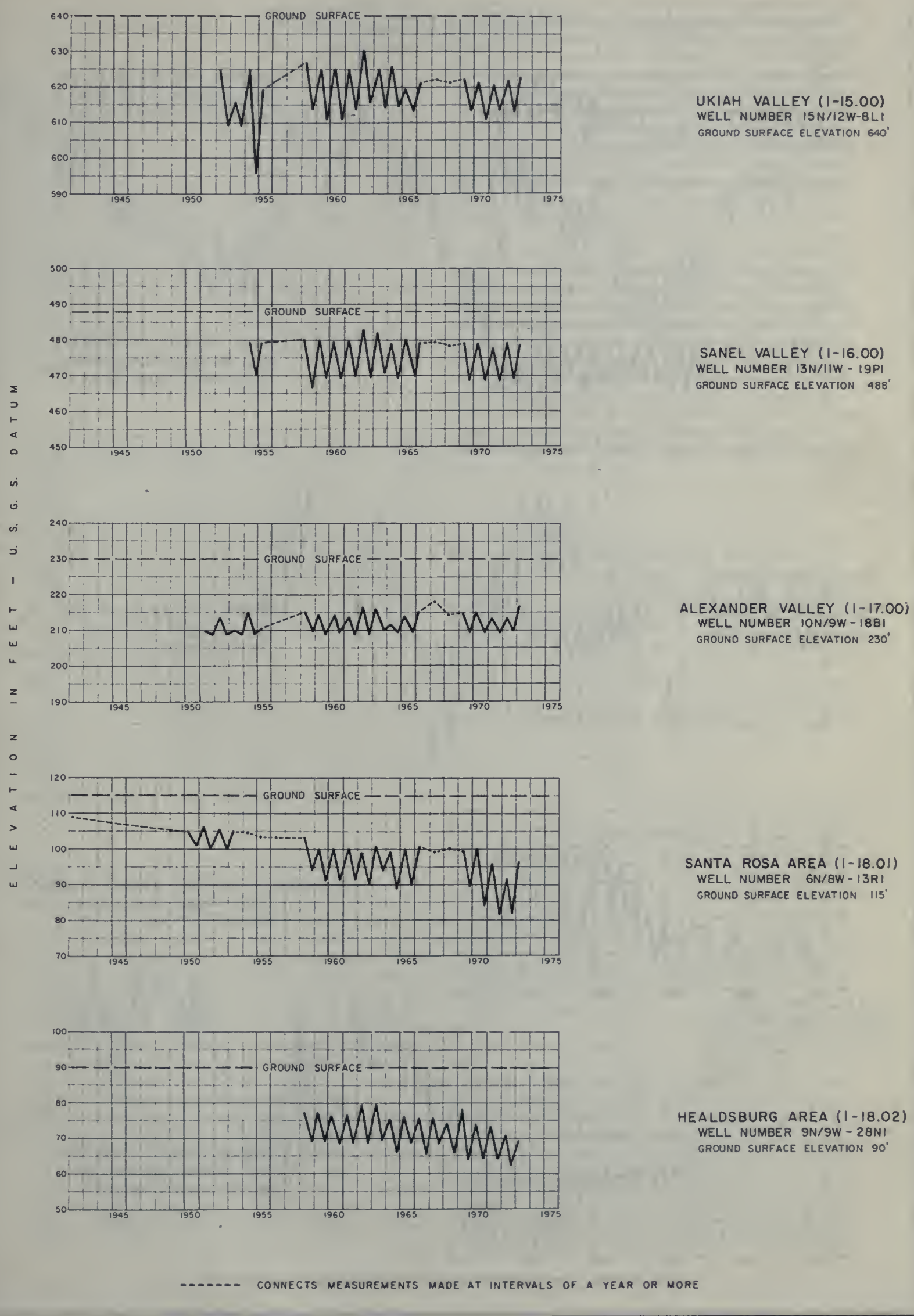
FLUCTUATION OF AVERAGE GROUND WATER LEVEL IN SELECTED AREAS



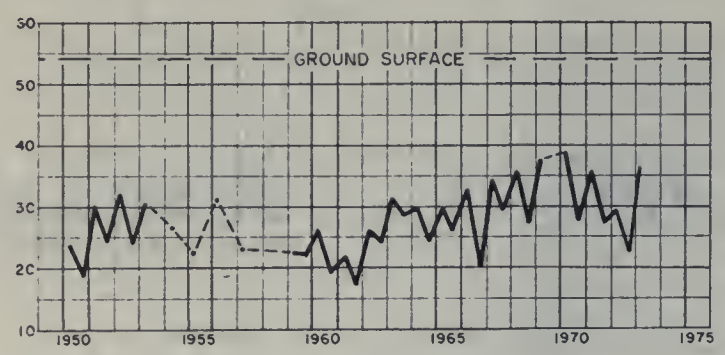
FLUCTUATION OF AVERAGE GROUND WATER LEVEL IN SELECTED AREAS



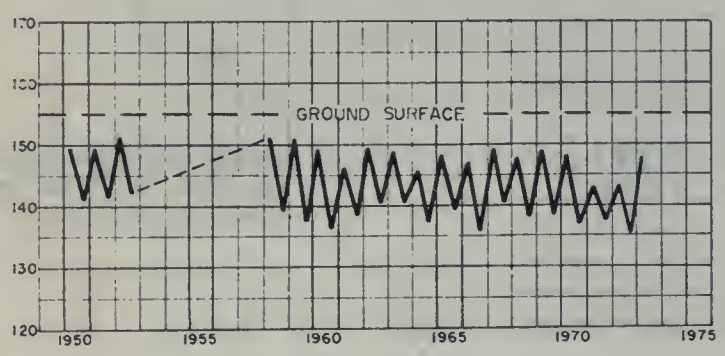
FLUCTUATION OF AVERAGE GROUND WATER LEVEL IN SELECTED AREAS



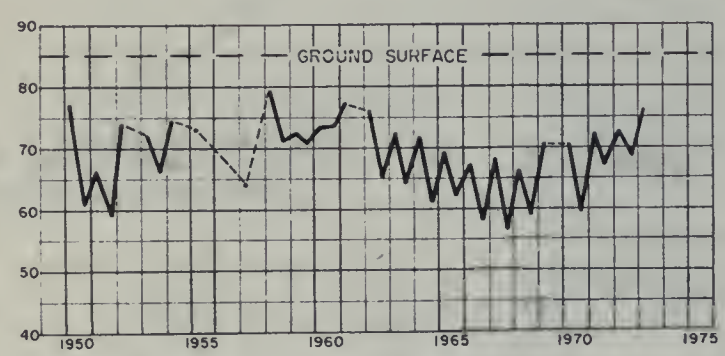
FLUCTUATION OF WATER LEVEL IN WELLS



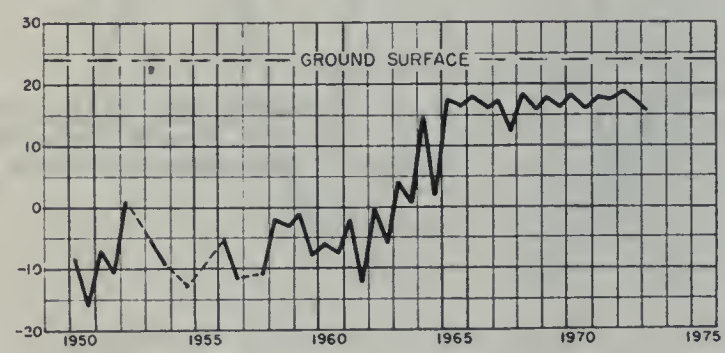
PETALUMA VALLEY (2-01.00)
WELL NUMBER 5N/7W-26R1
GROUND SURFACE ELEVATION 54'



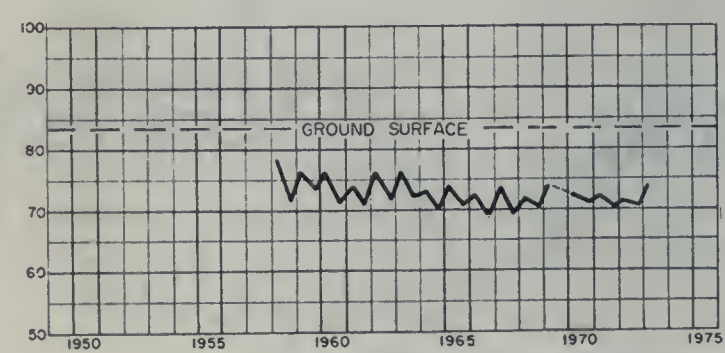
NAPA VALLEY (2-02.01)
WELL NUMBER 7N/5W - 9Q2
GROUND SURFACE ELEVATION 155'



SONOMA VALLEY (2-02.02)
WELL NUMBER 5N/5W-17C1
GROUND SURFACE ELEVATION 85'



SUISUN-FAIRFIELD VALLEY (2-03.00)
WELL NUMBER 5N/2W-27J2
GROUND SURFACE ELEVATION 24'



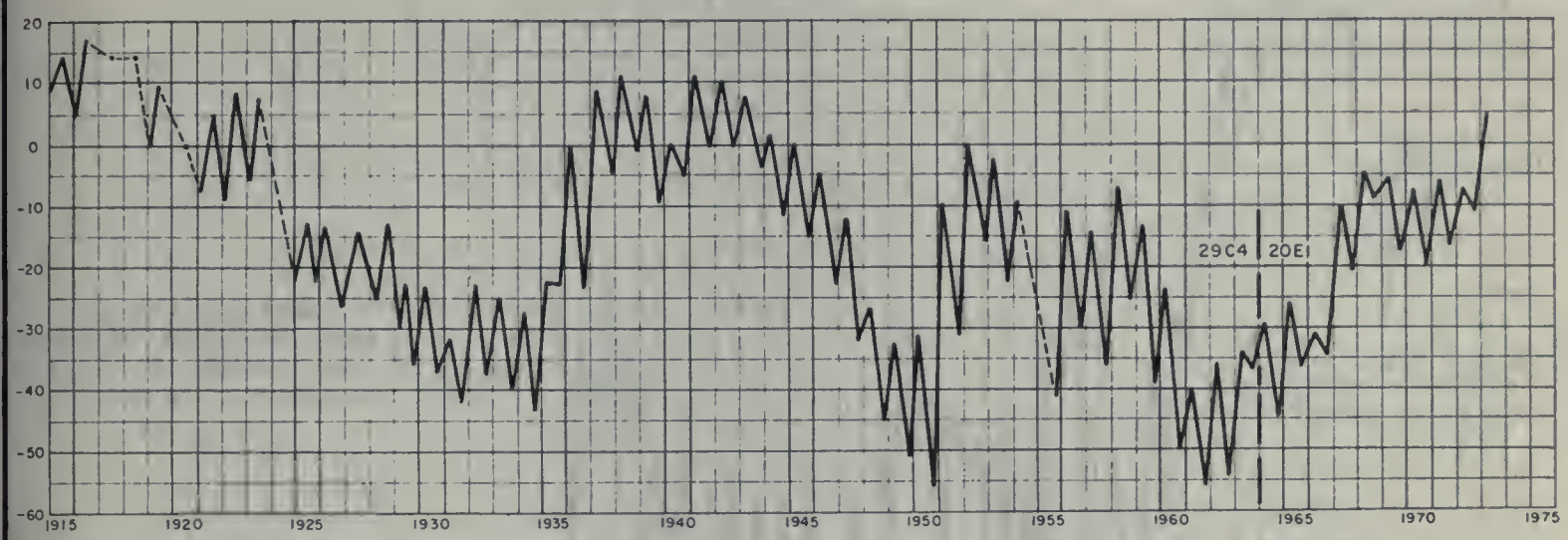
YGNACIO VALLEY (2-06.00)
WELL NUMBER 1N/1W-7K1
GROUND SURFACE ELEVATION 83'

ELEVATION IN FEET - U. S. G. S. DATUM

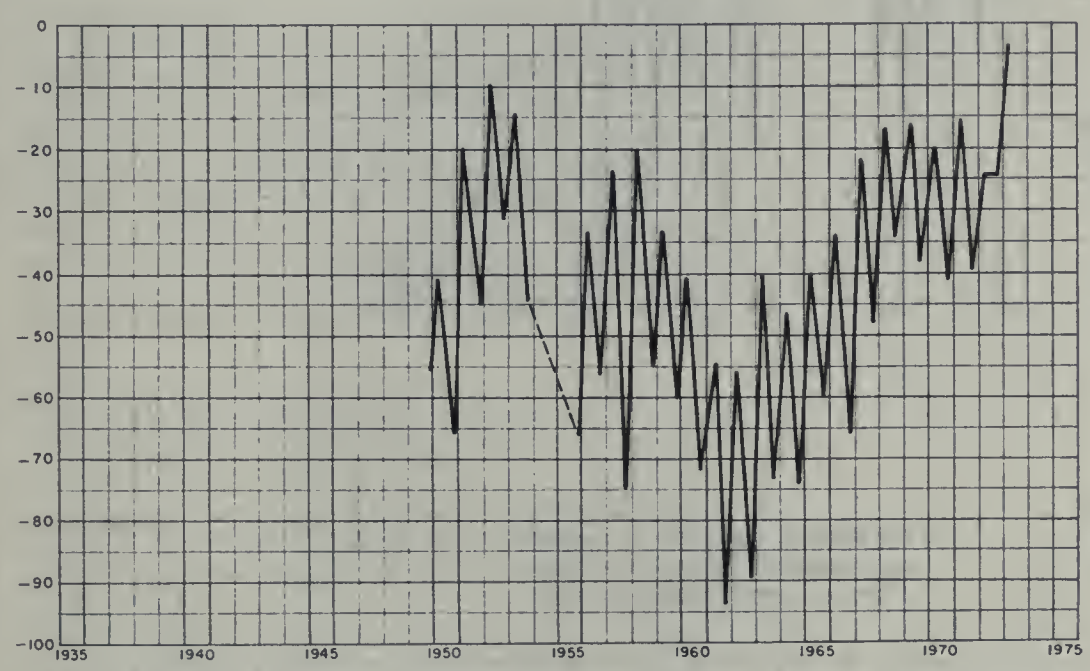
------- CONNECTS MEASUREMENTS MADE AT INTERVALS OF A YEAR OR MORE

FLUCTUATION OF WATER LEVEL IN WELLS

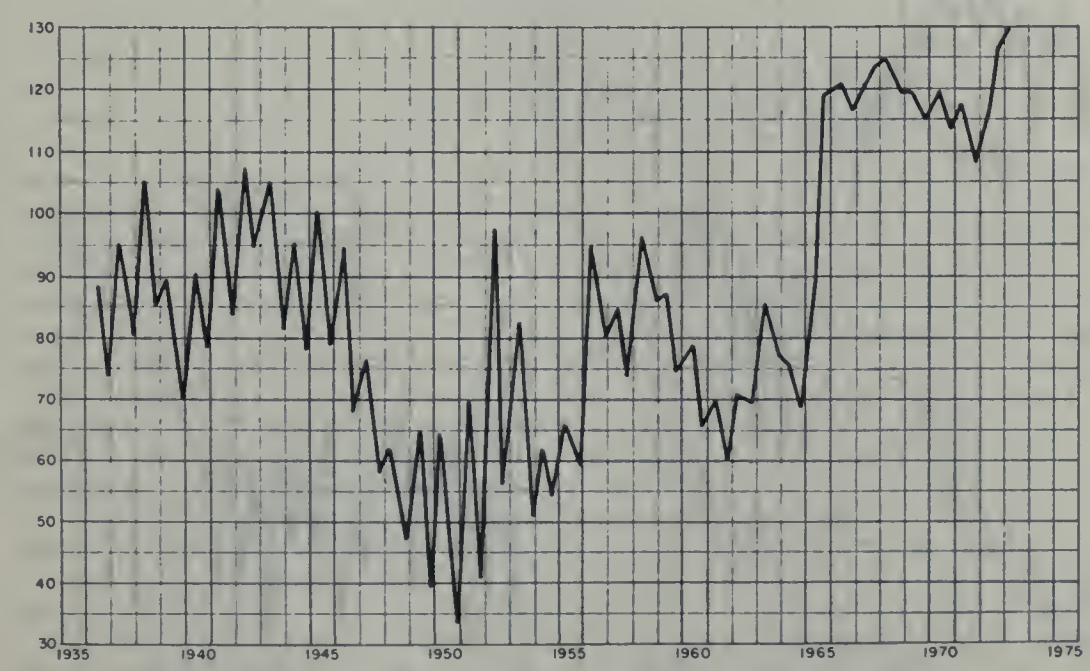
SANTA CLARA VALLEY
EAST BAY AREA - UPPER AQUIFER (2-09.01)
WELL NUMBERS 4S/1W-29C4, 20E1
GROUND SURFACE ELEVATION 55'



ELEVATION IN FEET - U. S. G. S. DATUM



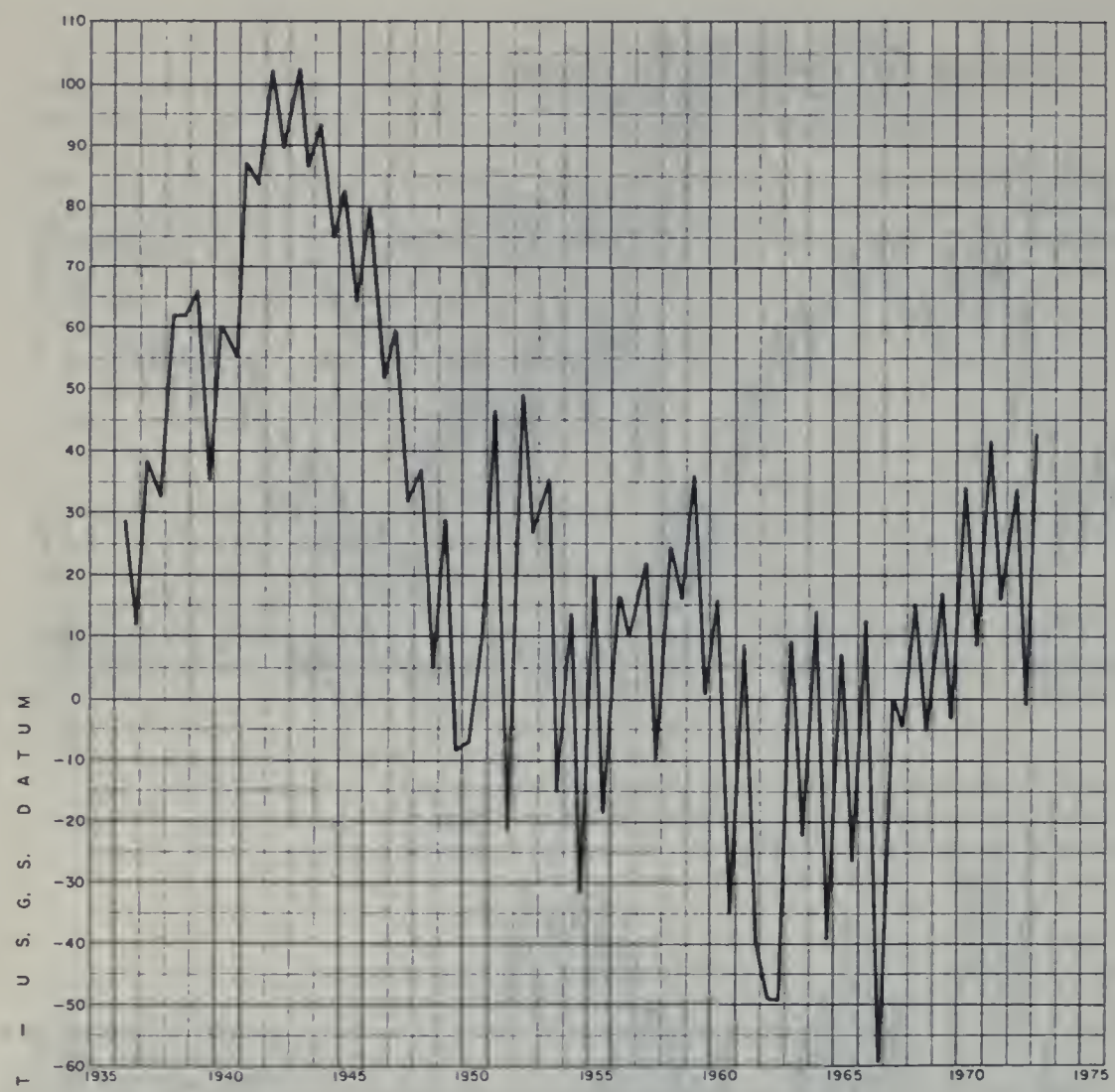
SANTA CLARA VALLEY
EAST BAY AREA
LOWER AQUIFER (2-09.01)
WELL NUMBER 5S/1W-5F1
GROUND SURFACE ELEVATION 36'



SANTA CLARA VALLEY
SOUTH BAY AREA (2-09.02)
WELL NUMBER 6S/1E-23P2
GROUND SURFACE ELEVATION 240'

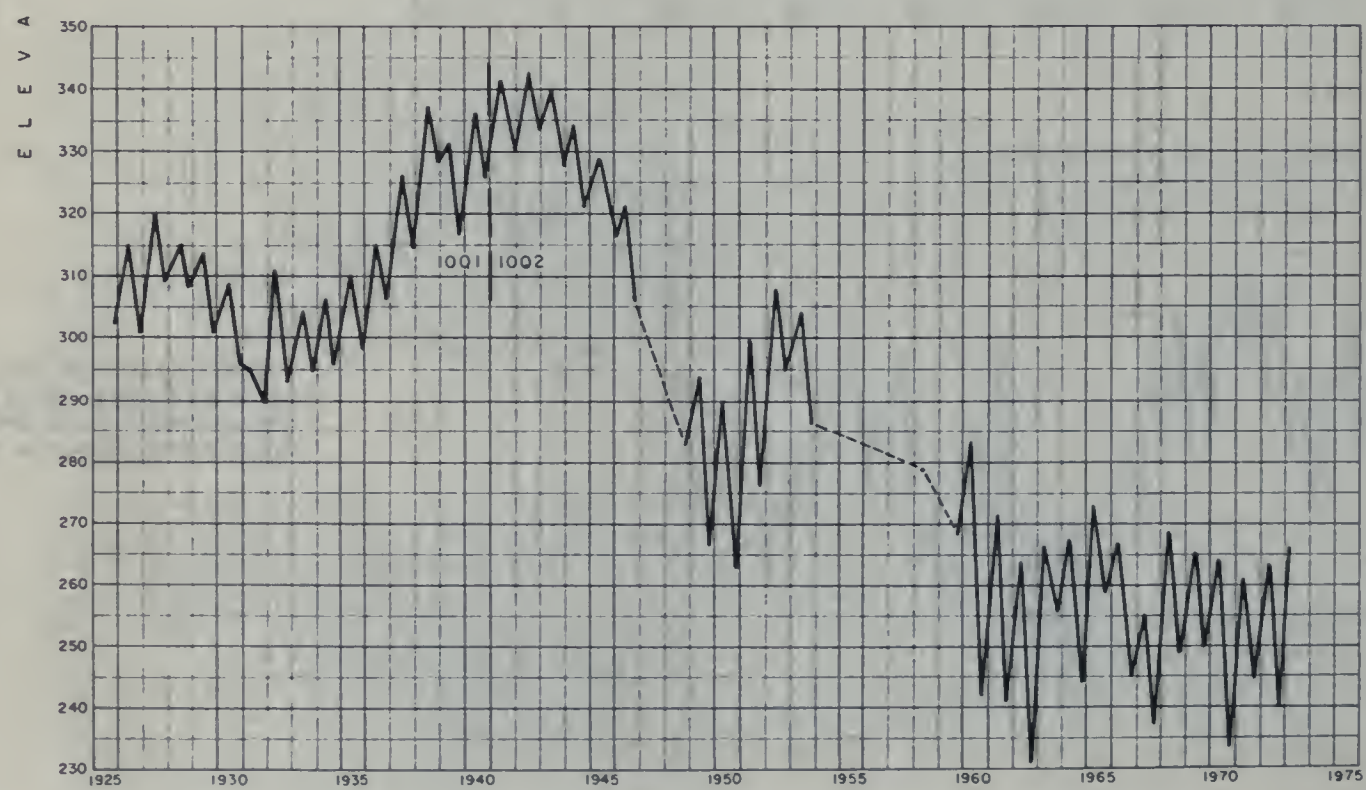
------- CONNECTS MEASUREMENTS MADE AT INTERVALS OF A YEAR OR MORE

FLUCTUATION OF WATER LEVEL IN WELLS



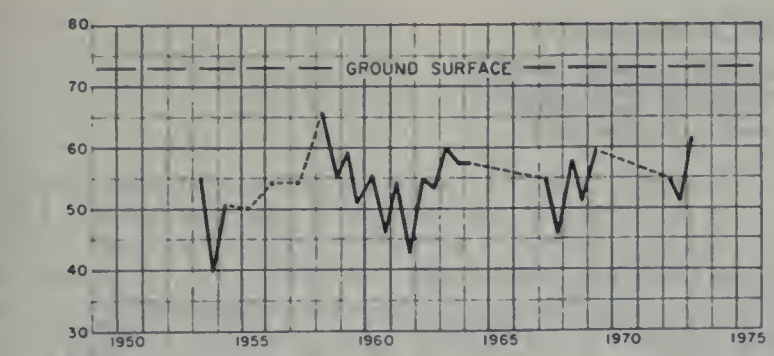
SANTA CLARA VALLEY
SOUTH BAY AREA (2-09.02)
WELL NUMBER 7S/1E-31A2
GROUND SURFACE ELEVATION 152'

LIVERMORE VALLEY (2-10.00)
WELL NUMBERS 3S/1E-10Q1, 10Q2
GROUND SURFACE ELEVATION 369'

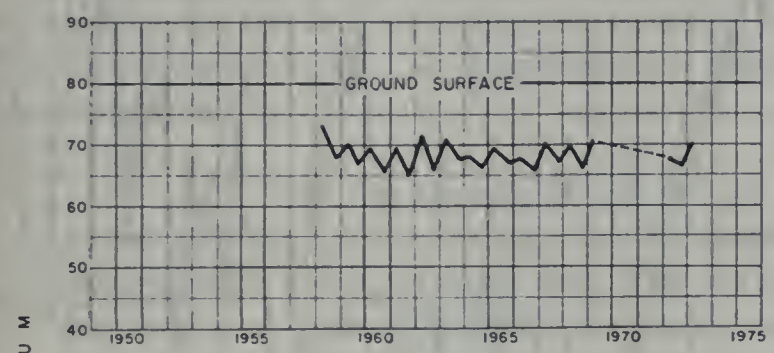


------- CONNECTS MEASUREMENTS MADE AT INTERVALS OF A YEAR OR MORE

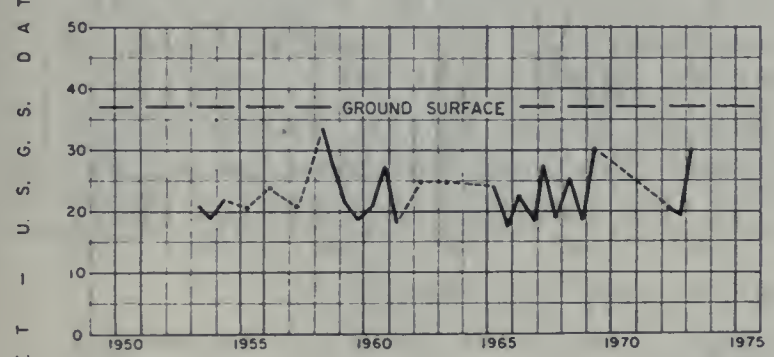
FLUCTUATION OF WATER LEVEL IN WELLS



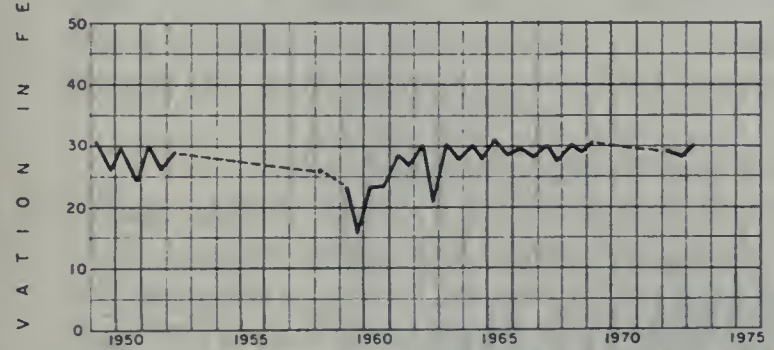
HALF MOON BAY TERRACE (2-22.00)
WELL NUMBER 5S/5W-20L1
GROUND SURFACE ELEVATION 73'



SAN GREGORIO VALLEY (2-24.00)
WELL NUMBER 7S/5W-14C1
GROUND SURFACE ELEVATION 80'



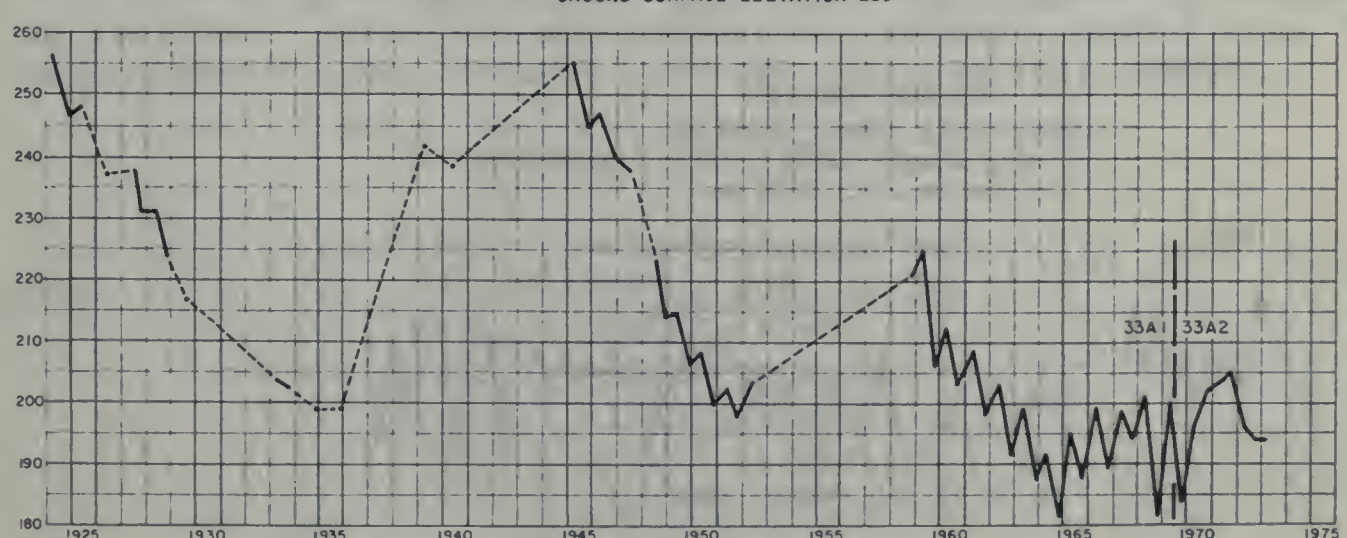
PESCADERO VALLEY (2-26.00)
WELL NUMBER 8S/5W-10K1
GROUND SURFACE ELEVATION 37'



SOQUEL VALLEY (3-01.00)
WELL NUMBER 11S/1W-10C1
GROUND SURFACE ELEVATION 90'

ELEVATION IN FEET - U. S. G. S. DATUM

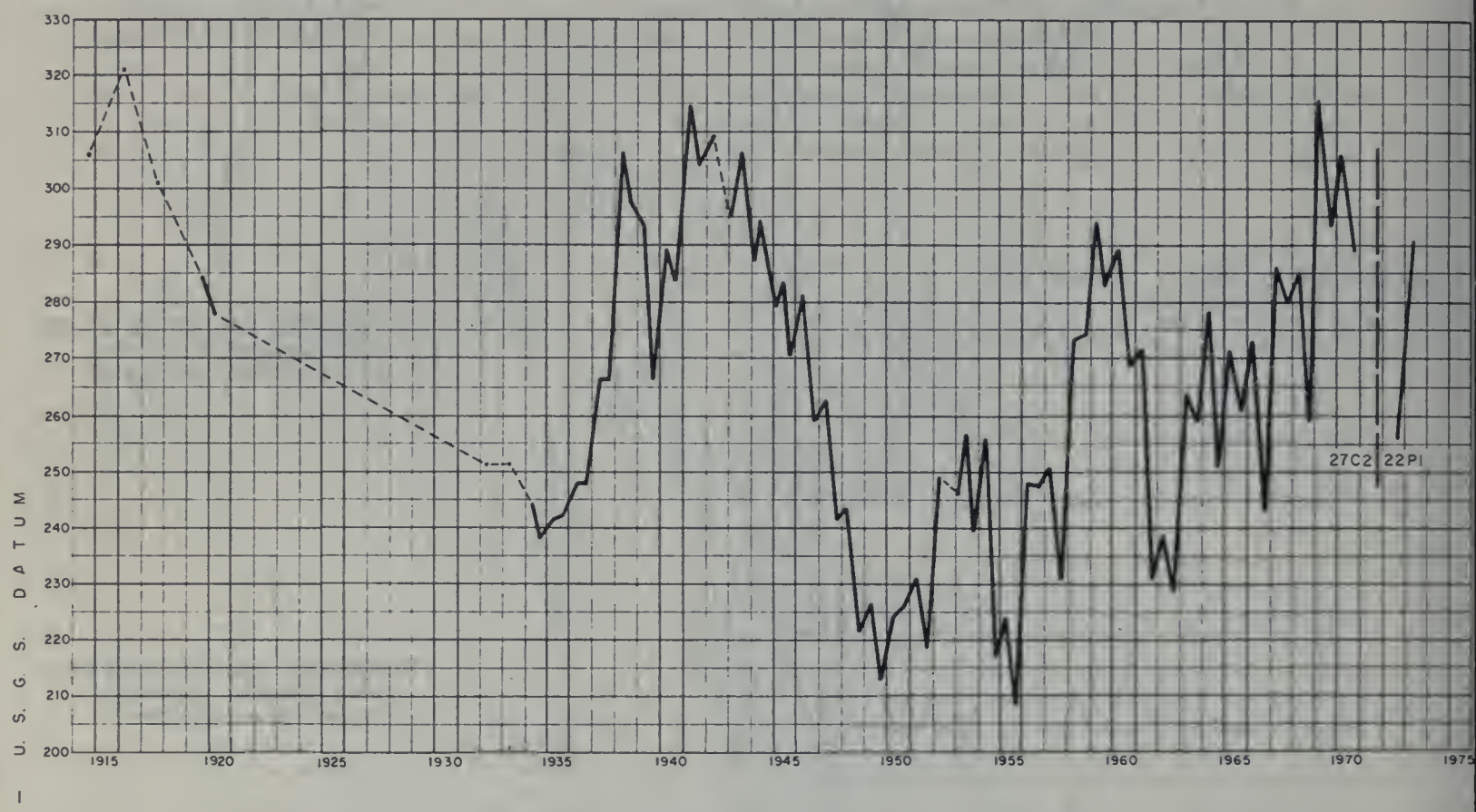
GILROY - HOLLISTER VALLEY
SAN BENITO COUNTY (3-03.02)
WELL NUMBERS 12S/5E-33A1, 33A2
GROUND SURFACE ELEVATION 280'



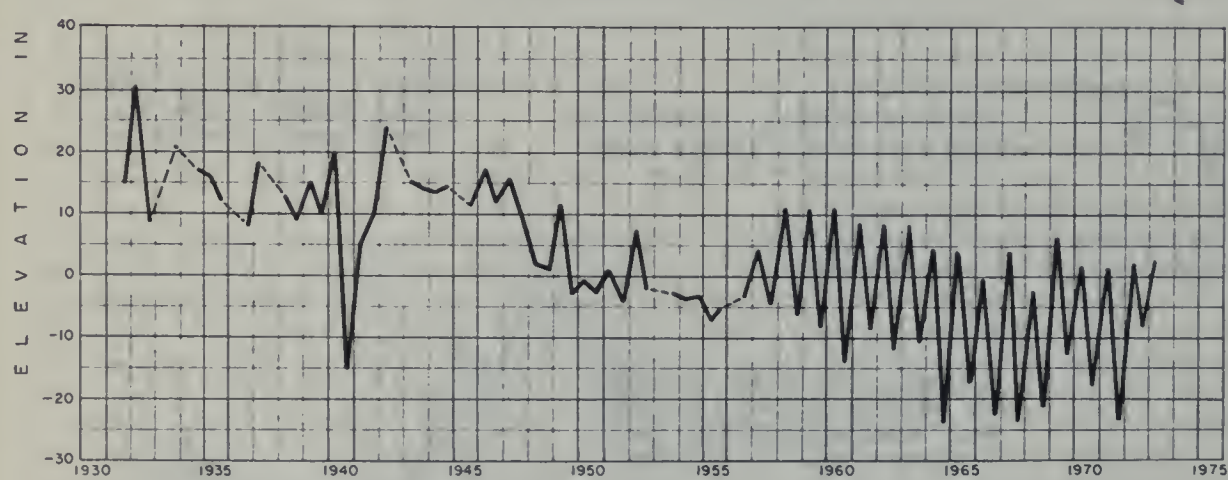
------- CONNECTS MEASUREMENTS MADE AT INTERVALS OF A YEAR OR MORE

FLUCTUATION OF WATER LEVEL IN WELLS

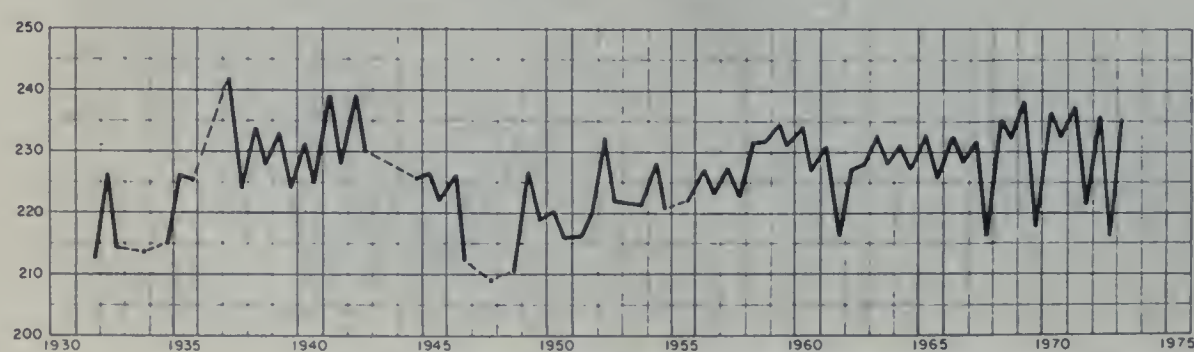
GILROY-HOLLISTER VALLEY
SOUTH SANTA CLARA COUNTY (3-03.01)
WELL NUMBER 9S/3E-27C2,22P1
GROUND SURFACE ELEVATION 347',354'



SALINAS VALLEY
PRESSURE AREA - 400' AQUIFER (3-04.01)
WELL NUMBER 14S/3E-18J1
GROUND SURFACE ELEVATION 69'



SALINAS VALLEY
UPPER VALLEY AREA (3-04.05)
WELL NUMBER 19S/7E-10P1
GROUND SURFACE ELEVATION 315'



------- CONNECTS MEASUREMENTS MADE AT INTERVALS OF A YEAR OR MORE

FLUCTUATION OF WATER LEVEL IN WELLS

Appendix D

SURFACE WATER QUALITY DATA

This appendix contains surface water quality data collected at stream and estuarine stations in the Central Coastal Area during the period from October 1, 1972, through September 30, 1973. Samples were collected by the Department of Water Resources, U. S. Bureau of Reclamation, U. S. Geological Survey, and Santa Cruz County Health Department.

The Department of Water Resources Laboratory used procedures from the latest edition of "Standard Methods for the Examination of Water and Wastewater" for the determination of mineral, nutrient, and biological constituents. Pesticides are determined in accordance with the "Guide to the Analysis of Pesticide Residues", U. S. Department of Health, Education and Welfare, 1965. Laboratory services for the U. S. Bureau of Reclamation are provided by the U. S. Air Force at McClellan Air Force Base. It uses procedures in accordance with the "FWPCA Methods for Chemical Analysis of Water and Wastes", November 1968, for all parameters.

Two numbering systems are used in this bulletin for identifying water quality stations. The first is for those stations for which the flow of water can be measured readily, as in streams and rivers. This system is described in Bulletin No. 157, "Index to Stream Gaging Stations In and Adjacent to California, 1970", Department of Water Resources.

The second numbering system is used for stations located in broad water bodies. This system is described as follows: The first two digits show the hydrographic unit as identified in the introduction to Appendix A. The third digit identifies the type of water body and, for this publication, is a "B" for Bay system; "L" for lake; "O" for Pacific Ocean; "R" for reservoir; and "S" for slough. The next digit is the last digit of the latitude in degrees, "3" for 33°, or "9" for 29°. The last three digits are the minutes of latitude to the tenth of a minute. The last four digits are the longitude in the same manner as latitude. A fifth digit indicates a sequence number when two stations have the same 8-digit latitude and longitude numbers.

Example: EO B 802.3 207.1 2

EO	San Francisco Bay
B	Water Body -- Bay
8	38° Latitude
02.3	02.3' Latitude
2	122° Longitude
07.1	07.1' Longitude
2	Second Station

TABLE D-1

SAMPLING STATION DATA AND INDEX

Station	Station Number	Location Latitude ° ' "	Location Longitude ° ' "	Beginning of Record	Data on Pages Indicated: Table Number D-2	D-3	D-4	D-5	D-6	D-7	D-8	Figure Number D-1
ALISAL CREEK AT OLD STAGE ROAD	D2 1255.50	36 41 30	121 34 06	Jan. 1952	42							37
APTOS CREEK BELOW VALENCIA CREEK	D0 2020.00	36 58 26	121 54 10	March 1970	41		59	69				37
ARROYO VALLE NEAR UPSTREAM END OF LAKE DEL VALLE	E5 1423.01	37 34 24	121 41 18	Nov. 1972	53	57	67	76				38
BIG RIVER NEAR MENDOCINO	F8 2720.00	39 18 48	123 42 12	Jan. 1959	54							39
BLANCO DRAIN AT PUMP LIFT	D2 1030.30	36 42 36	121 44 36	May 1970	42	57	59	69	78			37
BRANCIFORTE CREEK AT SANTA CRUZ	D0 1100.00	36 59 10	122 00 47	March 1970	41		59	69				37
CARMEL RIVER AT ROBLES DEL RIO	D4 1200.00	36 28 30	121 43 36	Jan. 1952	43		59	69				37
CHADBOURNE SLOUGH AT CHADBOURNE ROAD	EOS 811.0 204.8	38 10 57	122 04 50	Jan. 1967	51		66	75				38
CORDELIA SLOUGH AT CYGNUS	EOS 809.2 205.3	38 09 10	122 05 19	Jan. 1967	50		65	74				38
CORDELIA SLOUGH AT UPPER END	EOS 811.5 207.2	38 11 27	122 07 09	Sept. 1967	52		66	75				38
GABILAN CREEK NEAR SANTA RITA	D2 1240.00	36 45 18	121 36 36	Jan. 1952	42							37
GREEN VALLEY CREEK AT CORDELIA	E3 2100.51	38 12 42	122 07 47	Dec. 1968	53		67	76				38
GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH	EOB 807.0 202.3	38 07 02	122 02 19	Jan. 1968	49	57	65	73				38
HILL SLOUGH AT GRIZZLY ISLAND ROAD	EOS 813.6 201.2	38 13 34	122 01 14	Jan. 1967	52		66	75				38
HONKER BAY NEAR WHEELER POINT	EOB 804.4 156.2	38 04 26	121 56 12	Jan. 1968	48		64	73				38
LAKE MERRITT AT BOATHOUSE DOCK	E4L 748.1 215.6	37 48 08	122 15 35	March 1972	53			76	78			38
MERRITT LAKE DRAIN AT PUMP	D2 1006.60	36 45 06	121 44 12	Aug. 1970	42		59	69	78			37
MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD	EOS 811.2 158.5	38 11 14	121 58 32	Feb. 1967	51		66	75				38
NAPA RIVER NEAR NAPA	E3 1250.00	38 22 06	122 18 08	Nov. 1929	53							38
NAVARRO RIVER NEAR NAVARRO	F8 2100.00	39 10 15	123 39 55	Jan. 1959	54							39
NOYO RIVER NEAR FORT BRAGG	F8 3100.00	39 25 55	123 44 10	Jan. 1951	54							39
OLD SALINAS RIVER ABOVE TEMBLADERO SLOUGH	D2 1006.50	36 46 12	121 47 12	April 1972	42	57						37
PACHECO CREEK AT HIGHWAY 156 BRIDGE	D1 1667.50	36 56 36	121 23 00	Jan. 1952	42							37
PAJARO RIVER AT CHITTENDEN	D1 1250.00	36 54 00	121 35 54	Dec. 1951	41		59	69				37
PAJARO RIVER AT THURWACHTER ROAD	D1 1075.30	36 52 48	121 47 30	May 1970	41	57						37
PANCHO RICO CREEK AT SARGENTS ROAD	D2 1773.20	36 01 12	120 53 18	Jan. 1952	43							37
QUAIL CREEK AT OLD STAGE ROAD	D2 1260.50	36 37 00	121 31 18	Jan. 1952	42							37
RUSSIAN RIVER NEAR GUERNEVILLE	F9 1100.00	38 30 00	122 56 05	Nov. 1969	54					80		39
SACRAMENTO RIVER AT CHIPPS ISLAND	EOB 802.8 155.0	38 02 47	121 55 02	Jan. 1968	46	57	62	71	78			38
SALINAS RECLAMATION CANAL AT AIRPORT WAY	D2 1020.70	36 39 42	121 37 18	May 1970	42	57						37
SALINAS RECLAMATION CANAL AT ALISAL S.T.P.	D2 1016.50	36 40 06	121 38 06	May 1969	42							37
SALINAS RIVER NEAR BRADLEY	D2 1850.00	35 55 42	120 52 00	Aug. 1958	43		59	69				37
SALINAS RIVER NEAR GONZALES	D2 1325.10	36 29 12	121 28 06	May 1969	43	57	59	69				37
SAN BENITO RIVER AT HIGHWAY 156 BRIDGE	D1 2000.00	36 51 06	121 25 42	March 1957	42							37
SAN BENITO RIVER NEAR WILLOW CREEK SCHOOL	D1 2450.00	36 36 30	121 12 00	Aug. 1958	42		59	69				37
SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)	EOB 736.2 212.0	37 36 10	122 12 00	June 1971	43		60	70	78		82	38
SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL)	EOB 735.0 215.0	37 35 01	122 14 59	Sept. 1969	43		59	69	78		82	38
SAN FRANCISCO BAY AT TREASURE ISLAND	EOB 749.2 222.4	37 49 15	122 22 26	July 1965	44		60	70	78		82	38
SAN LORENZO CREEK AT FOOTHILL LINE	D2 1663.05	36 16 06	121 04 06	Jan. 1952	43							37
SAN LORENZO RIVER AT BOULDER CREEK	D0 1498.01	37 06 47	122 06 40	March 1970	41		59	69				37
SAN LORENZO RIVER AT PARADISE PARK	D0 1180.01	37 00 37	122 02 34	Sept. 1969	41		59	69		79		37
SAN PABLO BAY NEAR MOUTH OF PETALUMA RIVER	EOB 805.3 226.3	38 05 20	122 26 20	March 1971	49		64	73				38
SAN PABLO BAY NEAR PINOLE POINT	EOB 801.8 222.3	38 01 50	122 22 15	March 1971	44	57	60	71				38
SAN PABLO BAY NEAR RODEO	EOB 803.5 217.0	38 03 50	122 17 00	March 1971	46	57	62	72	78			38
SCOTT CREEK AT HIGHWAY 1	D0 4010.01	37 02 26	122 13 39	March 1970	41		59	69				37
SOQUEL CREEK AT SOQUEL	D0 3100.00	36 59 29	121 57 17	Dec. 1951	41		59	69				37
SUISUN BAY OFF BULLS HEAD POINT NEAR MARTINES	EOB 802.7 207.0	38 02 40	122 07 00	Sept. 1972	45	57	61	71	78			38
SUISUN BAY OFF MIDDLE POINT	EOB 803.6 159.3	38 03 36	121 59 20	Jan. 1968	47		63	72				38
SUISUN BAY NEAR PORT CHICAGO	EOB 803.5 201.4	38 03 30	122 01 25	Aug. 1946	46							38
SUISUN BAY NEAR PRESTON POINT	EOB 804.0 203.0	38 03 58	122 03 00	Sept. 1968	47	57	63	72	78			38
SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND	EOS 810.8 202.8	38 10 50	122 02 45	Sept. 1968	50		65	74				38
UVAS CREEK NEAR MORGAN HILL BL UVAS DAM	D1 1371.50	37 03 36	121 40 18	Aug. 1952	42		59	69				37
ZAYANTE CREEK AT FELTON	D0 1220.01	37 02 53	122 04 00	March 1970	41		59	69				37

HYDROGRAPHIC AREA DESIGNATIONS IN THE CENTRAL COASTAL AREA

Central Coastal Area

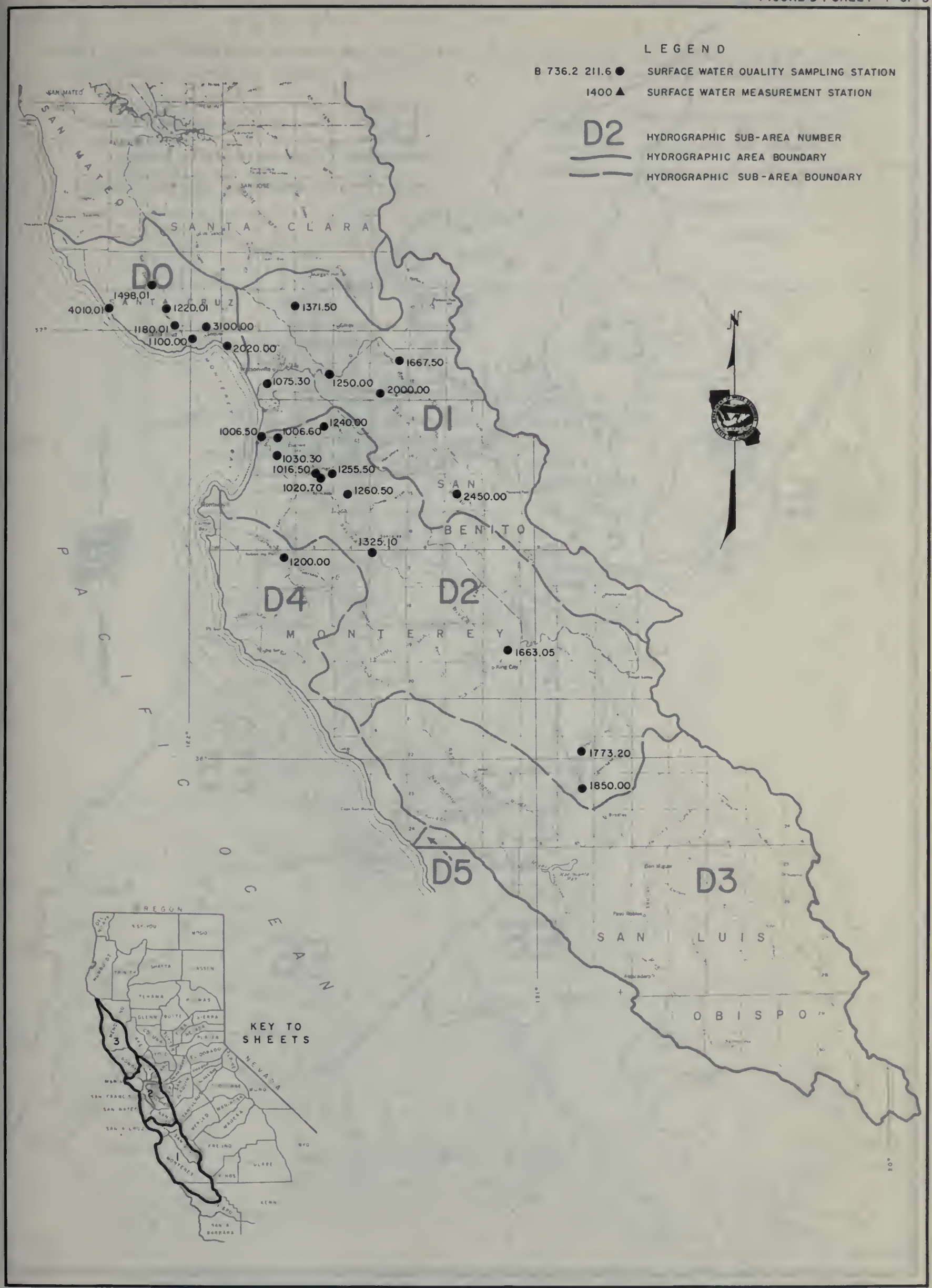
- D0 Santa Cruz
- D1 Pajaro-San Benito Rivers
- D2 Lower Salinas River
- D3 Upper Salinas River
- D4 Monterey Coast

San Francisco Bay Area

- E0 San Francisco Bay
- E1 Coast-Marin
- E2 Marin-Sonoma
- E3 Napa-Solano
- E4 East Bay
- E5 Alameda Creek
- E6 Santa Clara Valley
- E7 Bayside-San Mateo
- E8 Coast-San Mateo

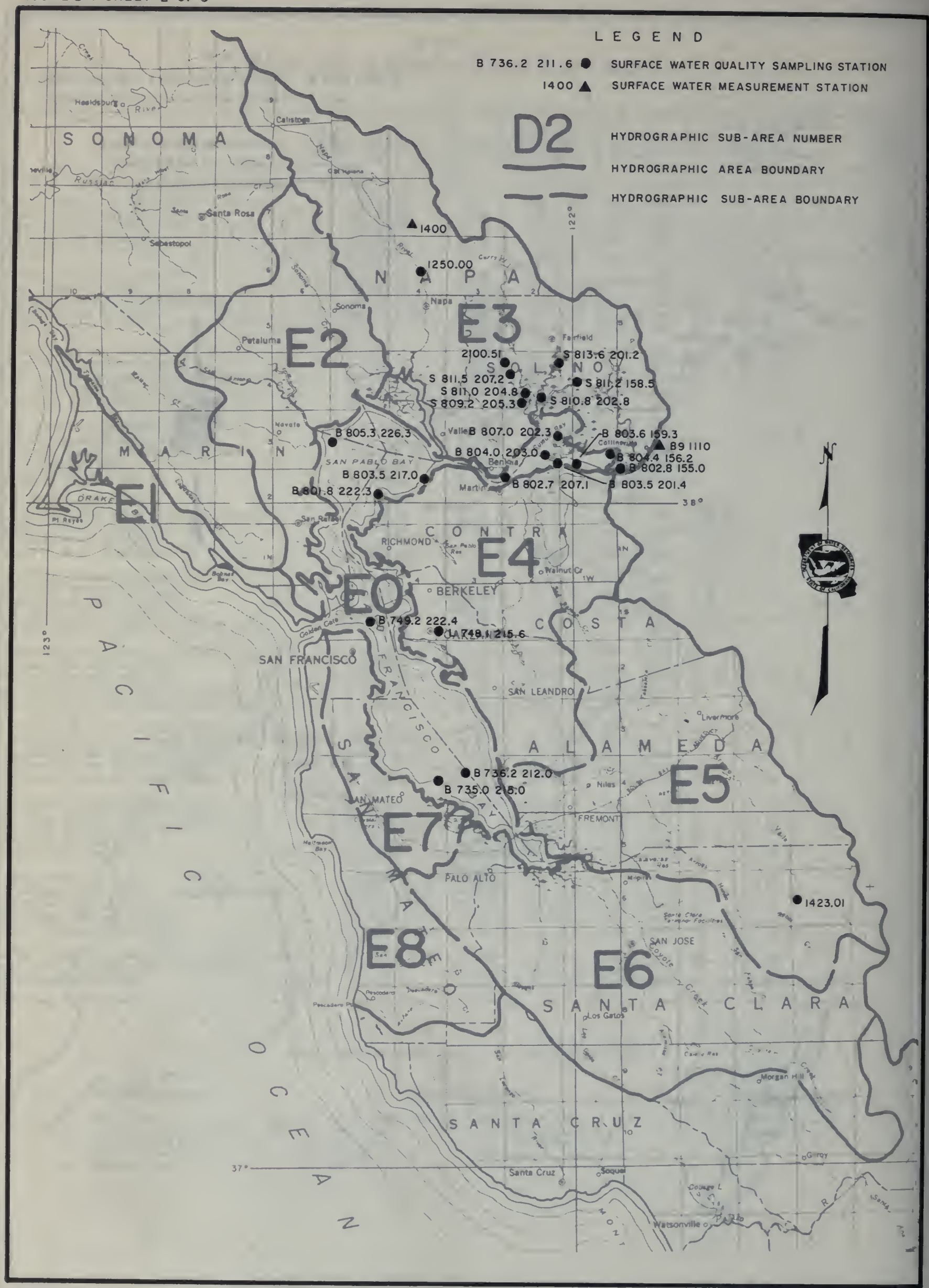
North Coastal Area

- F8 Mendocino Coast
- F9 Russian River



SURFACE WATER OBSERVATION STATIONS 1972-73

FIGURE D-1 SHEET 2 OF 3



SURFACE WATER OBSERVATION STATIONS 1972-73

SURFACE WATER OBSERVATION STATIONS 1972-73

TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

Sampler and Lab Agency Codes

5001 - U. S. Bureau of Reclamation
5050 - Department of Water Resources
5063 - Santa Cruz County Health Department

Abbreviations

TIME - Pacific Standard Time on a 24-hour clock

G.H. - Instantaneous gage height in feet above an established datum
Q - Instantaneous discharge in cubic feet per second
DEPTH - Depth in feet at which sample was collected

DO - Dissolved oxygen content in milligrams per liter
SAT - Percent of normal dissolved oxygen saturation

TEMP - Water temperature at time of sampling in degrees Fahrenheit (F) and Celsius (C)

PH - Measure of acidity (<7) or alkalinity (>7) of water

EC - Electrical conductance in micromhos at 25°C

TDS - Gravimetric determination of total dissolved solids at 180°C
SUM - Total dissolved solids by summation of analyzed constituents

TH - Total hardness
NCH - Noncarbonate hardness - any excess of total hardness over total alkalinity

TURB - Jackson Turbidity Units measured with a Hellege Turbidmeter (E) or a Hack Nephelometer (A)

SAR - Sodium adsorption ratio

PERCENT REACTANCE VALUE is determined by dividing the sum of the cations or anions in milliequivalents per liter into each constituent in milliequivalents per liter, arriving at a percentage. For a partial analysis, an approximate value is determined by multiplying the electrical conductance by 0.01 and using that as the cation or anion sum.

Mineral Constituents

B	-	Boron	K	-	Potassium
CA	-	Calcium	MG	-	Magnesium
CL	-	Chloride	NA	-	Sodium
CO3	-	Carbonate	NO3	-	Nitrate
F	-	Fluoride	SIO2	-	Silica
HCO3	-	Bicarbonate	SO4	-	Sulfate

TABLE D-2 (CONTINUED)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	TURB SAR
DO 1100.00					BRANCIFORTE CREEK AT SANTA CRUZ															
03/19/73	5063		10.0	50.0F	7.2	300	--	--	--	--	--	--	--	--	--	--	--			
1415			88	10.0C													--			
09/27/73	5050		9.7	62 F	7.7	450	41	16	38	--	0	182	--	33	--	--	--	296	171	1A
1330	5050	1E	99	17 C	8.3	482	2.05	1.37	1.65		.00	2.98		.93			--		22	1.3
							40	27	33											
DO 1180.01					SAN LORENZO RIVER AT PARADISE PARK															
10/20/72	5063		9.0	66 F	7.6	397	--	--	--	--	--	--	--	--	--	--	--			
1430			96	19 C													--			
11/20/72	5063		11.5	52 F	7.6	383	--	--	--	--	--	--	--	--	--	--	--			
1030			104	11 C													--			
03/19/73	5063		11.0	50.0F	7.5	335	--	--	--	--	--	--	--	--	--	--	--			
1000			97	10.0C													--			
07/03/73	5050		10.9	61 F	8.0	310	41	8.2	21	1.8	0	135	43	19	.2	.10	--	237	136	1A
1020	5050		110	16 C	8.0	368	2.05	.67	.91	.05	.00	2.21	.90	.54	.00		--	201	26	0.8
							56	18	25	1		61	25	15						
07/30/73	5063		1.5	68 F	7.8	340	--	--	--	--	--	--	--	--	--	--	--			
			16	20 C													--			
09/13/73	5063		11.0	62 F	7.8	350	--	--	--	--	--	--	--	--	--	--	--			
			113	17 C													--			
09/27/73	5050		10.2	57 F	7.7	330	38	9.5	24	--	0	134	--	25	--	--	--	226	134	0A
1000	5050		98	14 C	8.3	376	1.90	.78	1.04		.00	2.20		.71			--		24	0.9
							51	21	28											
DO 1220.01					ZAYANTE CREEK AT FELTON															
03/19/73	5063		11.5	49.0F	7.4	415	--	--	--	--	--	--	--	--	--	--	--			
1115			101	9.4C													--			
09/27/73	5050		10.9	56 F	7.7	330	39	7.7	24	--	0	125	--	25	--	--	--	238	129	0A
1115	5050	7E	105	13 C	8.1	374	1.95	.63	1.04		.00	2.05		.71			--		27	0.9
							54	17	29											
DO 1498.01					SAN LORENZO RIVER AT BOULDER CREEK															
03/19/73	5063		11.5	48.0F	7.2	195	--	--	--	--	--	--	--	--	--	--	--			
1200			100	8.9C													--			
09/27/73	5050		9.6	58 F	7.7	440	46	12	39	--	0	165	--	40	--	--	--	281	166	1A
1150	5050	5E	95	14 C	8.2	485	2.30	1.02	1.70		.00	2.70		1.13			--		31	1.3
							46	20	34											
DO 2020.00					APTOS CREEK BELOW VALENCIA CREEK															
03/19/73	5063		10.5	48 F	7.7	440	--	--	--	--	--	--	--	--	--	--	--			
1330			90	9 C													--			
09/27/73	5050		9.6	60 F	8.0	670	--	--	59	--	13	247	--	59	--	--	--	454	269	0A
1400	5050	1E	96	16 C	8.5	778			2.57		.43	4.05		1.66			--			1.6
									32											
DO 3100.00					SOQUEL CREEK AT SOQUEL															
03/19/73	5063		10.5	49.0F	7.8	530	--	--	--	--	--	--	--	--	--	--	--			
1300			92	9.4C													--			
09/27/73	5050	2.72	10.4	72 F	8.0	650	59	26	51	--	0	196	--	74	--	--	--	443	256	4A
1330	5050		119	22 C	8.3	724	2.94	2.17	2.22		.00	3.21		2.09			--		95	1.4
							40	30	30											
DO 4010.01					SCOTT CREEK AT HIGHWAY 1															
03/19/73	5063		11.0	50.0F	6.8	225	--	--	--	--	--	--	--	--	--	--	--			
0930			97	10.0C													--			
09/27/73	5050		10.4	61 F	7.3	370	24	9.3	25	--	0	103	--	26	--	--	--	190	98	0A
1530	5050	2E	105	16 C	8.3	311	1.20	.76	1.09		.00	1.69		.73			--		14	1.1
							39	25	36											
DO 1075.30					PAJARO RIVER AT THURWACHTER ROAD															
10/25/72	5050		20.0	76.1F	8.4		--	--	--	--	--	--	--	--	.2	1.30	--			
	5050		238	24.5C		8240									.00		--			
DO 1250.00					PAJARO RIVER AT CHITTENDEN															
01/23/73	5050	4.35	9.7	46 F	7.5	270	30	18	27	--	0	148	--	22	6.6	.20	--		149	
0940	5050		81	8 C	7.9	426	1.50	1.48	1.17		.00	2.43		.62	.11		--		28	1.0
							36	36	28			77		20	3					
07/18/73	5050	1.00	10.4	65 F	8.4	1400	--	--	--	--	0	531	--	--	--	--	--		553	
0945	5050		110	18 C	8.1	1950					.00	8.70					--			

TABLE D-2 (CONTINUED)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	TURB SAR
	D1	1371.50			UVAS CREEK NR MORGAN HILL BL UVAS DAM															
07/18/73	5050		10.9	65 F	8.2	250	--	--	--	--	0	171	--	--	--	--	--		152	
1215	5050		117	18 C	8.1	314					.00	2.80					--			
	D1	1667.50			PACHECO CREEK AT HIGHWAY 156 BRIDGE															
05/16/73	5050		12.0	68.0F	8.4	425	34	27	24	1.4	0	222	31	26	.0	.10	--	261	197	
0800	5050		132	20.0C	8.1	487	1.70	2.22	1.04	.04	.00	3.64	.65	.73	.00		--	253	14	0.7
							34	44	21	1		73	13	15						
	D1	2000.00			SAN BENITO RIVER AT HIGHWAY 156 BRIDGE															
05/16/73	5050			87.0F		1250	41	83	125	5.9	0	415	227	93	26.0	1.00	--	836	446	
1315	5050			30.5C	8.1	1340	2.05	6.83	5.44	.15	.00	6.80	4.73	2.62	.42		--	806	104	2.6
							14	47	38	1		47	32	18	3					
	D1	2450.00			SAN BENITO RIVER NEAR WILLOW CREEK SCHOOL															
05/16/73	5050		13.1	80.0F	8.4	1400	15	118	138	2.6	0	414	347	98	.1	1.30	--	929	524	
1225	5050		167	26.6C	8.2	1460	.75	9.70	6.00	.07	.00	6.79	7.22	2.76	.00		--	924	183	2.6
							5	59	36			40	43	16						
07/18/73	5050		9.8	80 F	8.4	850	--	--	--	--	17	418	--	--	--	--	--		411	
1340	5050		125	27 C	8.5	876					.57	6.85					--			
	D2	1006.50			OLD SALINAS RIVER ABOVE TEMBLADERO SLOUGH															
10/25/72	5050		13.7		8.4		--	--	--	--	--	--	--	--	2.8	.80	--			
	5050					2500									.05		--			
	D2	1006.60			MERRITT LAKE DRAIN AT PUMP															
01/23/73	5050		7.3	45 F	6.9	2150	218	145	240	--	0	269	--	221	158	.50	--		1140	
1120	5050		60	7 C	8.1	2860	10.88	11.92	10.44		.00	4.41		6.23	2.55		--		920	3.1
							33	36	31			33		47	19					
07/18/73	5050		9.4	64 F	8.2	1950	--	--	--	--	0	473	--	--	--	--	--		1010	
0820	5050		98	18 C	8.3	2950					.00	7.75					--			
08/14/73	5050		7.6	70 F	8.0	2890	154	138	318	7.0	0	525	758	313	--	.40	--	2080	951	
0930	5050		85	21 C	8.1	2850	7.68	11.35	13.83	.18	.00	8.60	15.78	8.83			--	1947	522	4.5
							23	34	42	1		26	48	27						
	D2	1016.50			SALINAS RECLAMATION CANAL AT ALISAL STP															
01/23/73	5050		8.2	54 F	7.6	800	61	26	85	--	0	195	--	120	31.0	.10	--		259	
1320	5050		76	12 C	8.0	982	3.04	2.14	3.70		.00	3.20		3.38	.50		--		99	2.3
							34	24	42			45		48	7					
02/06/73	5050		7.1	57 F	7.8	420	25	9.5	46	--	0	154	--	48	11.0	.00	--		102	
1420	5050		69	14 C	7.6	519	1.25	.78	2.00		.00	2.52		1.35	.18		--		0	2.0
							31	19	50			62		33	4					
	D2	1020.70			SALINAS RECLAMATION CANAL AT AIRPORT WAY															
10/25/72	5050		1.0	58.1F	7.2	1120	--	--	--	--	--	--	--	--	.1	.20	--			
0730	5050		10	14.5C		2150									.00		--			
	D2	1030.30			BLANCO DRAIN AT PUMP LIFT															
10/25/72	5050		9.5		8.2		--	--	--	--	--	--	--	--	39.0	1.80	--			
0955	5050					3840									.63		--			
01/23/73	5050		11.0	54 F	8.2	2800	54	146	535	--	0	466	--	367	133	1.30	--		737	
1240	5050		102	12 C	8.2	3700	2.69	12.01	23.27		.00	7.64		10.35	2.15		--		353	8.6
							7	32	61			38		51	11					
02/06/73	5050		8.7	56 F	7.9	850	94	91	250	--	0	301	--	156	113	.60	--		611	
1330	5050		83	13 C	8.1	2160	4.69	7.48	10.88		.00	4.93		4.40	1.82		--		362	4.4
							20	32	47			44		39	16					
07/18/73	5050		8.6	62 F	8.0	1350	--	--	--	--	0	375	--	--	--	--	--		549	
0730	5050		88	17 C	8.1	1950					.00	6.15					--			
08/14/73	5050		8.2	65 F	8.2	2380	96	100	268	6.0	0	428	572	192	3.6	1.00	--	1680	651	
0800	5050		87	18 C	7.9	2370	4.79	8.22	11.66	.15	.00	7.01	11.91	5.41	.06		--	1449	300	4.6
							19	33	47	1		29	49	22						
	D2	1240.00			GABILAN CREEK NEAR SANTA RITA															
02/28/73	5050					350	42	11	21	--	0	164	--	22	3.4	.00	--		150	
0900	5050	40			7.3	398	2.10	.90	.91		.00	2.69		.62	.05		--		16	0.7
							54	23	23			80		18	1					
	D2	1255.50			ALISAL CREEK AT OLD STAGE ROAD															
02/28/73	5050					420	39	12	36	--	0	155	--	44	6.7	.00	--		146	
0915	5050	8.0			7.5	465	1.95	.99	1.57		.00	2.54		1.24	.11		--		20	1.3
							43	22	35			65		32	3					
	D2	1260.50			QUAIL CREEK AT OLD STAGE ROAD															
02/28/73	5050					390	34	15	40	--	0	136	--	46	4.8	.00	--		146	
0935	5050	10			7.5	446	1.70	1.23	1.74		.00	2.23		1.30	.08		--		35	1.4
							36	26	37			62		36	2					

TABLE D-2 (CONTINUED)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	TURB SAR
							MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE									MILLIGRAMS PER LITER				
	D2	1325.10			SALINAS RIVER NEAR GONZALES															
10/25/72	5050		8.8	61.7F			--	--	--	--	--	--	--	--	1.1	.10	--			
0845	5050		90	16.5C		495									.02		--			
01/23/73	5050		10.7	49 F	8.0	330	48	14	28	--	0	157	--	23	3.9	.10	--		178	
1420	5050		94	9 C	8.0	490	2.40	1.15	1.22		.00	2.57		.65	.06		--		49	0.9
							50	24	26			78		20	2					
07/17/73	5050		11.7	74 F	8.4	350	--	--	--	--	0	155	--	--	--	--	--		178	
1215	5050		137	23 C	8.1	462					.00	2.54					--			
	D2	1663.05			SAN LORENZO CREEK AT FOOTHILL LINE															
03/07/73	5050					1800	78	76	211	--	0	272	--	82	3.9	.80	--		508	
1220	5050	35			7.9	1810	3.89	6.25	9.18		.00	4.46		2.31	.06		--		284	4.1
							20	32	48			65		34	1					
	D2	1773.20			PANCHO RICO CREEK AT SARGENTS ROAD															
03/07/73	5050					2460	173	91	276	--	0	195	--	84	7.3	1.10	--		806	
1045	5050	20			8.1	2470	8.63	7.48	12.01		.00	3.20		2.37	.12		--		646	4.2
							31	27	43			56		42	2					
	D2	1850.00			SALINAS RIVER NEAR BRADLEY															
07/17/73	5050	4.79	14.7	70 F	8.4	220	--	--	--	--	0	123	--	--	--	--	--		128	
1015	5050		167	21 C	8.3	294					.00	2.02					--			
	D4	1200.00			CARMEL RIVER AT ROBLES DEL RIO															
07/17/73	5050	3.53	17.8	72 F	8.4	700	--	--	--	--	0	186	--	--	--	--	--		250	
1335	5050		205	22 C	8.2	731					.00	3.05					--			
	F0 B	735.0	215.0		SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL)															
10/11/72	5050		6.7	65 F	7.9	45000	--	--	--	--	--	--	--	18800	--	--	--	35100		2A
0930	5050		71	18 C		48400								530.16			--			
11/27/72	5050		7.8	57 F	7.9	38000	--	--	--	--	--	--	--	17100	--	--	--	31200		3A
1230	5050		75	14 C		43700								482.22			--			
12/11/72	5050		8.3	48 F	7.9	40000	--	--	--	--	--	--	--	19000	--	--	--	28700		3A
1115	5050		71	9 C		42200								535.80			--			
01/23/73	5050		9.7	49 F	7.9	28000	--	--	--	--	--	--	--	10800	--	--	--	20000		2A
1130	5050		85	9 C		29300								304.56			--			
02/06/73	5050		9.3	51 F	7.9	28000	--	--	--	--	--	--	--	10100	--	--	--	19600		4A
1030	5050		83	11 C		28600								284.82			--			
03/20/73	5050		9.2	53 F	8.1	26000	--	--	--	--	--	--	--	8960	--	--	--	17400		19A
0915	5050		84	12 C		26600								252.67			--			
04/05/73	5050		9.5	58 F	8.2	26000	--	--	--	--	--	--	--	9620	--	--	--	18000		7A
0915	5050		93	14 C		27400								271.28			--			
05/03/73	5050		8.8	60 F	8.2	33000	--	--	--	--	--	--	--	11700	--	--	--	22600		15A
0810	5050		88	16 C		36300								329.94			--			
06/18/73	5050		9.0	66 F	8.0	38000	--	--	--	--	--	--	--	14400	--	--	--	28000		2A
1000	5050		96	19 C		41300								406.08			--			
07/30/73	5050		6.6	69 F	8.1	41000	--	--	--	--	--	--	--	15900	--	--	--	30000		2A
0830	5050		73	21 C		44400								448.38			--			
08/14/73	5050		6.7	67 F	8.2	43000	--	--	--	--	--	--	--	16500	--	--	--	31500		3A
0920	5050		72	19 C		43600								465.30			--			
09/13/73	5050		6.9	66 F	8.2	44000	--	--	--	--	--	--	--	16800	--	--	--	31800		1A
0810	5050		74	19 C		46900								473.76			--			
	F0 B	736.2	212.0		SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)															
10/11/72	5050		7.2	65 F	7.9	45000	--	--	--	--	--	--	--	17800	--	--	--	35200		3A
1100	5050		76	18 C		47500								501.96			--			
11/27/72	5050		8.2	57 F	8.1	40000	--	--	--	--	--	--	--	16900	--	--	--	31700		4A
1330	5050		79	14 C		43600								476.58			--			
12/11/72	5050		9.2	45 F	8.0	41000	--	--	--	--	--	--	--	15900	--	--	--	28500		4A
1200	5050		76	7 C		42300								448.38			--			
01/23/73	5050		9.1	49 F	7.9	32000	--	--	--	--	--	--	--	11700	--	--	--	22600		6A
1220	5050		79	9 C		32600								329.94			--			
02/06/73	5050		9.1	51 F	7.9	28000	--	--	--	--	--	--	--	10000	--	--	--	19000		4A
1100	5050		81	11 C		28100								282.00			--			

TABLE D-2 (CONTINUED)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	TURB SAR
		E0 B 736.2 212.0			SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)		CONTINUED														
03/20/73	5050		9.6	53 F	8.0	26000		--	--	--	--	--	--	--	8770	--	--	--	17000		53A
1015	5050		88	12 C		25700									247.31			--			
04/05/73	5050		9.6	59 F	8.2	26000		--	--	--	--	--	--	--	8930	--	--	--	17800		17A
1005	5050		95	15 C		26800									251.83			--			
05/03/73	5050		9.0	60 F	8.2	34000		--	--	--	--	--	--	--	12400	--	--	--	23000		10A
0900	5050		90	16 C		36400									349.68			--			
06/18/73	5050		11.1	66 F	8.0	40000		--	--	--	--	--	--	--	14800	--	--	--	28900		3A
1045	5050		119	19 C		42500									417.36			--			
07/30/73	5050		6.3	70 F	8.1	43000		--	--	--	--	--	--	--	16000	--	--	--	30300		8A
0930	5050		70	21 C		44500									451.20			--			
08/14/73	5050		6.1	66 F	8.0	44000		--	--	--	--	--	--	--	16700	--	--	--	32000		21A
1000	5050		65	19 C		43900									470.94			--			
09/13/73	5050		7.0	64 F	8.2	45000		--	--	--	--	--	--	--	17000	--	--	--	32400		2A
0910	5050		73	18 C		47400									479.40			--			
		E0 B 749.2 222.4			SAN FRANCISCO BAY AT TREASURE ISLAND																
10/11/72	5050		7.1	62 F	7.9	42000		--	--	--	--	--	--	--	17200	--	--	--	32600		2A
0850	5050		73	17 C		45500									485.04			--			
11/27/72	5050		8.1	56 F	7.9	37500		--	--	--	--	--	--	--	14500	--	--	--	27500		6A
1100	5050		77	13 C		40000									408.90			--			
12/11/72	5050		8.6	48 F	8.1	39000		--	--	--	--	--	--	--	14600	--	--	--	26600		4A
1000	5050		74	9 C		40100									411.72			--			
01/23/73	5050		9.8	48 F	7.8	15000		--	--	--	--	--	--	--	5400	--	--	--	10900		20A
1000	5050		84	9 C		16900									152.28			--			
02/06/73	5050		9.5	50 F	8.3	23000		--	--	--	--	--	--	--	8090	--	--	--	15800		10A
0840	5050		84	10 C		23700									228.14			--			
03/20/73	5050		9.0	52 F	8.1	34000		--	--	--	--	--	--	--	12100	--	--	--	23200		6A
0730	5050		82	11 C		36400									341.22			--			
04/05/73	5050		9.0	55 F	8.2	34000		--	--	--	--	--	--	--	12400	--	--	--	24300		5A
0800	5050		85	13 C		37600									349.68			--			
05/03/73	5050		8.2	56 F	8.2	41000		--	--	--	--	--	--	--	15300	--	--	--	29300		5A
0645	5050		78	13 C		45500									431.46			--			
06/18/73	5050		8.7	64 F	8.1	40000		--	--	--	--	--	--	--	16000	--	--	--	31300		3A
0845	5050		91	18 C		45200									451.20			--			
07/30/73	5050		6.5	63 F	8.0	44000		--	--	--	--	--	--	--	17900	--	--	--	32200		3A
0700	5050		67	17 C		47900									504.78			--			
08/14/73	5050		6.7	63 F	8.1	44000		--	--	--	--	--	--	--	17500	--	--	--	33000		1A
0755	5050		69	17 C		48000									493.50			--			
09/13/73	5050		7.4	62 F	8.1	45000		--	--	--	--	--	--	--	17000	--	--	--	28200		1A
0640	5050		76	17 C		47700									479.40			--			
		E0 B 801.8 222.3			SAN PABLO BAY NEAR PINOLE POINT																
10/04/72	5001		7.5	63 F	8.0			--	--	--	--	0	124	--	14600	--	--	--			3AF
1300	5001		77	17 C	8.0	39300						.00	2.03		411.72			2.0			
		3																			
11/16/72	5001		8.7	57 F	7.8			--	--	--	--	0	102	--	11600	--	--	--			4AF
1010	5001		84	14 C	7.8	29700						.00	1.67		327.12			6.0			
		3																			
12/13/72	5001		10.5	46 F	7.0			--	--	--	--	0	101	--	6500	--	--	--			8AF
0930	5001		88	8 C	7.8	23200						.00	1.66		183.30			11.4			
		3																			
02/14/73	5001		10.3	52 F	7.8			--	--	--	--	0	87	--	1700	--	--	--			38AF
1200	5001		93	11 C	7.8	5800						.00	1.43		47.94			14.8			
		3																			
04/11/73	5001		8.5	59.0F	7.6	19100		--	--	--	--	0	112	--	8040	--	--	--			7AF
1115	5050		84	15.0C	7.9	22400						.00	1.84		226.73			10.8			
		3																			
05/09/73	5001		8.8	59.0F	8.0	27500		--	--	--	--	0	119	--	12100	--	--	--			9AF
0925	5050		87	15.0C	7.6	32000						.00	1.95		341.22			3.8			
		3																			
06/12/73	5001		8.4	68.0F	7.9	32800		--	--	--	--	0	121	--	12900	--	--	--			9AF
1430	5050		92	20.0C	7.8	37300						.00	1.98		363.78			3.4			
		3																			

TABLE D-2 (CONTINUED)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. D DEPTH	DO SAT	TEMP	FIELD PH	LABORATORY EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	TURB SAR
							MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER	MILLIEQUIVALENTS PER LITER	PERCENT REACTANCE VALUE			MILLIGRAMS PER LITER				
F0 B 801.8 222.3					SAN PABLO BAY NEAR PINOLE POINT													CONTINUED		
07/10/73	5001		7.8		7.9	41000	--	--	--	--	0	131	--	15000	--	--	--			9AF
1415	5050				7.9	42700					.00	2.15		423.00			4.2			
		3																		
08/07/73	5001		8.3	68.0F	7.9	38300	--	--	--	--	0	132	--	15300	--	--	--			5AF
1235	5050		91	20.0C	8.1	42500					.00	2.16		431.46			3.8			
		3																		
09/05/73	5001		7.9	64.4F	7.9	38580	--	--	--	--	0	130	--	15100	--	--	--			9AF
1135	5050		83	18.0C	8.0	42600					.00	2.13		425.82			3.6			
		3																		
F0 B 802.7 207.0					SUISUN BAY OFF BULLS HEAD POINT NEAR MARTINES															
10/04/72	5001		8.1	64 F	8.0		--	--	--	--	--	--	--	7600	--	--	--			8AF
1430	5001		85	18 C		22200								214.32			3.6			
		3																		
10/18/72	5001		7.8	64 F	7.8		--	--	--	--	0	108	--	7900	--	--	--			5AF
1300	5001		82	18 C	7.8	23800					.00	1.77		222.78			5.6			
		3																		
11/07/72	5001			59.0F			--	--	3000	--	--	--	--	5630	--	--	--	10100		
1115	5050			15.0C		16600			130.50					158.77			--			
11/16/72	5001		8.4	57 F	7.7		--	--	--	--	0	99	--	7000	--	--	--			16AF
1140	5001		81	14 C	7.7	20700					.00	1.62		197.40			9.4			
		3																		
12/13/72	5001		10.3	46 F	7.9		--	--	--	--	0	95	--	5000	--	--	--			13AF
1045	5001		87	8 C	7.8	17100					.00	1.56		141.00			15.4			
		3																		
01/15/73	5001		10.5	46 F	7.3		--	--	--	--	0	80	--	2250	--	--	--			30AF
1050	5001		88	8 C	7.6	7680					.00	1.31		63.45			16.2			
		3																		
02/06/73	5001			50.0F			--	--	33	--	--	--	--	50	--	--	--	208		
1200	5050			10.0C		369			1.44					1.41			--			
02/14/73	5001		9.8	52 F	7.6		--	--	33	--	0	80	--	46	--	--	--			110AF
1315	5001		89	11 C	7.7	310			1.44		.00	1.31		1.30			16.0			
		3																		
03/15/73	5001		10.0	54 F	7.8		--	--	--	--	0	86	--	2040	--	--	--	3920		34AF
1130	5050		92	12 C	7.5	6990					.00	1.41		57.53			15.4			
		3																		
03/28/73	5001		10.0	53.6F	7.6	6900	--	--	--	--	0	91	--	2430	--	--	--	3810		20AF
0940	5050		92	12.0C	7.4	6670					.00	1.49		68.53			16.8			
		3																		
04/11/73	5001		8.8	60.8F	7.5	6900	--	--	--	--	0	98	--	2820	--	--	--	4670		38AF
1240	5050		89	16.0C	7.4	7670					.00	1.61		79.52			15.6			
		3																		
04/25/73	5001		9.3	60.8F	7.6	9800	--	--	--	--	0	98	--	4200	--	--	--	7180		16AF
1005	5050		94	16.0C	7.6	11400					.00	1.61		118.44			13.4			
		3																		
05/08/73	5001			61.7F			--	--	2560	--	--	--	--	4710	--	--	--	8920		
1130	5050			16.5C		14800			111.36					132.82			--			
05/09/73	5001		9.0	62.6F	7.9	12350	--	--	--	--	0	100	--	4670	--	--	--	8870		27AF
1110	5050		93	17.0C	7.7	14100					.00	1.64		131.69			9.4			
		3																		
05/30/73	5001		8.4	66.2F	7.9	17300	--	--	--	--	0	78	--	5610	--	--	--	11300		21AF
1510	5050		90	19.0C	7.7	20900					.00	1.28		158.20			6.4			
		3																		
06/12/73	5001		8.2	69.8F	7.9	18000	--	--	--	--	0	102	--	6900	--	--	--	13000		8AF
1600	5050		91	21.0C	7.9	17000					.00	1.67		194.58			6.7			
		3																		
06/27/73	5001		7.8	71.6F	7.9	21500	--	--	--	--	0	103	--	7890	--	--	--	15200		13AF
1410	5050		89	22.0C	7.9	14600					.00	1.69		222.50			7.0			
		3																		
07/11/73	5001		8.5	69.8F	8.1	22740	--	--	--	--	0	108	--	8780	--	--	--	16900		18AF
1355	5050		95	21.0C	8.0	24200					.00	1.77		247.60			4.6			
		3																		
08/07/73	5001			68.0F			--	--	4250	--	--	--	--	8050	--	--	--	15500		
1130	5050			20.0C		23300			184.88					227.01			--			
08/07/73	5001		8.9	68.0F	8.1	23200	--	--	--	--	0	108	--	8780	--	--	--	15900		18AF
1410	5050		97	20.0C	8.1	24500					.00	1.77		247.60			4.2			
		3																		
08/22/73	5001		8.4	66.2F	7.9	21320	--	--	--	--	0	103	--	7490	--	--	--	14200		14AF
1100	5050		90	19.0C	7.9	22500					.00	1.69		211.22			4.6			
		3																		
08/28/73	5001			66.2F			--	--	2800	--	--	--	--	5180	--	--	--	9970		
1145	5050			19.0C		15700			121.80					146.08			--			
09/05/73	5001		8.1	64.4F	8.0	21840	--	--	--	--	0	103	--	7660	--	--	--	15300		11AF
1305	5050		85	18.0C	8.1	22900					.00	1.69		216.01			5.0			
		3																		
09/19/73	5001		8.0	66.2F	8.0	14850	--	--	--	--	0	98	--	5760	--	--	--	10800		15AF
0935	5050		86	19.0C	7.9	17600					.00	1.61		162.43			7.0			

TABLE 0-2 (CONTINUED)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	TURB SAR
EO B 802.8 155.0 SACRAMENTO RIVER AT CHIPPS ISLAND																				
10/04/72	5001		9.1	66 F	8.1		--	--	--	--	--	--	--	920	--	--	--			40AF
1530	5001		97	19 C		3480								25.94			11.2			
		3																		
10/18/72	5001		8.3	64 F	7.7		--	--	--	--	0	82	--	1500	--	--	--			29AF
1420	5001		87	18 C	7.8	5750					.00	1.34		42.30			11.6			
		3																		
11/15/72	5001		9.7	55 F	7.7		--	--	--	--	0	72	--	680	--	--	--			34AF
1110	5001		92	13 C	7.5	2500					.00	1.18		19.18			15.6			
		3																		
12/12/72	5001		11.6	45 F	7.7		--	--	--	--	0	74	--	80	--	--	--			21AF
0910	5001		95	7 C	7.7	429					.00	1.21		2.26			19.8			
		3																		
01/15/73	5001		10.6	46 F	7.0		--	--	--	--	0	58	--	14	--	--	--			80AF
1200	5001		89	8 C	7.4	175					.00	.95		.39			15.6			
		3																		
02/13/73	5001		10.0	52 F	7.8		--	--	--	--	0	73	--	15	--	--	--			110AF
1240	5001		90	11 C	7.6	205					.00	1.20		.42			16.0			
		3																		
03/15/73	5001		10.5	54 F	8.0		--	--	--	--	0	83	--	20	--	--	--	154		37AF
1245	5050		97	12 C	7.3	254					.00	1.36		.56			17.6			
		3																		
03/28/73	5001		10.5	53.6F	7.6	265	--	--	--	--	0	83	--	20	--	--	--	152		40AF
1100	5050		97	12.0C	7.7	246					.00	1.36		.56			17.6			
		3																		
04/11/73	5001		9.4	60.8F	7.5	350	--	--	--	--	0	93	--	34	--	--	--	186		32AF
1345	5050		95	16.0C	7.5	352					.00	1.52		.96			18.2			
		3																		
04/25/73	5001		10.2	60.8F	8.2	445	--	--	--	--	0	89	--	56	--	--	--	232		32AF
1200	5050		103	16.0C	7.7	416					.00	1.46		1.58			16.6			
		3																		
05/09/73	5001		9.3	64.4F	8.1	1930	--	--	--	--	0	85	--	696	--	--	--	1190		33AF
1225	5050		98	18.0C	7.9	2140					.00	1.39		19.63			12.6			
		3																		
05/30/73	5001		9.0	69.8F	7.8	2500	--	--	--	--	4.0	70	--	701	--	--	--	1410		48AF
1640	5050		100	21.0C	8.5	2550					.13	1.15		19.77			15.6			
		3																		
06/12/73	5001		8.5	71.6F	7.9	2890	--	--	--	--	0	82	--	911	--	--	--	1660		45AF
1710	5050		96	22.0C	8.0	2790					.00	1.34		25.69			15.0			
		3																		
06/27/73	5001		8.7	73.4F	8.0	6300	--	--	--	--	0	82	--	1960	--	--	--	4090		31AF
1530	5050		101	23.0C	7.6	6630					.00	1.34		55.27			13.4			
		3																		
07/11/73	5001		9.0	73.4F	8.1	8571	--	--	--	--	0	87	--	2660	--	--	--	5480		48AF
1530	5050		104	23.0C	8.2	8800					.00	1.43		75.01			10.4			
		3																		
07/31/73	5001		8.6	77 F	7.8	370	--	--	--	--	0	73	--	--	--	--	--			18A
1340	5001		103	25 C							.00	1.20					12.4			
		3																		
08/07/73	5001		9.4	68.0F	9.3	8170	--	--	--	--	0	85	--	2710	--	--	--	5110		37AF
1525	5050		103	20.0C	8.2	8830					.00	1.39		76.42			9.2			
		3																		
08/22/73	5001		8.6	68.0F	7.9	6920	--	--	--	--	0	86	--	2190	--	--	--	4200		60AF
1220	5050		94	20.0C	8.0	7460					.00	1.41		61.76			10.4			
		3																		
09/05/73	5001		8.6	66.2F	8.1	5542	--	--	--	--	0	85	--	1780	--	--	--	3530		38AF
1425	5050		92	19.0C	8.3	6050					.00	1.39		50.20			12.4			
		3																		
09/19/73	5001		8.0	68.0F	8.1	1940	--	--	--	--	0	86	--	537	--	--	--	1120		50AF
1050	5050		87	20.0C	7.8	2110					.00	1.41		15.14			16.0			
		3																		
EO B 803.5 201.4 SUISUN BAY NEAR PORT CHICAGO																				
11/07/72	5001			59.0F			--	--	1620	--	--	--	--	2980	--	--	--	5400		
1040	5050			15.0C		9320			70.47					84.04			--			
02/06/73	5001			50.0F			--	--	23	--	--	--	--	33	--	--	--	171		
1100	5050			10.0C		287			1.00					.93			--			
05/08/73	5001			66.2F			--	--	2030	--	--	--	--	3540	--	--	--	6580		
1100	5050			19.0C		11400			88.31					99.83			--			
08/07/73	5001			69.8F			--	--	2540	--	--	--	--	4820	--	--	--	9100		
1100	5050			21.0C		15100			110.49					135.92			--			
EO B 803.5 217.0 SAN PABLO BAY NEAR ROOEO																				
10/04/72	5001		7.7	66 F	8.0		--	--	--	--	0	930	--	11200	--	--	--			6AF
1350	5001		82	19 C	7.9	31800					.00	15.24		315.84			2.6			
		3																		
11/16/72	5001		8.4	57 F	7.8		--	--	--	--	0	101	--	8300	--	--	--			10AF
1055	5001		81	14 C	7.8	24900					.00	1.66		234.06			8.2			
		3																		

TABLE D-2 (CONTINUED)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TM NCH	TURB SAR
FO B 803.5 217.0					SAN PABLO BAY NEAR RODEO															CONTINUED
12/13/72	5001		10.7	46 F	7.9		--	--	--	--	0	100	--	6000	--	--	--			12AF
1005	5001		90	8 C	7.9	21100					.00	1.64		169.20			11.6			
		3																		
02/14/73	5001		10.0	52 F	7.6		--	--	--	--	0	86	--	1600	--	--	--			50AF
1230	5001		90	11 C	7.7	5000					.00	1.41		45.12			15.4			
		3																		
04/11/73	5001		8.8	60.8F	7.6	15200	--	--	--	--	0	106	--	6640	--	--	--	11700		10AF
1150	5050		89	16.0C	7.3	17600					.00	1.74		187.25			12.2			
		3																		
05/09/73	5001		8.8	60.8F	8.0	20700	--	--	--	--	0	112	--	7870	--	--	--	15600		16AF
1010	5050		89	16.0C	7.6	23800					.00	1.84		221.93			6.0			
		3																		
06/12/73	5001		8.2	68.0F	7.9	27800	--	--	--	--	0	112	--	10600	--	--	--	19900		26AF
1510	5050		90	20.0C	7.8	21800					.00	1.84		298.92			4.3			
		3																		
07/11/73	5001		7.7	68.0F	7.9	31920	--	--	--	--	0	121	--	11600	--	--	--	24000		31AF
1305	5050		84	20.0C	7.9	35200					.00	1.98		327.12			4.4			
		3																		
08/07/73	5001		8.0	66.2F	7.9	33400	--	--	--	--	0	124	--	12600	--	--	--	24600		17AF
1310	5050		86	19.0C	8.1	37200					.00	2.03		355.32			4.4			
		3																		
09/05/73	5001			64.4F	7.8	32500	--	--	--	--	0	121	--	12300	--	--	--	23800		29AF
1210	5050			18.0C	7.9	36300					.00	1.98		346.86			4.4			
		3																		
FO B 803.6 159.3					SUISUN BAY OFF MIDDLE POINT															
10/18/72	5001		8.2	64 F	7.7		--	--	--	--	--	--	--	2600	--	--	--			25AF
1350	5001		86	18 C		13300								73.32			9.6			
		3																		
11/16/72	5001		9.0	57 F	7.6		--	--	--	--	--	--	--	2600	--	--	--			25AF
1235	5001		87	14 C		8320								73.32			13.4			
		3																		
12/13/72	5001		11.8	45 F	7.9		--	--	--	--	--	--	--	650	--	--	--			23AF
1125	5001		97	7 C		2490								18.33			18.6			
		3																		
01/15/73	5001		11.0	46 F	7.0		--	--	--	--	0	67	--	27	--	--	--			40AF
1140	5001		93	8 C	7.5	260					.00	1.10		.76			17.2			
		3																		
02/14/73	5001		9.9	50 F	7.6		--	--	--	--	0	77	--	30	--	--	--			80AF
1425	5001		87	10 C	7.6	280					.00	1.26		.85			17.0			
		3																		
03/28/73	5001		10.4	53.6F	7.7	305	--	--	--	--	0	84	--	24	--	--	--			33AF
1030	5050		96	12.0C	7.7	279					.00	1.38		.68			19.8			
		3																		
04/25/73	5001		10.6	62.6F	8.4	1480	--	--	--	--	0	89	--	243	--	--	--			15AF
1130	5050		109	17.0C	7.9	1060					.00	1.46		6.85			16.4			
		3																		
05/30/73	5001		9.1	69.8F	8.0	6000	--	--	--	--	5.0	73	--	2070	--	--	--			46AF
1615	5050		101	21.0C	8.5	6310					.17	1.20		58.37			12.4			
		3																		
06/27/73	5001		8.6	73.4F	8.0	9200	--	--	--	--	0	86	--	2940	--	--	--			24AF
1505	5050		99	23.0C	7.5	9200					.00	1.41		82.91			12.0			
		3																		
08/22/73	5001		9.2	68.0F	7.4	8640	--	--	--	--	0	87	--	2990	--	--	--			45AF
1150	5050		101	20.0C	8.0	9820					.00	1.43		84.32			8.6			
		3																		
09/19/73	5001		8.1	66.2F	8.2	3950	--	--	--	--	0	88	--	1140	--	--	--			45AF
1025	5050		87	19.0C	8.0	4090					.00	1.44		32.15			14.2			
		3																		
FO B 804.0 203.0					SUISUN BAY NEAR PRESTON POINT															
10/18/72	5001		8.0	64 F	7.8		--	--	--	--	--	--	--	4100	--	--	--			22AF
1330	5001		84	18 C		9070								115.62			7.8			
		3																		
11/16/72	5001		9.0	55 F	7.7		--	--	--	--	--	--	--	3200	--	--	--			25AF
1215	5001		85	13 C		9780								90.24			12.8			
		3																		
12/13/72	5001		11.2	45 F	7.9		--	--	--	--	--	--	--	2400	--	--	--			18AF
1110	5001		92	7 C		7750								67.68			16.8			
		3																		
01/15/73	5001		11.0	46 F	7.2		--	--	--	--	0	74	--	540	--	--	--			40AF
1120	5001		93	8 C	7.7	2000					.00	1.21		15.23			17.8			
		3																		
03/15/73	5001		10.2	54 F	7.9		--	--	--	--	0	82	--	258	--	--	--	644		40AF
1200	5050		94	12 C	7.5	1150					.00	1.34		7.28			.2			
		3																		
03/28/73	5001		10.7	53.6F	7.9	690	--	--	--	--	0	85	--	155	--	--	--	389		33A
1005	5050		99	12.0C	7.8	739					.00	1.39		4.37			18.4			
		3																		
04/11/73	5001		9.4	60.8F	7.6	1750	--	--	--	--	0	95	--	494	--	--	--	1100		39AF
1305	5050		95	16.0C	7.6	1960					.00	1.56		13.93			17.6			
		3																		

TABLE D-2 (CONTINUED)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	TURB SAR
FO B 804.0 203.0 SUISUN BAY NEAR PRESTON POINT CONTINUED																				
04/25/73	5001		9.0	60.8F	8.0	6300	--	--	--	--	0	95	--	2340	--	--	--	4300		26AF
1045	5050		91	16.0C	7.8	7160					.00	1.56		65.99			14.6			
		3																		
05/09/73	5001		9.2	62.6F	8.0	7640	--	--	--	--	0	95	--	2880	--	--	--	5320		46AF
1140	5050		95	17.0C	7.7	8860					.00	1.56		81.22			11.2			
		3																		
05/30/73	5001		9.3	68.0F	8.1	8900	--	--	--	--	4.0	80	--	3080	--	--	--	5540		66AF
1545	5050		102	20.0C	8.4	9580					.13	1.31		86.86			10.0			
		3																		
06/12/73	5001		8.4	69.8F	7.9	11250	--	--	--	--	0	93	--	4480	--	--	--	7420		37AF
1625	5050		94	21.0C	7.9	10200					.00	1.52		126.34			9.1			
		3																		
06/27/73	5001		8.5	71.6F	7.9	16250	--	--	--	--	0	96	--	5790	--	--	--	11200		25AF
1440	5050		96	22.0C	7.6	14500					.00	1.57		163.28			8.6			
		3																		
07/11/73	5001		9.5	71.6F	8.3	17240	--	--	--	--	0	100	--	7100	--	--	--	12200		33AF
1420	5050		108	22.0C	8.2	18300					.00	1.64		200.22			5.2			
		3																		
08/07/73	5001		10.0	68.0F	8.4	16400	--	--	--	--	0	96	--	5980	--	--	--	10900		33AF
1440	5050		109	20.0C	8.2	17500					.00	1.57		168.64			4.4			
		3																		
08/22/73	5001		8.8	68.0F	8.0	14080	--	--	--	--	0	95	--	5460	--	--	--	10100		31AF
1130	5050		96	20.0C	7.9	16200					.00	1.56		153.97			5.6			
		3																		
09/05/73	5001		8.4	64.4F	8.1	12600	--	--	--	--	0	92	--	4240	--	--	--	8440		45AF
1330	5050		88	18.0C	8.3	13400					.00	1.51		119.57			7.2			
		3																		
09/19/73	5001		7.5	66.2F	8.1	12120	--	--	--	--	0	93	--	4390	--	--	--	7470		50AF
1000	5050		80	19.0C	7.9	12700					.00	1.52		123.80			8.0			
		3																		
FO B 804.4 156.2 HONKER BAY NEAR WHEELER POINT																				
10/03/72	5001		8.7	66.2F	8.0		--	--	--	--	--	--	--	840	--	--	--			65AF
1340	5001		93	19.0C		3040								23.69			12.0			
		3																		
10/18/72	5001		7.9	64 F	7.6		--	--	--	--	0	84	--	1600	--	--	--			30AF
1410	5001		83	18 C	7.6	5700					.00	1.38		45.12			11.4			
		3																		
11/15/72	5001		9.5	55 F	7.7		--	--	--	--	0	73	--	1120	--	--	--			31AF
1055	5001		90	13 C	7.6	2860					.00	1.20		31.58			15.0			
		3																		
12/12/72	5001		11.6	43 F	7.8		--	--	--	--	0	74	--	50	--	--	--			21AF
0845	5001		93	6 C	7.7	349					.00	1.21		1.41			20.0			
		3																		
02/13/73	5001		10.0	52 F	8.0		--	--	--	--	0	72	--	11	--	--	--			110AF
1210	5001		90	11 C	7.5	178					.00	1.18		.31			15.8			
		3																		
03/15/73	5001		10.8	52 F	8.0		--	--	--	--	0	89	--	14	--	--	--			50AF
1230	5050		98	11 C	7.5	230					.00	1.46		.39			17.6			
		3																		
03/29/73	5001		10.3	53.6F	7.7	252	--	--	--	--	0	86	--	16	--	--	--			27AF
1050	5050		95	12.0C	7.8	236					.00	1.41		.45			17.4			
		3																		
04/12/73	5001		9.5	59.0F	7.6	403	--	--	--	--	0	92	--	40	--	--	--			33AF
1130	5050		94	15.0C	7.6	372					.00	1.51		1.13			18.2			
		3																		
04/26/73	5001		10.6	62.6F	8.3	2220	--	--	--	--	0	89	--	484	--	--	--			22AF
1020	5050		109	17.0C	7.8	1950					.00	1.46		13.65			15.8			
		3																		
05/10/73	5001		9.0	64.4F	8.0	2480	--	--	--	--	0	85	--	762	--	--	--			45AF
1020	5050		95	18.0C	7.7	2700					.00	1.39		21.49			12.2			
		3																		
05/31/73	5001		8.6	68.0F	7.7	2180	--	--	--	--	13	55	--	534	--	--	--			68AF
1455	5050		94	20.0C	8.9	1890					.43	.90		15.06			16.2			
		3																		
06/13/73	5001		8.2	69.8F	7.8	3300	--	--	--	--	0	85	--	839	--	--	--			75AF
1545	5050		91	21.0C	7.9	3160					.00	1.39		23.66			15.8			
		3																		
06/26/73	5001		7.8	73.4F	7.8	6700	--	--	--	--	0	84	--	1990	--	--	--			45AF
1330	5050		90	23.0C	8.0	6810					.00	1.38		56.12			13.8			
		3																		
07/11/73	5001		8.7	71.6F	8.2	9680	--	--	--	--	0	88	--	3250	--	--	--			80AF
1505	5050		99	22.0C	8.0	10300					.00	1.44		91.65			9.0			
		3																		
08/08/73	5001		9.3	68.0F	8.2	8430	--	--	--	--	0	84	--	3270	--	--	--			90AF
1350	5050		102	20.0C	8.0	9850					.00	1.38		92.21			8.0			
		3																		
08/23/73	5001		8.6	69.8F	7.7	7420	--	--	--	--	0	84	--	2640	--	--	--			100AF
1300	5050		96	21.0C	7.7	8680					.00	1.38		74.45			9.6			
		3																		
09/06/73	5001			66.2F	8.0	5830	--	--	--	--	0	83	--	1860	--	--	--			55AF
1305	5050			19.0C	8.2	5860					.00	1.36		52.45			12.6			
		3																		

TABLE D-2 (CONTINUED)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	TURB SAR
FO B 804.4 156.2 HONKER BAY NEAR WHEELER POINT CONTINUED																				
09/20/73	5001		7.9	68.0F	8.0	2220	--	--	--	--	0	86	--	659	--	--	--			60AF
1050	5050		86	20.0C	7.8	2310					.00	1.41		18.58			16.0			
		3																		
FO B 805.3 226.3 SAN PABLO BAY NEAR MOUTH OF PETALUMA RIVER																				
10/04/72	5001		7.7	64 F	7.9		--	--	--	--	0	116	--	12600	--	--	--			7AF
1225	5001		81	18 C	8.1	34400					.00	1.90		355.32			.8			
		3																		
11/16/72	5001		9.1	54 F	7.6		--	--	--	--	0	103	--	9400	--	--	--			
0940			84	12 C	7.8						.00	1.69		265.08			--			
		3																		
12/13/72	5001		12.1	39 F	7.9		--	--	--	--	0	98	--	6500	--	--	--			28AF
0905	5001		92	4 C	7.8	22200					.00	1.61		183.30			11.4			
		3																		
02/14/73	5001		10.7	52 F	7.9		--	--	--	--	0	82	--	2000	--	--	--			50AF
1135	5001		97	11 C	7.8	6500					.00	1.34		56.40			15.8			
		3																		
04/11/73	5001		11.2	62.6F	7.9	18200	--	--	--	--	0	106	--	7790	--	--	--			26AF
1010	5050		115	17.0C	7.4	20500					.00	1.74		219.68			--			
		3																		
05/09/73	5001		10.1	60.8F	8.3	26500	--	--	--	--	0	117	--	11700	--	--	--			21AF
0845	5050		102	16.0C	7.6	30700					.00	1.92		329.94			4.0			
		3																		
06/12/73	5001		8.1	69.8F	7.9	27800	--	--	--	--	0	112	--	11400	--	--	--			60AF
1350	5050		90	21.0C	7.7	31400					.00	1.84		321.48			1.2			
		3																		
07/10/73	5001		7.8	69.8F	8.0	36000	--	--	--	--	0	124	--	12600	--	--	--			78AF
1325	5050		87	21.0C	7.8	37900					.00	2.03		355.32			5.2			
		3																		
08/07/73	5001		8.0	68.0F	7.7	33500	--	--	--	--	0	129	--	13700	--	--	--			20AF
1200	5050		87	20.0C	7.7	39500					.00	2.11		386.34			5.0			
		3																		
09/05/73	5001		7.5	64.4F	7.8	34700	--	--	--	--	0	123	--	12900	--	--	--			65AF
1050	5050		79	18.0C	7.8	38400					.00	2.02		363.78			4.8			
		3																		
FO B 807.0 202.3 GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH																				
10/03/72	5001		8.7	65.3F	8.0		--	--	--	--	--	--	--	2400	--	--	--			50AF
1300	5001		92	18.5C		7940								67.68			6.6			
		3																		
10/18/72	5001		8.0	64 F	7.5		--	--	--	--	0	90	--	2800	--	--	--			27AF
1215	5050		84	18 C	7.3	10800					.00	1.48		78.96			9.2			
		3																		
11/15/72	5001		9.2	57 F	7.1		--	--	--	--	0	79	--	1900	--	--	--			45AF
1010	5001		89	14 C	7.6	6780					.00	1.29		53.58			13.4			
		3																		
12/12/72	5001		11.0	43 F	7.1		--	--	--	--	0	77	--	700	--	--	--			38AF
0800	5001		88	6 C	7.7	2840					.00	1.26		19.74			18.0			
		3																		
02/13/73	5001		10.4	52 F	7.4		--	--	--	--	0	76	--	23	--	--	--			100AF
1130	5001		94	11 C	7.8	180					.00	1.25		.65			15.8			
		3																		
03/15/73	5001		10.7	52 F	7.5		--	--	--	--	0	83	--	17	--	--	--	147		50AF
1005	5050		97	11 C	7.6	222					.00	1.36		.48			17.4			
		3																		
03/29/73	5001		10.1	53.6F	7.7	320	--	--	--	--	0	86	--	29	--	--	--	175		55AF
1000	5050		93	12.0C	7.6	292					.00	1.41		.82			17.4			
		3																		
04/12/73	5001		9.4	60.8F	7.7	1210	--	--	--	--	0	93	--	240	--	--	--	605		55AF
1040	5050		95	16.0C	7.6	1120					.00	1.52		6.77			17.8			
		3																		
04/26/73	5001		9.9	62.6F	8.0	4920	--	--	--	--	0	95	--	1830	--	--	--	3230		26AF
0940	5050		102	17.0C	7.7	5450					.00	1.56		51.61			14.6			
		3																		
05/10/73	5001		8.9	62.6F	8.0	5400	--	--	--	--	0	89	--	1710	--	--	--	3360		50AF
0935	5050		92	17.0C	7.7	5820					.00	1.46		48.22			11.4			
		3																		
05/31/73	5001		8.8	68.0F	7.9	7600	--	--	--	--	0	82	--	2560	--	--	--	4610		76AF
1415	5050		96	20.0C	7.7	8130					.00	1.34		72.19			10.4			
		3																		
06/13/73	5001		8.1	68.0F	7.8	7330	--	--	--	--	0	90	--	2310	--	--	--	4910		37AF
1345	5050		88	20.0C	7.9	8000					.00	1.48		65.14			11.5			
		3																		
06/27/73	5001		9.3	73.4F	7.6	12600	--	--	--	--	0	83	--	4480	--	--	--	8300		37AF
1330	5050		108	23.0C	7.5	13100					.00	1.36		126.34			9.6			
		3																		
08/08/73	5001		9.4	66.2F	8.0	13600	--	--	--	--	0	92	--	5050	--	--	--	9430		80AF
1145	5050		101	19.0C	8.0	15200					.00	1.51		142.41			4.2			
		3																		
08/22/73	5001		9.1	66.2F	8.0	11360	--	--	--	--	0	89	--	3890	--	--	--	7350		39AF
1000	5050		97	19.0C	8.0	12600					.00	1.46		109.70			6.6			
		3																		

TABLE D-2 (CONTINUED)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	TURB SAR
EO B 807.0 202.3 GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH CONTINUED																				
09/06/73	5001		6.8	64.4F	8.0	9040	--	--	--	--	0	86	--	2800	--	--	--	5520		45AF
1050	5050		71	18.0C	8.0	9340					.00	1.41		78.96			9.6			
		3																		
09/19/73	5001		8.3	66.2F	7.9	6348	--	--	--	--	0	89	--	2050	--	--	--	3880		50AF
0850	5050		89	19.0C	7.9	7090					.00	1.46		57.81			11.0			
		3																		
EO S 809.2 205.3 CORDELIA SLOUGH AT CYGNUS																				
10/13/72	5001		5.6	64 F	7.0		--	--	--	--	--	--	--	2000	--	--	--			18AF
0850	5001		59	18 C		6940								56.40			8.2			
		3																		
11/14/72	5001		7.1	52 F	7.1	5250	--	--	--	--	--	--	--	1200	--	--	--			34AF
0940	5001		64	11 C		4350								33.84			10.4			
		3																		
12/14/72	5001		11.0	39 F	6.8		--	--	--	--	--	--	--	630	--	--	--			50AF
0935	5001		84	4 C		2490								17.77			18.2			
		3																		
01/29/73	5001		9.3	46 F	7.0		--	--	--	--	--	--	--	220	--	--	--			80AF
1010	5001		78	8 C		998								6.20			14.6			
		3																		
02/26/73	5001		7.9	55 F	7.4		--	--	--	--	--	--	--	210	--	--	--			70AF
1045	5001		75	13 C		1020								5.92			18.0			
		3																		
03/27/73	5001		8.2	55 F	7.2	1780	--	--	--	--	0	114	--	418	--	--	--			40AF
0920	5050		78	13 C	7.3	1810					.00	1.87		11.79			16.4			
		3																		
04/26/73	5001		8.1	66 F	7.7	1290	--	--	--	--	0	100	--	310	--	--	--			75AF
0905	5050		87	19 C	7.8	1330					.00	1.64		8.74			15.6			
		3																		
05/24/73	5001		8.3	66 F	7.9	5800	--	--	--	--	0	97	--	2130	--	--	--			42AF
0920	5050		89	19 C	7.8	6530					.00	1.59		60.07			7.4			
		3																		
06/25/73	5001		6.9	75 F	7.5	6600	--	--	--	--	0	96	--	2140	--	--	--			44AF
1125	5050		81	24 C	7.8	6730					.00	1.57		60.35			8.0			
		3																		
07/23/73	5001		7.8	66 F	7.9	12980	--	--	--	--	0	100	--	4430	--	--	--			33AF
0940	5050		84	19 C	7.9	13600					.00	1.64		124.93			1.4			
		3																		
08/20/73	5001		4.0	68.0F	6.8	11600	--	--	--	--	0	91	--	4300	--	--	--			55AF
0845	5050		44	20.0C	7.8	13200					.00	1.49		121.26			2.4			
		3																		
09/18/73	5001		7.3	66 F	7.9	9600	--	--	--	--	0	96	--	3060	--	--	--			62AF
0940	5050		78	19 C	7.9	9730					.00	1.57		86.29			5.6			
		3																		
EO S 810.8 202.8 SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND																				
10/13/72	5001		6.6	66 F	7.5		--	--	--	--	--	--	--	2300	--	--	--			27AF
1125	5050		71	19 C		7630								64.86			4.8			
		2																		
11/14/72	5001		8.1	54 F	7.4	8020	--	--	--	--	--	--	--	2150	--	--	--			70AF
1330	5050		75	12 C		7270								60.63			9.6			
		3																		
12/14/72	5001		9.2	39 F	7.0		--	--	--	--	--	--	--	1180	--	--	--			45AF
1245	5001		70	4 C		4180								33.28			15.2			
		2																		
02/13/73	5001		9.1	52 F	6.8		--	--	--	--	0	102	--	200	--	--	--			65AF
1040	5001		82	11 C	7.7	945					.00	1.67		5.64			15.2			
		3																		
02/26/73	5001		7.4	55 F	7.5		--	--	--	--	--	--	--	120	--	--	--			80AF
1415	5001		70	13 C		1090								3.38			16.8			
		3																		
03/27/73	5001		8.4	57 F	7.3	1720	--	--	--	--	0	162	--	384	--	--	--	935		32AF
1305	5050		81	14 C	7.4	1750					.00	2.66		10.83			16.2			
		3																		
04/12/73	5001		8.0	62.6F	7.4	1330	--	--	--	--	0	114	--	297	--	--	--	763		75AF
0950	5050		82	17.0C	7.7	1310					.00	1.87		8.38			15.4			
		3																		
04/26/73	5001		8.8	68 F	8.1	1660	--	--	--	--	0	142	--	382	--	--	--	957		60AF
1310	5050		96	20 C	7.8	1690					.00	2.33		10.77			13.2			
		3																		
05/10/73	5001		7.4	64.4F	7.7	3700	--	--	--	--	0	114	--	1170	--	--	--	2320		70AF
0845	5050		78	18.0C	7.7	4050					.00	1.87		32.99			10.2			
		3																		
05/24/73	5001		8.8	66 F	8.3	3880	--	--	--	--	0	148	--	1360	--	--	--	2400		60AF
1340	5050		94	19 C	8.0	4250					.00	2.43		38.35			2.4			
		3																		
06/13/73	5001		7.4	69.8F	7.7	4700	--	--	--	--	0	122	--	1540	--	--	--	2890		75AF
1230	5050		82	21.0C	7.9	4540					.00	2.00		43.43			5.8			
		3																		
06/25/73	5001		8.8	75 F	7.9	5900	--	--	--	--	0	127	--	1780	--	--	--	3170		38AF
1455	5050		104	24 C	7.9	5380					.00	2.08		50.20			4.2			
		3																		

TABLE D-2 (CONTINUED)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	TURB SAR
							MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER				
EO S 810.8 202.8					SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND										CONTINUED					
07/23/73	5001		10.3	68 F	8.1	9259	--	--	--	--	0	138	--	3150	--	--	--	5870		27AF
1345	5050		113	20 C	8.1	10100					.00	2.26		88.83			2.6			
		3																		
08/08/73	5001		8.3	68.0F	7.4	10700	--	--	--	--	0	110	--	4500	--	--	--	8000		60AF
1030	5050		91	20.0C	8.1	12600					.00	1.80		126.90			.6			
		3																		
08/08/73	5001			68.0F	7.5	11000	--	--	--	--	--	--	--	--	--	--	--			70AF
1031	5001			20.0C													--			
		30																		
08/20/73	5001		7.4	68.0F	7.8	10500	--	--	--	--	0	128	--	3550	--	--	--	6660		32AF
1300	5050		81	20.0C	8.1	11300					.00	2.10		100.11			.6			
		3																		
09/06/73	5001		6.9	66.2F	7.7	11200	--	--	--	--	0	101	--	4000	--	--	--	7080		30AF
1140	5050		74	19.0C	8.2	11700					.00	1.66		112.80			1.8			
		3																		
09/06/73	5001			68.0F	7.7	11150	--	--	--	--	--	--	--	--	--	--	--			40AF
1141	5001			20.0C													--			
		28																		
09/18/73	5001		8.0	68 F	8.1	10000	--	--	--	--	0	119	--	3460	--	--	--			33AF
1235	5050		87	20 C	8.0	10200					.00	1.95		97.57			2.0			
		3																		
EO S 811.0 204.8					CHADBOURNE SLOUGH AT CHADBOURNE ROAD															
10/13/72	5001		6.0	64 F	7.3		--	--	--	--	--	--	--	2100	--	--	--			22AF
0955	5001		63	18 C		7460								59.22			5.6			
		3																		
11/14/72	5001		8.5	52 F	7.1	800	--	--	--	--	--	--	--	83	--	--	--			950AF
1230	5001		77	11 C		466								2.34			16.4			
		3																		
12/14/72	5001		9.8	39 F	7.0		--	--	--	--	--	--	--	1150	--	--	--			40AF
1120	5001		74	4 C		4080								32.43			16.2			
		3																		
01/29/73	5001		8.5	46 F			--	--	--	--	--	--	--	290	--	--	--			60AF
1150	5001		72	8 C		1400								8.18			14.4			
		3																		
02/26/73	5001		9.0	55 F	7.3		--	--	--	--	--	--	--	140	--	--	--			21AF
1300	5001		85	13 C		949								3.95			28.0			
		3																		
03/27/73	5001		8.9	59 F	7.3	1320	--	--	--	--	0	171	--	242	--	--	--			30AF
1135	5050		88	15 C	7.4	1340					.00	2.80		6.82			26.4			
		3																		
04/26/73	5001		8.9	72 F	8.1	1520	--	--	--	--	0	148	--	346	--	--	--			50AF
1155	5050		101	22 C	7.8	1550					.00	2.43		9.76			14.0			
		3																		
05/24/73	5001		7.6	68 F	7.8	3900	--	--	--	--	0	144	--	1330	--	--	--			60AF
1140	5050		83	20 C	8.0	4290					.00	2.36		37.51			11.6			
		3																		
06/25/73	5001		7.9	73 F	7.6	6500	--	--	--	--	0	108	--	2150	--	--	--			37AF
1320	5050		91	23 C	7.8	6300					.00	1.77		60.63			6.0			
		3																		
06/25/73	5001		8.1	72 F	8.0	4600	--	--	--	--	0	149	--	1270	--	--	--			34AF
1545	5050		92	22 C	8.2	4330					.00	2.44		35.81			10.0			
		1																		
07/23/73	5001		8.2	68 F	7.7	8928	--	--	--	--	0	129	--	2990	--	--	--			32AF
1215	5050		90	20 C	8.0	10200					.00	2.11		84.32			4.8			
		3																		
08/20/73	5001		6.7	66.2F	7.3	10300	--	--	--	--	0	95	--	4110	--	--	--			40AF
1130	5050		72	19.0C	7.7	12800					.00	1.56		115.90			1.6			
		3																		
09/18/73	5001			64 F	7.6	10000	--	--	--	--	0	100	--	3310	--	--	--			30AF
1125	5050			18 C	7.7	9730					.00	1.64		93.34			4.2			
		3																		
FO S 811.2 158.5					MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD															
10/13/72	5001		6.9	64 F	7.5		--	--	--	--	--	--	--	2100	--	--	--			17AF
1230	5001		72	18 C		7140								59.22			5.4			
		3																		
11/14/72	5001		8.4	55 F	7.4		--	--	--	--	--	--	--	2100	--	--	--			25AF
1435	5001		79	13 C		7270								59.22			9.8			
		3																		
12/14/72	5001		10.2	39 F	6.7		--	--	--	--	--	--	--	1300	--	--	--			30AF
1330	5001		78	4 C		4490								36.66			14.6			
		3																		
01/29/73	5001		9.8	46 F			--	--	--	--	--	--	--	260	--	--	--			75AF
1335	5001		83	8 C		1070								7.33			14.8			
		3																		
02/26/73	5001		9.4	55 F	7.4		--	--	--	--	--	--	--	100	--	--	--			55AF
1520	5001		89	13 C		632								2.82			18.2			
		3																		
03/27/73	5001		9.5	55 F	7.1	950	--	--	--	--	0	95	--	199	--	--	--			27AF
1405	5050		90	13 C	7.3	962					.00	1.56		5.61			16.2			
		3																		

TABLE D-2 (CONTINUED)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE									B	F	TDS	TH	TURB
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3		SIO2	SUM	NCH	SAR
EO S 811.2 158.5 MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD CONTINUED																				
04/26/73	5001		8.9	68 F	8.0	1660	--	--	--	--	0	123	--	383	--	--	--			55AF
1405	5050		97	20 C	7.6	1690					.00	2.02		10.80			11.8			
		3																		
05/24/73	5001		7.8	66 F	7.8	3320	--	--	--	--	0	104	--	1080	--	--	--			40AF
1440	5050		84	19 C	7.8	3680					.00	1.70		30.46			7.2			
		3																		
06/25/73	5001		7.4	73 F	7.8	5600	--	--	--	--	0	105	--	1680	--	--	--			29AF
1543	5050		86	23 C	7.9	5160					.00	1.72		47.38			4.8			
		3																		
07/23/73	5001		9.8	68 F	8.0	8109	--	--	--	--	0	106	--	2690	--	--	--	5030		22AF
1430	5050		107	20 C	8.1	8870					.00	1.74		75.86			2.2			
		3																		
08/20/73	5001		7.4	71.6F	7.8	9800	--	--	--	--	0	110	--	3530	--	--	--			24AF
1350	5050		84	22.0C	7.9	10300					.00	1.80		99.55			2.2			
		3																		
08/20/73	5001					10000	--	--	--	--	--	--	--	--	--	--	--			60AF
1355	5001																--			
		10																		
09/18/73	5001		7.2	68 F	8.0	10700	--	--	--	--	0	101	--	3180	--	--	--			30AF
1315	5050		79	20 C	8.2	10400					.00	1.66		89.68			2.4			
		3																		
EO S 811.5 207.2 CORDELIA SLOUGH AT UPPER END																				
03/27/73	5001		10.0	57 F	7.7	575	--	--	--	--	0	170	--	58	--	--	--			32AF
1025	5050		97	14 C	7.8	597					.00	2.79		1.64			30.0			
		3																		
04/26/73	5001		17.6	70 F	9.1	1070	--	--	--	--	0	201	--	201	--	--	--			18AF
1055	5050		196	21 C	8.2	1130					.00	3.29		5.67			24.8			
		1																		
05/24/73	5001		7.5	68 F	8.2	4750	--	--	--	--	4.0	163	--	187	--	--	--			75AF
1020	5050		82	20 C	8.5	4580					.13	2.67		5.27			19.2			
		2																		
06/25/73	5001		7.0	72 F	7.8	3100	--	--	--	--	0	180	--	832	--	--	--			65AF
1210	5050		79	22 C	8.1	2870					.00	2.95		23.46			14.2			
		3																		
07/23/73	5001		7.5	68 F	8.1	593	--	--	--	--	5.0	173	--	84	--	--	--			60AF
1100	5050		82	20 C	8.5	669					.17	2.84		2.37			13.2			
		3																		
08/20/73	5001		6.3	68.0F	7.6	6200	--	--	--	--	0	168	--	2100	--	--	--			65AF
1015	5050		69	20.0C	8.0	7060					.00	2.75		59.22			8.4			
		3																		
09/18/73	5001		6.4	66 F	8.2	550	--	--	--	--	3.0	170	--	57	--	--	--			84AF
1030	5050		69	19 C	8.5	527					.10	2.79		1.61			16.0			
		2																		
EO S 813.6 201.2 HILL SLOUGH AT GRIZZLY ISLAND ROAD																				
10/13/72	5001		5.0	64 F	7.5		--	--	--	--	--	--	--	2900	--	--	--			31AF
1300	5001		53	18 C		8890								81.78			5.0			
		3																		
11/14/72	5001		7.1	52 F	7.4		--	--	--	--	--	--	--	250	--	--	--			120AF
1515	5001		64	11 C		834								7.05			9.0			
		3																		
12/14/72	5001		9.5	37 F	6.7		--	--	--	--	--	--	--	1280	--	--	--			40AF
1410	5001		70	3 C		4590								36.10			16.0			
		3																		
01/29/73	5001		8.1	46 F			--	--	--	--	--	--	--	240	--	--	--			55AF
1415	5001		68	8 C		1160								6.77			11.2			
		3																		
02/26/73	5001		7.0	55.4F	7.5		--	--	--	--	--	--	--	400	--	--	--			32AF
1545	5001		66	13.0C		1870								11.28			12.4			
		3																		
03/27/73	5001		8.5	59 F	7.5	990	--	--	--	--	0	194	--	177	--	--	--			45AF
1440	5050		84	15 C	7.7	1010					.00	3.18		4.99			13.2			
		3																		
04/26/73	5001		9.1	70 F	8.3	2540	--	--	--	--	0	263	--	597	--	--	--			60AF
1453	5050		101	21 C	8.0	2570					.00	4.31		16.84			9.8			
		3																		
05/24/73	5001		8.1	66 F	8.3	3100	--	--	--	--	0	248	--	841	--	--	--			120AF
1520	5050		87	19 C	8.0	2890					.00	4.06		23.72			--			
		3																		
06/25/73	5001		9.4	75 F	8.2	3700	--	--	--	--	0	231	--	944	--	--	--			65AF
1620	5050		111	24 C	8.2	3350					.00	3.79		26.62			3.6			
		3																		
07/23/73	5001		7.4	68 F	7.9	3765	--	--	--	--	0	212	--	1110	--	--	--			55AF
1500	5050		81	20 C	8.2	4180					.00	3.47		31.30			8.2			
		3																		
08/20/73	5001		8.7	75.2F	8.7	11000	--	--	--	--	0	208	--	2370	--	--	--			55AF
1440	5050		102	24.0C	7.9	7350					.00	3.41		66.83			3.4			
		3																		
09/18/73	5001		7.9	66 F	8.3	8700	--	--	--	--	0	190	--	2660	--	--	2.2			39AF
1345	5050		85	19 C	8.3	8290					.00	3.11		75.01			--			
		3																		

TABLE D-2 (CONTINUED)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TOS SUM	TH NCH	TURB SAR
	E3	1250.00			NAPA RIVER NEAR NAPA																
10/12/72	5050	3.01	8.9	64 F	7.7	380		28	24	24	--	0	208	--	21	--	--	--		170	5A
1440	5050		93	18 C	8.1	441		1.40	2.00	1.04		.00	3.41		.59			--		0	0.8
								32	45	23											
11/15/72	5050	5.02	10.0	55 F	7.2	200		14	9.2	12	--	0	75	--	10	--	--	--		73	45A
1145	5050		94	13 C	7.7	207		.70	.76	.52		.00	1.23		.28			--		12	0.6
								35	38	26											
12/21/72	5050	4.72	10.1	54 F	7.3	220		16	11	13	--	0	85	--	12	--	--	--		87	20A
1100	5050		94	12 C	7.7	221		.80	.94	.57		.00	1.39		.34			--		18	0.6
								35	41	25											
02/16/73	5050	6.47	10.9	52 F	7.3	185		13	11	8.9	--	0	85	--	8.5	--	--	--		78	30A
1345	5050		99	11 C	7.7	197		.65	.91	.39		.00	1.39		.24			--		9	0.4
								33	47	20											
04/11/73	5050	3.61	10.2	64 F	7.6	270		20	18	15	--	0	138	--	9.3	--	--	--		124	3A
1115	5050		107	18 C	7.7	304		1.00	1.48	.65		.00	2.26		.26			--		11	0.6
								32	47	21											
06/14/73	5050	2.87	15.7	69 F	8.2	320		28	24	20	--	2.0	187	--	15	--	--	--	197	170	4A
1230	5050		174	21 C	8.4	424		1.40	2.00	.87		.07	3.06		.42			--		14	0.7
								33	47	20											
08/17/73	5050	2.64	11.1	70 F	7.9	360		28	26	23	1.6	4.0	202	30	17	1.4	.40	--	255	177	0A
1200	5050		124	21 C	8.4	431		1.40	2.14	1.00	.04	.13	3.31	.62	.48	.02		--	231	5	0.8
								31	47	22	1	3	73	14	11						
	E3	2100.51			GREEN VALLEY CREEK AT CORDELIA																
10/13/72	5001		7.7	59 F	8.1			--	--	--	--	--	--	--	31	--	--	--			4AF
0930	5001		76	15 C		424									.87			16.8			
		2																			
11/14/72	5001		9.6	55 F	7.6			--	--	--	--	--	--	--	13	--	--	--			65AF
1115	5001		91	13 C		178									.37			34.8			
		3																			
12/14/72	5001		13.1	37 F	7.7			--	--	--	--	--	--	--	19	--	--	--			4AF
1045	5001		97	3 C		347									.54			32.4			
		2																			
01/29/73	5001		11.1	48 F				--	--	--	--	--	--	--	20	--	--	--			28AF
1110	5001		96	9 C		323									.56			41.4			
		3																			
02/26/73	5001		9.9	55 F	7.5			--	--	--	--	--	--	--	24	--	--	--			140AF
1200	5001		94	13 C		428									.68			35.6			
		3																			
03/27/73	5001		12.2	57 F	7.7			--	--	--	--	--	--	--	--	--	--	--			
1105			118	14 C														--			
		1																			
05/24/73	5001		10.8	66 F	8.7	330		--	--	--	--	--	--	--	--	--	--	--			
1105			116	19 C														--			
		1																			
06/25/73	5001		10.5	72 F	8.7	353		--	--	--	--	11	157	--	--	--	--	--			
1250	5001		119	22 C								.37	2.57					--			
		1																			
07/23/73	5001		11.2	66 F	8.6	305		--	--	--	--	--	--	--	--	--	--	--			
1140			120	19 C														--			
		1																			
	F4 L	748.1	215.6		LAKE MERRITT AT BOATHOUSE DOCK																
12/11/72	5050		12.1	44 F	8.9	13000		87	286	2500	60	0	110	598	4460	.8	1.20	--	7940	1400	11A
1345	5050		99	7 C	7.1	13300		4.34	23.52	108.75	1.53	.00	1.80	12.45	125.77	.01		--	8047	1304	29.1
								3	17	79	1		1	9	90						
03/20/73	5050		9.3	56 F	9.0	6000		62	124	1040	31	0	122	268	1860	--	.50	--	3710	666	1A
1150	5050		89	13 C	7.6	6480		3.09	10.20	45.24	.79	.00	2.00	5.58	52.45			--	3445	565	17.5
								5	17	76	1		3	9	87						
06/18/73	5050		10.0	71 F	8.5	37000		299	1011	7580	200	0	133	2080	13800	--	.30	--	28000	4910	0A
1230	5050		113	22 C	7.5	41200		14.92	83.14	329.73	5.12	.00	2.18	43.31	389.16			--	25036	4798	47.1
								3	19	76	1		1	10	90						
09/13/73	5050		6.8	68 F	8.5	42000		331	1130	9240	280	0	134	2240	16800	--	4.00	--	31600	5470	2A
1020	5050		74	20 C	7.5	45200		16.52	92.93	401.94	7.16	.00	2.20	46.64	473.76			--	30091	5367	54.3
								3	18	78	1			9	91						
	F5	1423.01			ARROYO VALLE NEAR UPSTREAM END OF LAKE DEL VALLE																
11/15/72	5050		10.5	54.0F	8.7	360		32	19	15	1.8	0	148	41	8.9	6.0	.40	--	226	160	37A
1105	5050		100	12.2C	7.5	372		1.60	1.56	.65	.05	.00	2.43	.85	.25	.10		--	197	37	0.5
								41	40	17	1		67	23	7	3					
03/27/73	5050		10.9	60 F	8.7	450		--	--	--	--	--	--	--	--	--	--	--		212	0A
1345	5050		111	16 C		466												--			
04/06/73	5050			56 F	8.9	500		--	--	--	--	--	--	--	--	--	--	--		252	0A
1630	5050			13 C		531												--			
04/13/73	5050		10.9	60.0F	8.4	540		--	--	--	--	--	--	--	--	--	--	--		245	0A
1330	5050		111	15.5C		564												--			
04/18/73	5050		11.2	58.0F	8.9	580		53	33	20	1.4	0	278	62	13	.5	.20	--	305	269	1A
1100	5050		112	14.4C	8.0	582		2.64	2.71	.87	.04	.00	4.56	1.29	.37	.01		--	320	40	0.5
								42	43	14	1		73	21	6						
04/27/73	5050		8.5	74.0F	8.5	575		--	--	--	--	--	--	--	--	--	--	--		264	0A
1620	5050		101	23.3C		589												--			

TABLE D-2 (CONTINUED)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TOS SUM	TH NCH	TURB SAR
E5	1423.01			ARROYO VALLE NEAR UPSTREAM END OF LAKE DEL VALLE CONTINUED																
05/04/73	5050		10.3	64.0F	8.8	600	--	--	--	--	--	--	--	--	--	--	--		274	0A
1445	5050		110	17.8C		613											--			
05/09/73	5050		11.5	72.0F	8.6	550	--	--	--	--	--	--	--	--	--	--	--		263	0A
1135	5050		134	22.2C		606											--			
05/16/73	5050		14.0	70 F	8.7	580	47	35	24	1.8	0	277	72	15	2.4	.30	--	308	263	1A
1015	5050		160	21 C	8.0	616	2.35	2.88	1.04	.05	.00	4.54	1.50	.42	.04		--	334	35	0.6
							37	46	16	1		70	23	6	1					
F8	2100.00			NAVARRO RIVER NEAR NAVARRO																
11/16/72	5050	4.97	10.2	50.9F	7.4	155	--	--	7.9	--	0	77	--	5.1	--	.10	--		65	230A
0900	5050	1060	91	10.5C	7.5	163			.34		.00	1.26		.14			--			0.4
									21											
01/19/73	5050	18.88	10.9	48.2F	7.2	110	--	--	--	--	--	--	--	--	--	--	--			340AF
0900	5050	12000	94	9.0C													--			
03/08/73	5050	6.11	10.3	48.2F	7.2	146	--	--	--	--	--	--	--	--	--	--	--			55AF
0840	5050	1650	89	9.0C													--			
05/24/73	5050	1.72	9.4	60.8F	7.3	254	--	--	--	--	--	--	--	--	--	--	--			0AF
0725	5050	61	95	16.0C													--			
07/12/73	5050	1.45	8.2	60.8F	7.3	266	--	--	--	--	--	--	--	--	--	--	--			1AF
0750	5050	16	83	16.0C													--			
09/14/73	5050	1.39	8.8	59.9F	7.2	228	--	--	13	--	0	141	--	9.8	--	.20	--		110	0A
0815	5050	9.0	88	15.5C	7.9	264			.57		.00	2.31		.28			--			0.5
									21											
F8	2720.00			BIG RIVER NEAR MENDOCINO																
11/15/72	5050	8.27	10.1	50.9F	7.2	161	--	--	9.4	--	0	88	--	5.1	--	.20	--		66	21A
1545	5050		90	10.5C	7.8	177			.41		.00	1.44		.14			--			0.5
									24											
01/18/73	5050		10.3	50.0F	7.0	80	--	--	--	--	--	--	--	--	--	--	--			325AF
1630	5050	800E	91	10.0C													--			
03/07/73	5050		10.0	48.2F	7.2	121	--	--	7.2	--	0	59	--	5.9	--	.00	--		45	18A
1515	5050	400E	86	9.0C	7.7	122			.31		.00	.97		.17			--			0.5
									26											
05/24/73	5050		8.6	60.8F	7.3	194	--	--	--	--	--	--	--	--	--	--	--			0AF
0810	5050	30	87	16.0C													--			
07/11/73	5050	6.76	9.4	68.0F	7.4	207	--	--	--	--	--	--	--	--	--	--	--			1AF
1415	5050	20	103	20.0C													--			
09/13/73	5050		10.5	60.8F	7.2	174	--	--	12	--	0	106	--	8.6	--	.40	--		78	0A
1505	5050	15E	106	16.0C	7.7	203			.52		.00	1.74		.24			--			0.6
									25											
F8	3100.00			NOYO RIVER NEAR FORT BRAGG																
11/15/72	5050		10.4	50.0F	7.2	134	--	--	10	--	0	65	--	7.9	--	.10	--		48	21A
1445	5050	167	92	10.0C	7.4	141			.44		.00	1.07		.22			--			0.6
									31											
01/18/73	5050		10.8	51.8F	7.0	78	--	--	--	--	--	--	--	--	--	--	--			182AF
1530	5050	650	98	11.0C													--			
03/07/73	5050		10.6	48.2F	7.2	105	--	--	--	--	--	--	--	--	--	--	--			11AF
1415	5050	500	91	9.0C													--			
05/23/73	5050		9.7	59.0F	7.5	127	--	--	--	--	--	--	--	--	--	--	--			1AF
1010	5050	42	96	15.0C													--			
07/11/73	5050		10.4	66.2F	7.4	164	--	--	--	--	--	--	--	--	--	--	--			1AF
1255	5050	11	111	19.0C													--			
09/13/73	5050		10.2	57.2F	7.1	141	--	--	9.7	--	0	68	--	20	--	.10	--		51	0A
1215	5050	5.0	99	14.0C	7.6	150			.42		.00	1.11		.56			--			0.6
									29											
F9	1100.00			RUSSIAN RIVER NEAR GUERNEVILLE																
10/12/72	5050	5.55	7.8	63 F	7.3	220	--	--	--	--	--	--	--	--	--	--	--			
1200			81	17 C													--			
11/15/72	5050	12.31	8.0	53 F	7.2	175	15	7.9	8.6	--	0	77	--	7.8	--	--	--		70	84A
1430	5050		73	12 C	7.7	186	.75	.65	.37		.00	1.26		.22			--		7	0.4
							42	37	21											
12/21/72	5050	11.78	9.5	53 F	7.2	182	--	--	--	--	--	--	--	--	--	--	--			
1430			87	12 C													--			
01/18/73	5050	33.10	10.4	50 F	7.3	99	8.8	6.1	4.1	--	0	51	--	5.4	--	--	--		47	750A
1130	5050		92	10 C	7.3	107	.44	.50	.18		.00	.84		.15			--		5	0.3
							39	45	16											

TABLE D-2 (CONTINUED)

MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	TURB SAR
F9	1100.00				RUSSIAN RIVER NEAR GUERNEVILLE									CONTINUED						
02/16/73	5050	15.72	10.6	49 F	7.3	170	--	--	--	--	--	--	--	--	--	--	--			
1030			92	9 C													--			
03/14/73	5050	10.13	10.7	50 F	7.3	218	18	14	8.4	--	0	121	--	7.0	--	--	--		104	244
1130	5050		95	10 C	8.0	236	.90	1.18	.37		.00	1.98		.20			--		5	0.4
							37	48	15											
04/11/73	5050	7.27	10.3	64 F	7.6	275	--	--	--	--	--	--	--	--	--	--	--			
1330			108	18 C													--			
05/10/73	5050	5.69	10.6	68 F	7.9	260	--	--	--	--	--	--	--	--	--	--	--			
1300			116	20 C													--			
06/14/73	5050		10.2	69 F	7.8	275	--	--	--	--	--	--	--	--	--	--	--			
0945			113	21 C													--			
07/12/73	5050		9.5	76 F	8.2	240	--	--	--	--	--	--	--	--	--	--	--			
1230			113	24 C													--			
08/17/73	5050	4.74	8.0	69 F	7.8	235	24	13	9.4	1.2	0	138	12	7.6	1.4	.30	--	146	113	2A
0900	5050		88	21 C	8.1	258	1.20	1.07	.41	.03	.00	2.26	.25	.21	.02		--	137	1	0.4
							44	39	15	1		82	9	8	1					
09/12/73	5050	4.80	8.2	69 F	7.8	210	23	14	12	--	0	143	--	7.4	--	.40	--	143	117	2A
1030	5050		91	21 C	8.1	266	1.15	1.19	.52		.00	2.34		.21			--		0	0.5
							40	42	18											

TABLE D-3

MINOR ELEMENT ANALYSIS OF SURFACE WATER

Sampler and Lab Agency Codes

5001 - U. S. Bureau of Reclamation

5006 - McClellan Air Force Base Laboratory

5050 - Department of Water Resources

Abbreviations

TIME	- Pacific Standard Time on a 24-hour clock
DISCH	- Instantaneous discharge in cubic feet per second
EC	- Electrical conductance in micromhos at 25° Celsius
TEMP	- Water temperature at time of sampling in degrees Fahrenheit (F) and Celsius (C)
PH	- Measure of acidity (<7) or alkalinity (>7) of water
CHROM (ALL)	- All chromium
CHROM (HEX)	- Hexavelent chromium
D	- Dissolved
T	- Total

TABLE D-3 (CONTINUED)

MINOR ELEMENT ANALYSIS OF SURFACE WATER

CONSTITUENTS IN MILLIGRAMS PER LITER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	BARIUM CADMIUM	CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC
	D1	1075.30		PAJARO RIVER AT THURWACHTER ROAD							
10/25/72	5050			24.5C		--	--	--	0.00 D	0.0 T	--
	5050			8.4	0.00 D	0.00 D	--	--	--	--	--
	D2	1006.50		OLD SALINAS RIVER ABOVE TEMBLADERO SLOUGH							
10/25/72	5050					--	--	--	0.00 D	0.0 T	--
	5050			8.4	0.00 D	0.00 D	--	--	--	--	--
	D2	1020.70		SALINAS RECLAMATION CANAL AT AIRPORT WAY							
10/25/72	5050			14.5C		--	--	--	0.00 D	0.0 T	--
0730	5050		1120	7.2	0.00 D	0.00 D	--	--	--	--	--
	D2	1030.30		BLANCO DRAIN AT PUMP LIFT							
10/25/72	5050					--	--	--	0.00 D	0.0 T	--
0955	5050			8.2	0.00 D	0.00 D	--	--	--	--	--
	D2	1325.10		SALINAS RIVER NEAR GONZALES							
10/25/72	5050			16.5C		--	--	--	0.00 D	0.0 T	--
0845	5050				0.00 D	0.00 D	--	--	--	--	--
	E0 B	801.8	222.3	SAN PABLO BAY NEAR PINOLE POINT							
11/16/72	5001			14 C		--	--	--	--	--	--
1010	5006	3		7.8	--	--	--	0.0 D	0.0 D	--	--
05/09/73	5001			15.0C		--	0.00 D	0.0 D	0.010 D	--	--
0925	5006	3	27500	8.0	--	0.00 D	--	0.0 D	0.0 D	--	0.0 D
	E0 B	802.7	207.0	SUISUN BAY OFF BULLS HEAD POINT NEAR MARTINES							
05/09/73	5001			17.0C		--	0.00 D	0.0 D	0.00 D	--	--
1110	5006	3	12350	7.9	--	0.00 D	--	0.0 D	0.0 D	--	0.0 D
	E0 B	802.8	155.0	SACRAMENTO RIVER AT CHIPPS ISLAND							
11/15/72	5001			13 C		--	--	--	--	--	--
1110	5006	3		7.7	--	--	--	0.0 D	0.0 D	--	--
01/15/73	5001			8 C		--	0.00 D	0.012 D	0.00 D	--	--
1200	5006	3		7.0	--	0.00 D	--	0.110 D	0.0 D	--	0.010 D
05/09/73	5001			18.0C		--	0.00 D	0.0 D	0.00 D	--	--
1225	5006	3	1930	8.1	--	0.00 D	--	0.0 D	0.0 D	--	0.0 D
	E0 B	803.5	217.0	SAN PABLO BAY NEAR RODEO							
05/09/73	5001			16.0C		--	0.00 D	0.0 D	0.00 D	--	--
1010	5006	3	20700	8.0	--	0.00 D	--	0.0 D	0.0 D	--	0.0 D
	E0 B	804.0	203.0	SUISUN BAY NEAR PRESTON POINT							
11/16/72	5001			13 C		--	--	--	--	--	--
1215	5006	3		7.7	--	--	--	0.0 D	0.0 D	--	--
01/15/73	5001			8 C		--	0.00 D	0.020 D	0.00 D	--	--
1120	5006	3		7.2	--	0.00 D	--	0.180 D	0.0 D	--	0.040 D
05/09/73	5001			17.0C		--	0.00 D	0.0 D	0.00 D	--	--
1140	5006	3	7640	8.0	--	0.00 D	--	0.0 D	0.0 D	--	0.0 D
	E0 B	807.0	202.3	GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH							
11/15/72	5001			14 C		--	--	--	--	--	--
1010	5006	3		7.1	--	--	--	0.0 D	0.0 D	--	--
05/10/73	5001			17.0C		--	0.00 D	0.0 D	0.00 D	--	--
0935	5006	3	5400	8.0	--	0.00 D	--	0.0 D	0.0 D	--	0.0 D
	E5	1423.01		ARROYO VALLE NEAR UPSTREAM END OF LAKE DEL VALLE							
11/15/72	5050		50	54.0F		--	--	--	--	--	--
1105	5050		360	8.7	--	--	--	--	0.92 T	--	--
03/27/73	5050			60 F		--	--	--	--	--	--
1345	5050		450	8.7	--	--	--	--	0.01 T	--	--
04/06/73	5050			56 F		--	--	--	--	--	--
1630	5050		500	8.9	--	--	--	--	0.01 T	--	--
04/13/73	5050			60.0F		--	--	--	--	--	--
1330	5050		540	8.4	--	--	--	--	0.01 T	--	--
04/18/73	5050			58.0F		--	--	--	--	--	--
1100	5050		580	8.9	--	--	--	--	0.01 T	--	--
04/27/73	5050			74.0F		--	--	--	--	--	--
1620	5050		575	8.5	--	--	--	--	0.00 T	--	--
05/04/73	5050			64.0F		--	--	--	--	--	--
1445	5050		600	8.8	--	--	--	--	0.00 T	--	--
05/09/73	5050			72.0F		--	--	--	--	--	--
1135	5050		550	8.6	--	--	--	--	0.00 T	--	--
05/16/73	5050			70 F		--	--	--	--	--	--
1015	5050		580	8.7	--	--	--	--	0.00 T	--	--

TABLE D-4

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Sampler and Lab Agency Codes

5001 - U. S. Bureau of Reclamation
5050 - Department of Water Resources
5063 - Santa Cruz County Health Department

Abbreviations and Constituents

TIME - Pacific Standard Time on a 24-hour clock

TEMP - Water temperature at time of sampling in degrees Fahrenheit (F) or Celsius (C)

EC - Electrical conductance in micromhos at 25° Celsius

DO - Dissolved oxygen content in milligrams per liter

G.H. - Instantaneous gage height in feet above an established datum

PH - Measure of acidity (<7) or alkalinity (>7) of water: F - Field; L - Lab

DISCH - Instantaneous discharge in cubic feet per second

MBAS - Methylene blue active substance (a test for detergent surfactants) in milligrams per liter: L - Linear alkylate sulfonate; A - Alkyl benzene sulfonate

DEPTH - Depth in feet at which sample was collected

TURB - Jackson Turbidity Units

T+L - Tannin and lignin as tannic acid in milligrams per liter

CHLOR - Field determination of residual chlorine in milligrams per liter

O+G - Oil and grease in milligrams per liter

COLOR - True color in color units

SET S - Settleable solids in milliliters per liter (ML/L) and milligrams per liter (MG/L): F - Field; L - Lab

BOD - Biochemical oxygen demand in milligrams per liter: A - 4 days; B - 5 days; C - 6 days; D - 7 days; E - 100 days; F - other

SUS S - Suspended solids in milligrams per liter: 5 - at 105°C; 8 - at 108°C

COD - Chemical oxygen demand in milligrams per liter

V SUS S - Volatile suspended solids in milligrams per liter

CYANIDE - Cyanide in milligrams per liter

PHENOLS - Phenols in milligrams per liter

TOC - Total organic carbon in milligrams per liter

DOC - Dissolved organic carbon in milligrams per liter

IODIDE - Iodide in milligrams per liter

T ODOR - Threshold odor number at 60°C

BROMIDE - Bromide in milligrams per liter

SULFITE - Sulfite in milligrams per liter

T SULF - Total sulfides in milligrams per liter

D SULF - Dissolved sulfides in milligrams per liter

CC EXT - Carbon chloroform extract

CA EXT - Carbon alcohol extract

TABLE D-4 (CONTINUED)

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

SET 5

DATE TIME	SAMP LAB	TEMP EC	DO G.H.	F-PH L-PH	DISCH MGAS	DEPTH TURB	T+L CHLOR	O+G COLOR	ML/L MG/L	BOD SUS	5	COD V SUS	5	CYANIDE PHENOLS	TOC DOC	IODIDE T ODOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
	D0 1100.00				BRANCIFORTE CREEK AT SANTA CRUZ														
03/19/73	5063	50.0F	10.0	7.2			--	--	--	--		--		--	--	--	--	--	--
1415	5050	300			0.0	A	--	--	--	27	5	--		--	--	--	--	--	--
09/27/73	5050	62 F	9.7	7.7	1	E	--	--	--	--		--		--	--	--	--	--	--
1330	5050	450		8.3	0.0	A	--	--	--	26	5	--		--	--	--	--	--	--
	D0 1180.01				SAN LORENZO RIVER AT PARADISE PARK														
03/19/73	5063	50.0F	11.0	7.5			--	--	--	--		--		--	--	--	--	--	--
1000	5050	335			0.0	A	--	--	--	10	5	--		--	--	--	--	--	--
09/27/73	5050	57 F	10.2	7.7			--	--	--	--		--		--	--	--	--	--	--
1000	5050	330		8.3	0.0	A	--	--	--	22	5	--		--	--	--	--	--	--
	D0 1220.01				ZAYANTE CREEK AT FELTON														
03/19/73	5063	49.0F	11.5	7.4			--	--	--	--		--		--	--	--	--	--	--
1115	5050	415			0.0	A	--	--	--	43	5	--		--	--	--	--	--	--
09/27/73	5050	56 F	10.9	7.7			--	--	--	--		--		--	--	--	--	--	--
1115	5050	330		8.1	0.0	A	--	--	--	4	5	--		--	--	--	--	--	--
	D0 1498.01				SAN LORENZO RIVER AT BOULDER CREEK														
03/19/73	5063	48.0F	11.5	7.2			--	--	--	--		--		--	--	--	--	--	--
1200	5050	195			0.0	A	--	--	--	6	5	--		--	--	--	--	--	--
09/27/73	5050	58 F	9.6	7.7	5	E	--	--	--	--		--		--	--	--	--	--	--
1150	5050	440		8.2	0.0	A	--	--	--	22	5	--		--	--	--	--	--	--
	D0 2020.00				APTOS CREEK BELOW VALENCIA CREEK														
03/19/73	5063	48 F	10.5	7.7			--	--	--	--		--		--	--	--	--	--	--
1330	5050	440			0.0	A	--	--	--	239	5	--		--	--	--	--	--	--
09/27/73	5050	60 F	9.6	8.0	1	E	--	--	--	--		--		--	--	--	--	--	--
1400	5050	670		8.5	0.0	A	--	--	--	20	5	--		--	--	--	--	--	--
	D0 3100.00				SOQUEL CREEK AT SOQUEL														
03/19/73	5063	49.0F	10.5	7.8			--	--	--	--		--		--	--	--	--	--	--
1300	5050	530			0.0	A	--	--	--	42	5	--		--	--	--	--	--	--
09/27/73	5050	72 F	10.4	8.0			--	--	--	--		--		--	--	--	--	--	--
1330	5050	650	2.72	8.3	0.0	A	--	--	--	36	5	--		--	--	--	--	--	--
	D0 4010.01				SCOTT CREEK AT HIGHWAY 1														
03/19/73	5063	50.0F	11.0	6.8			--	--	--	--		--		--	--	--	--	--	--
0930	5050	225			0.0	A	--	--	--	2	5	--		--	--	--	--	--	--
09/27/73	5050	61 F	10.4	7.3	2	E	--	--	--	--		--		--	--	--	--	--	--
1530	5050	370		8.3	0.0	A	--	--	--	2	5	--		--	--	--	--	--	--
	D1 1250.00				PAJARO RIVER AT CHITTENDEN														
07/18/73	5050	65 F	10.4	8.4			--	--	--	--		--		--	--	--	--	--	--
0945	5050	1400	1.00		--		--	--	--	45	5	--		--	--	--	--	--	--
	D1 1371.50				UVAS CREEK NR MORGAN HILL BL UVAS DAM														
07/18/73	5050	65 F	10.9	8.2			--	--	--	--		--		--	--	--	--	--	--
1215	5050	250			--		--	--	--	5	5	--		--	--	--	--	--	--
	D1 2450.00				SAN BENITO RIVER NEAR WILLOW CREEK SCHOOL														
07/18/73	5050	80 F	9.8	8.4			--	--	--	--		--		--	--	--	--	--	--
1340	5050	850			--		--	--	--	32	5	--		--	--	--	--	--	--
	D2 1006.60				MERRITT LAKE DRAIN AT PUMP														
07/18/73	5050	64 F	9.4	8.2			--	--	--	--		--		--	--	--	--	--	--
0820	5050	1950			--		--	--	--	71	5	--		--	--	--	--	--	--
	D2 1030.30				BLANCO DRAIN AT PUMP LIFT														
07/18/73	5050	62 F	8.6	8.0			--	--	--	--		--		--	--	--	--	--	--
0730	5050	1350			--		--	--	--	27	5	--		--	--	--	--	--	--
	D2 1325.10				SALINAS RIVER NEAR GONZALES														
07/17/73	5050	74 F	11.7	8.4			--	--	--	--		--		--	--	--	--	--	--
1215	5050	350			--		--	--	--	111	5	--		--	--	--	--	--	--
	D2 1850.00				SALINAS RIVER NEAR BRADLEY														
07/17/73	5050	70 F	14.7	8.4			--	--	--	--		--		--	--	--	--	--	--
1015	5050	220	4.79		--		--	--	--	13	5	--		--	--	--	--	--	--
	D4 1200.00				CARMEL RIVER AT ROBLES DEL RIO														
07/17/73	5050	72 F	17.8	8.4			--	--	--	--		--		--	--	--	--	--	--
1335	5050	700	3.53		--		--	--	--	6	5	--		--	--	--	--	--	--
	E0 B 735.0 215.0				SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL)														
10/11/72	5050	65 F	6.7	7.9			--	--	--	--		--		--	--	--	--	--	--
0930	5050	45000			--		--	--	--	6	5	--		--	--	--	--	--	--
11/27/72	5050	57 F	7.8	7.9			--	--	--	--		--		--	--	--	--	--	--
1230	5050	38000			--		--	--	--	18	5	--		--	--	--	--	--	--
12/11/72	5050	48 F	8.3	7.9			--	--	--	--		--		--	--	--	--	--	--
1115	5050	40000			--		--	--	--	6	5	--		--	--	--	--	--	--
01/23/73	5050	49 F	9.7	7.9			--	--	--	--		--		--	--	--	--	--	--
1130	5050	28000			--		--	--	--	2	5	--		--	--	--	--	--	--
02/06/73	5050	51 F	9.3	7.9			--	--	--	--		--		--	--	--	--	--	--
1030	5050	28000			--		--	--	--	14	5	--		--	--	--	--	--	--

TABLE D-4 (CONTINUED)

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.H.	F-PH L-PH	DISCH MBAS	DEPTH TURB	T+L CHLOR	O+G COLOR	SET S ML/L MG/L	BOD SUS	S	COD V SUS	S	CYANIDE PHENOLS	TOC DOC	IODIDE T ODOR	BROMIDE SULFITE	T SULF O SULF	CC EXT CA EXT
E0 B 735.0 215.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL) CONTINUED																		
03/20/73	5050	53 F	9.2	8.1			--	--	--	--		--		--	--	--	--	--	--
0915	5050	26000			--		--	--	--	43	5	--		--	--	--	--	--	--
04/05/73	5050	58 F	9.5	8.2			--	--	--	--		--		--	--	--	--	--	--
0915	5050	26000			--		--	--	--	28	5	--		--	--	--	--	--	--
05/03/73	5050	60 F	8.8	8.2			--	--	--	--		--		--	--	--	--	--	--
0810	5050	33000			--		--	--	--	45	5	--		--	--	--	--	--	--
06/18/73	5050	66 F	9.0	8.0			--	--	--	--		--		--	--	--	--	--	--
1000	5050	38000			--		--	--	--	1	5	--		--	--	--	--	--	--
09/13/73	5050	66 F	6.9	8.2			--	--	--	--		--		--	--	--	--	--	--
0810	5050	44000			--		--	--	--	40	5	--		--	--	--	--	--	--
E0 B 736.2 212.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)																		
10/11/72	5050	65 F	7.2	7.9			--	--	--	--		--		--	--	--	--	--	--
1100	5050	45000			--		--	--	--	10	5	--		--	--	--	--	--	--
11/27/72	5050	57 F	8.2	8.1			--	--	--	--		--		--	--	--	--	--	--
1330	5050	40000			--		--	--	--	21	5	--		--	--	--	--	--	--
12/11/72	5050	45 F	9.2	8.0			--	--	--	--		--		--	--	--	--	--	--
1200	5050	41000			--		--	--	--	4	5	--		--	--	--	--	--	--
01/23/73	5050	49 F	9.1	7.9			--	--	--	--		--		--	--	--	--	--	--
1220	5050	32000			--		--	--	--	36	5	--		--	--	--	--	--	--
02/06/73	5050	51 F	9.1	7.9			--	--	--	--		--		--	--	--	--	--	--
1100	5050	28000			--		--	--	--	21	5	--		--	--	--	--	--	--
03/20/73	5050	53 F	9.6	8.0			--	--	--	--		--		--	--	--	--	--	--
1015	5050	26000			--		--	--	--	140	5	--		--	--	--	--	--	--
04/05/73	5050	59 F	9.6	8.2			--	--	--	--		--		--	--	--	--	--	--
1005	5050	26000			--		--	--	--	43	5	--		--	--	--	--	--	--
05/03/73	5050	60 F	9.0	8.2			--	--	--	--		--		--	--	--	--	--	--
0900	5050	34000			--		--	--	--	28	5	--		--	--	--	--	--	--
06/18/73	5050	66 F	11.1	8.0			--	--	--	--		--		--	--	--	--	--	--
1045	5050	40000			--		--	--	--	5	5	--		--	--	--	--	--	--
09/13/73	5050	64 F	7.0	8.2			--	--	--	--		--		--	--	--	--	--	--
0910	5050	45000			--		--	--	--	20	5	--		--	--	--	--	--	--
E0 B 749.2 222.4	SAN FRANCISCO BAY AT TREASURE ISLAND																		
10/11/72	5050	62 F	7.1	7.9			--	--	--	--		--		--	--	--	--	--	--
0850	5050	42000			--		--	--	--	9	5	--		--	--	--	--	--	--
11/27/72	5050	56 F	8.1	7.9			--	--	--	--		--		--	--	--	--	--	--
1100	5050	37500			--		--	--	--	23	5	--		--	--	--	--	--	--
12/11/72	5050	48 F	8.6	8.1			--	--	--	--		--		--	--	--	--	--	--
1000	5050	39000			--		--	--	--	30	5	--		--	--	--	--	--	--
01/23/73	5050	48 F	9.8	7.8			--	--	--	--		--		--	--	--	--	--	--
1000	5050	15000			--		--	--	--	231	5	--		--	--	--	--	--	--
02/06/73	5050	50 F	9.5	8.3			--	--	--	--		--		--	--	--	--	--	--
0840	5050	23000			--		--	--	--	31	5	--		--	--	--	--	--	--
03/20/73	5050	52 F	9.0	8.1			--	--	--	--		--		--	--	--	--	--	--
0730	5050	34000			--		--	--	--	19	5	--		--	--	--	--	--	--
04/05/73	5050	55 F	9.0	8.2			--	--	--	--		--		--	--	--	--	--	--
0800	5050	34000			--		--	--	--	20	5	--		--	--	--	--	--	--
05/03/73	5050	56 F	8.2	8.2			--	--	--	--		--		--	--	--	--	--	--
0645	5050	41000			--		--	--	--	21	5	--		--	--	--	--	--	--
06/18/73	5050	64 F	8.7	8.1			--	--	--	--		--		--	--	--	--	--	--
0845	5050	40000			--		--	--	--	4	5	--		--	--	--	--	--	--
09/13/73	5050	62 F	7.4	8.1			--	--	--	--		--		--	--	--	--	--	--
0640	5050	45000			--		--	--	--	13	5	--		--	--	--	--	--	--
E0 B 801.8 222.3	SAN PABLO BAY NEAR PINOLE POINT																		
10/04/72	5001	17 C	7.5	8.0		3	--	--	--	--		--		--	--	--	--	--	--
1300	5050			8.0	--		--	--	--	15	5	5		--	--	--	--	--	--
11/16/72	5001	14 C	8.7	7.8		3	--	--	--	--		--		--	--	--	--	--	--
1010	5050			7.8	--		--	--	--	9	5	5		--	--	--	--	--	--
02/14/73	5001	11 C	10.3	7.8		3	--	--	--	--		--		--	--	--	--	--	--
1200	5050			7.8	--		--	--	--	36	5	18		--	--	--	--	--	--
04/11/73	5001	15.0C	8.5	7.6		3	--	--	--	--		--		--	--	--	--	--	--
1115	5050	19100		7.9	--		--	--	--	14	5	4		--	--	--	--	--	--
04/25/73	5001					3	--	--	--	--		--		--	--	--	--	--	--
0840	5050	22600			--		--	--	--	7	5	3		--	--	--	--	--	--
04/25/73	5001					15	--	--	--	--		--		--	--	--	--	--	--
0841	5050	30500			--		--	--	--	11	5	2		--	--	--	--	--	--
04/25/73	5001					25	--	--	--	--		--		--	--	--	--	--	--
0842	5050	33000			--		--	--	--	19	5	2		--	--	--	--	--	--

TABLE D-4 (CONTINUED)

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.H.	F-PH L-PH	DISCH MBAS	DEPTH TURB	T+L CHLOR	O+G COLOR	SET S ML/L MG/L	BOD SUS	S	COD V SUS	S	CYANIDE PHENOLS	TOC DOC	IODIDE T ODOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
		E0 B 801.8 222.3			SAN PABLO BAY NEAR PINOLE POINT									CONTINUED					
04/25/73	5001					39	--	--	--	--		--		--	--	--	--	--	--
0843	5050	35700			--		--	--	--	15	5	3		--	--	--	--	--	--
05/09/73	5001	15.0C	8.8	8.0		3	--	--	--	--		--		--	--	--	--	--	--
0925	5050	27500		7.6	--		--	--	--	19	5	1		--	--	--	--	--	--
06/12/73	5001	20.0C	8.4	7.9		3	--	--	--	--		--		--	--	--	--	--	--
1430	5050	32800		7.8	--		--	--	--	12	5	3		--	--	--	--	--	--
06/12/73	5001	19.0C				43	--	--	--	--		--		--	--	--	--	--	--
1431	5050	35000			--		--	--	--	28	5	5		--	--	--	--	--	--
07/10/73	5001		7.8	7.9		3	--	--	--	--		--		--	--	--	--	--	--
1415	5050	41000		7.9	--		--	--	--	12	5	0		--	--	--	--	--	--
07/10/73	5001						--	--	--	--		--		--	--	--	--	--	--
1416	5050	41050			--		--	--	--	31	5	6		--	--	--	--	--	--
08/07/73	5001	20.0C	8.3	7.9		3	--	--	--	--		--		--	--	--	--	--	--
1235	5050	38300		8.1	--		--	--	--	6	5	1		--	--	--	--	--	--
08/07/73	5001	19.0C				35	--	--	--	--		--		--	--	--	--	--	--
1236	5050	46000			--		--	--	--	8	5	0		--	--	--	--	--	--
09/05/73	5001	18.0C	7.9	7.9		3	--	--	--	--		--		--	--	--	--	--	--
1135	5050	38580		8.0	--		--	--	--	12	5	3		--	--	--	--	--	--
09/05/73	5001	18.0C	7.8	7.9		39	--	--	--	--		--		--	--	--	--	--	--
1136	5050	39400			--		--	--	--	10	5	3		--	--	--	--	--	--
		E0 B 802.7 207.0			SUISUN BAY OFF BULLS HEAD POINT NEAR MARTINES														
10/04/72	5001	18 C	8.1	8.0		3	--	--	--	--		--		--	--	--	--	--	--
1430	5050				--		--	--	--	14	5	4		--	--	--	--	--	--
10/18/72	5001	18 C	7.8	7.8		3	--	--	--	--		--		--	--	--	--	--	--
1300	5050			7.8	--		--	--	--	12	5	2		--	--	--	--	--	--
11/16/72	5001	14 C	8.4	7.7		3	--	--	--	--		--		--	--	--	--	--	--
1140	5050			7.7	--		--	--	--	27	5	6		--	--	--	--	--	--
02/14/73	5001	11 C	9.8	7.6		3	--	--	--	--		--		--	--	--	--	--	--
1315	5050			7.7	--		--	--	--	160	5	22		--	--	--	--	--	--
03/15/73	5001	12 C	10.0	7.8		3	--	--	--	--		--		--	--	--	--	--	--
1130	5050			7.5	--		--	--	--	47	5	10		--	--	--	--	--	--
03/28/73	5001	12.0C	10.0	7.6		3	--	--	--	--		--		--	--	--	--	--	--
0940	5050	6900		7.4	--		--	--	--	24	5	7		--	--	--	--	--	--
04/11/73	5001	16.0C	8.8	7.5		3	--	--	--	2.8	B	--		--	--	--	--	--	--
1240	5050	6900		7.4	--		--	--	--	53	5	6		--	--	--	--	--	--
04/25/73	5001	16.0C	9.3	7.6		3	--	--	--	--		--		--	--	--	--	--	--
1005	5050	9800		7.6	--		--	--	--	31	5	6		--	--	--	--	--	--
04/25/73	5001					15	--	--	--	--		--		--	--	--	--	--	--
1006	5050-				--		--	--	--	35	5	6		--	--	--	--	--	--
04/25/73	5001					27	--	--	--	--		--		--	--	--	--	--	--
1007	5050				--		--	--	--	120	5	24		--	--	--	--	--	--
05/09/73	5001	17.0C	9.0	7.9		3	--	--	--	1.2	B	--		--	--	--	--	--	--
1110	5050	12350		7.7	--		--	--	--	37	5	8		--	--	--	--	--	--
05/30/73	5001	19.0C	8.4	7.9		3	--	--	--	--		--		--	--	--	--	--	--
1510	5050	17300		7.7	--		--	--	--	48	5	8		--	--	--	--	--	--
06/12/73	5001	21.0C	8.2	7.9		3	--	--	--	1.2	B	--		--	--	--	--	--	--
1600	5050	18000		7.9	--		--	--	--	15	5	5		--	--	--	--	--	--
06/12/73	5001	20.0C				32	--	--	--	--		--		--	--	--	--	--	--
1601	5050	21100			--		--	--	--	44	5	5		--	--	--	--	--	--
06/27/73	5001	22.0C	7.8	7.9		3	--	--	--	--		--		--	--	--	--	--	--
1410	5050	21500		7.9	--		--	--	--	18	5	5		--	--	--	--	--	--
06/27/73	5001			7.8		33	--	--	--	--		--		--	--	--	--	--	--
1411	5050	24000			--		--	--	--	89	5	13		--	--	--	--	--	--
07/11/73	5001	21.0C	8.5	8.1		3	--	--	--	1.4	B	--		--	--	--	--	--	--
1355	5050	22740		8.0	--		--	--	--	38	5	6		--	--	--	--	--	--
07/11/73	5001					35	--	--	--	--		--		--	--	--	--	--	--
1356	5050	25300			--		--	--	--	111	5	14		--	--	--	--	--	--
08/07/73	5001	20.0C	8.9	8.1		3	--	--	--	1.2	B	--		--	--	--	--	--	--
1410	5050	23200		8.1	--		--	--	--	20	5	4		--	--	--	--	--	--
08/07/73	5001	20.0C				31	--	--	--	--		--		--	--	--	--	--	--
1411	5050	26700			--		--	--	--	23	5	2		--	--	--	--	--	--
08/22/73	5001	19.0C	8.4	7.9		3	--	--	--	--		--		--	--	--	--	--	--
1100	5050	21320		7.9	--		--	--	--	21	5	4		--	--	--	--	--	--
08/22/73	5001	19.0C		7.9		33	--	--	--	--		--		--	--	--	--	--	--
1101	5050	22950			--		--	--	--	49	5	8		--	--	--	--	--	--
09/05/73	5001	18.0C	8.1	8.0		3	--	--	--	1.3	B	--		--	--	--	--	--	--
1305	5050	21840		8.1	--		--	--	--	18	5	2		--	--	--	--	--	--
09/05/73	5001	19.0C		7.8		30	--	--	--	--		--		--	--	--	--	--	--
1306	5050	26040			--		--	--	--	30	5	6		--	--	--	--	--	--
09/19/73	5001	19.0C	8.0	8.0		3	--	--	--	--		--		--	--	--	--	--	--
0935	5050	14850		7.9	--		--	--	--	33	5	6		--	--	--	--	--	--

TABLE D-4 (CONTINUED)

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.H.	F-PH L-PH	DISCH MBAS	DEPTH TURB	T+L CHLOR	O+G COLOR	SET S ML/L MG/L	BOD SUS S	COD V SUS S	CYANIDE PHENOLS	TOC DOC	IODIDE T DOOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
		E0 B 802.8 155.0			SACRAMENTO RIVER AT CHIPPS ISLAND												
10/04/72	5001	19 C	9.1	8.1		3	--	--	--	--	--	--	--	--	--	--	--
1530	5050				--		--	--	--	109 5	16	--	--	--	--	--	--
10/18/72	5001	18 C	8.3	7.7		3	--	--	--	--	--	--	--	--	--	--	--
1420	5050			7.8	--		--	--	--	45 5	6	--	--	--	--	--	--
10/20/72	5001						--	--	--	--	--	--	--	--	--	--	--
1125	5050				--		--	--	--	58 5	8	--	--	--	--	--	--
10/20/72	5001						--	--	--	--	--	--	--	--	--	--	--
1215	5050				--		--	--	--	74 5	13	--	--	--	--	--	--
10/20/72	5001						--	--	--	--	--	--	--	--	--	--	--
1242	5050				--		--	--	--	45 5	8	--	--	--	--	--	--
10/20/72	5001						--	--	--	--	--	--	--	--	--	--	--
1330	5050				--		--	--	--	68 5	10	--	--	--	--	--	--
10/20/72	5001						--	--	--	--	--	--	--	--	--	--	--
1542	5050				--		--	--	--	47 5	2	--	--	--	--	--	--
11/15/72	5001	13 C	9.7	7.7		3	--	--	--	--	--	--	--	--	--	--	--
1110	5050			7.5	--		--	--	--	71 5	10	--	--	--	--	--	--
03/15/73	5001	12 C	10.5	8.0		3	--	--	--	--	--	--	--	--	--	--	--
1245	5050			7.3	--		--	--	--	60 5	12	--	--	--	--	--	--
03/28/73	5001	12.0C	10.5	7.6		3	--	--	--	--	--	--	--	--	--	--	--
1100	5050	265		7.7	--		--	--	--	58 5	11	--	--	--	--	--	--
04/11/73	5001	16.0C	9.4	7.5		3	--	--	--	1.7 B	--	--	--	--	--	--	--
1345	5050	350		7.5	--		--	--	--	50 5	6	--	--	--	--	--	--
04/25/73	5001	16.0C	10.2	8.2		3	--	--	--	--	--	--	--	--	--	--	--
1200	5050	445		7.7	--		--	--	--	60 5	9	--	--	--	--	--	--
04/25/73	5001					15	--	--	--	--	--	--	--	--	--	--	--
1201	5050	455			--		--	--	--	79 5	10	--	--	--	--	--	--
04/25/73	5001					25	--	--	--	--	--	--	--	--	--	--	--
1202	5050	460			--		--	--	--	85 5	10	--	--	--	--	--	--
04/25/73	5001					39	--	--	--	--	--	--	--	--	--	--	--
1203	5050	455			--		--	--	--	105 5	13	--	--	--	--	--	--
05/09/73	5001	18.0C	9.3	8.1		3	--	--	--	1.2 B	--	--	--	--	--	--	--
1225	5050	1930		7.9	--		--	--	--	70 5	10	--	--	--	--	--	--
05/30/73	5001	21.0C	9.0	7.8		3	--	--	--	--	--	--	--	--	--	--	--
1640	5050	2500		8.5	--		--	--	--	103 5	13	--	--	--	--	--	--
06/12/73	5001	22.0C	8.5	7.9		3	--	--	--	1.2 B	--	--	--	--	--	--	--
1710	5050	2890		8.0	--		--	--	--	74 5	12	--	--	--	--	--	--
06/12/73	5001					39	--	--	--	--	--	--	--	--	--	--	--
1711	5050	3700			--		--	--	--	80 5	10	--	--	--	--	--	--
06/27/73	5001	23.0C	8.7	8.0		3	--	--	--	--	--	--	--	--	--	--	--
1530	5050	6300		7.6	--		--	--	--	52 5	7	--	--	--	--	--	--
06/27/73	5001			7.9		41	--	--	--	--	--	--	--	--	--	--	--
1531	5050	7400			--		--	--	--	94 5	12	--	--	--	--	--	--
07/11/73	5001	23.0C	9.0	8.1		3	--	--	--	2.0 B	--	--	--	--	--	--	--
1530	5050	8571		8.2	--		--	--	--	103 5	13	--	--	--	--	--	--
07/11/73	5001					38	--	--	--	--	--	--	--	--	--	--	--
1531	5050	9279			--		--	--	--	126 5	16	--	--	--	--	--	--
08/07/73	5001	20.0C	9.4	9.3		3	--	--	--	1.4 B	--	--	--	--	--	--	--
1525	5050	8170		8.2	--		--	--	--	72 5	10	--	--	--	--	--	--
08/07/73	5001					37	--	--	--	--	--	--	--	--	--	--	--
1526	5050	9000			--		--	--	--	92 5	10	--	--	--	--	--	--
08/22/73	5001	20.0C		7.9		32	--	--	--	--	--	--	--	--	--	--	--
1220	5050	6800			--		--	--	--	113 5	16	--	--	--	--	--	--
08/22/73	5001	20.0C	8.6	7.9		3	--	--	--	--	--	--	--	--	--	--	--
1220	5050	6920		8.0	--		--	--	--	108 5	14	--	--	--	--	--	--
09/05/73	5001	19.0C	8.6	8.1		3	--	--	--	0.9 B	--	--	--	--	--	--	--
1425	5050	5542		8.3	--		--	--	--	64 5	7	--	--	--	--	--	--
09/05/73	5001	19.0C		7.9		36	--	--	--	--	--	--	--	--	--	--	--
1425	5050	6295			--		--	--	--	80 5	12	--	--	--	--	--	--
09/19/73	5001	20.0C	8.0	8.1		3	--	--	--	--	--	--	--	--	--	--	--
1050	5050	1940		7.8	--		--	--	--	85 5	10	--	--	--	--	--	--
		E0 B 803.5 217.0			SAN PABLO BAY NEAR RODEO												
04/11/73	5001	16.0C	8.8	7.6		3	--	--	--	1.6 B	--	--	--	--	--	--	--
1150	5050	15200		7.3	--		--	--	--	19 5	3	--	--	--	--	--	--
05/09/73	5001	16.0C	8.8	8.0		3	--	--	--	0.9 B	--	--	--	--	--	--	--
1010	5050	20700		7.6	--		--	--	--	26 5	5	--	--	--	--	--	--
06/12/73	5001	20.0C	8.2	7.9		3	--	--	--	1.3 B	--	--	--	--	--	--	--
1510	5050	27800		7.8	--		--	--	--	57 5	12	--	--	--	--	--	--
06/12/73	5001					42	--	--	--	--	--	--	--	--	--	--	--
1511	5050	32000			--		--	--	--	74 5	11	--	--	--	--	--	--
07/11/73	5001	20.0C	7.7	7.9		3	--	--	--	1.0 B	--	--	--	--	--	--	--
1305	5050	31920		7.9	--		--	--	--	71 5	9	--	--	--	--	--	--
07/11/73	5001					43	--	--	--	--	--	--	--	--	--	--	--
1306	5050	36280			--		--	--	--	71 5	11	--	--	--	--	--	--

TABLE D-4 (CONTINUED)

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.H.	F-PH L-PH	DISCH MBAS	DEPTH TURB	T+L CHLOR	O+G COLOR	SET S ML/L MG/L	BOD SUS	S V	COD SUS	S	CYANIDE PHENOLS	TOC DOC	IODIDE T DOOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
		F0 8 803.5 217.0			SAN PABLO BAY NEAR RODEO									CONTINUED					
08/07/73	5001	19.0C	8.0	7.9		3	--	--	--	1.0	8	--		--	--	--	--	--	--
1310	5050	33400		8.1	--		--	--	--	31	5	4		--	--	--	--	--	--
08/07/73	5001	19.0C				35	--	--	--	--		--		--	--	--	--	--	--
1311	5050	37100			--		--	--	--	29	5	4		--	--	--	--	--	--
09/05/73	5001	18.0C		7.8		3	--	--	--	0.6	8	--		--	--	--	--	--	--
1210	5050	32500		7.9	--		--	--	--	59	5	10		--	--	--	--	--	--
09/05/73	5001	18.0C		7.8		36	--	--	--	--		--		--	--	--	--	--	--
1211	5050	36400			--		--	--	--	26	5	5		--	--	--	--	--	--
		E0 8 803.6 159.3			SUISUN BAY OFF MIDDLE POINT														
03/28/73	5001	12.0C	10.4	7.7		3	--	--	--	--		--		--	--	--	--	--	--
1030	5050	305		7.7	--		--	--	--	35	5	8		--	--	--	--	--	--
04/25/73	5001	17.0C	10.6	8.4		3	--	--	--	--		--		--	--	--	--	--	--
1130	5050	1480		7.9	--		--	--	--	33	5	7		--	--	--	--	--	--
05/30/73	5001	21.0C	9.1	8.0		3	--	--	--	--		--		--	--	--	--	--	--
1615	5050	6000		8.5	--		--	--	--	127	5	16		--	--	--	--	--	--
06/27/73	5001	23.0C	8.6	8.0		3	--	--	--	--		--		--	--	--	--	--	--
1505	5050	9200		7.5	--		--	--	--	41	5	8		--	--	--	--	--	--
06/27/73	5001			7.9		34	--	--	--	--		--		--	--	--	--	--	--
1506	5050	14000			--		--	--	--	98	5	14		--	--	--	--	--	--
08/22/73	5001	20.0C	9.2	7.4		3	--	--	--	--		--		--	--	--	--	--	--
1150	5050	8640		8.0	--		--	--	--	45	5	87		--	--	--	--	--	--
08/22/73	5001	20.0C		7.8		35	--	--	--	--		--		--	--	--	--	--	--
1151	5050	12720			--		--	--	--	81	5	13		--	--	--	--	--	--
09/19/73	5001	19.0C	8.1	8.2		3	--	--	--	--		--		--	--	--	--	--	--
1025	5050	3950		8.0	--		--	--	--	73	5	10		--	--	--	--	--	--
		E0 8 804.0 203.0			SUISUN BAY NEAR PRESTON POINT														
10/18/72	5001	18 C	8.0	7.8		3	--	--	--	--		--		--	--	--	--	--	--
1330	5050				--		--	--	--	29	5	4		--	--	--	--	--	--
03/15/73	5001	12 C	10.2	7.9		3	--	--	--	--		--		--	--	--	--	--	--
1200	5050			7.5	--		--	--	--	57	5	14		--	--	--	--	--	--
03/28/73	5001	12.0C	10.7	7.9		3	--	--	--	--		--		--	--	--	--	--	--
1005	5050	690		7.8	--		--	--	--	47	5	11		--	--	--	--	--	--
04/11/73	5001	16.0C	9.4	7.6		3	--	--	--	1.6	8	--		--	--	--	--	--	--
1305	5050	1750		7.6	--		--	--	--	52	5	5		--	--	--	--	--	--
04/25/73	5001	16.0C	9.0	8.0		3	--	--	--	--		--		--	--	--	--	--	--
1045	5050	6300		7.8	--		--	--	--	56	5	7		--	--	--	--	--	--
04/25/73	5001					15	--	--	--	--		--		--	--	--	--	--	--
1046	5050	9950			--		--	--	--	88	5	10		--	--	--	--	--	--
04/25/73	5001					25	--	--	--	--		--		--	--	--	--	--	--
1047	5050	15800			--		--	--	--	44	5	7		--	--	--	--	--	--
04/25/73	5001					40	--	--	--	--		--		--	--	--	--	--	--
1048	5050	18100			--		--	--	--	68	5	9		--	--	--	--	--	--
05/04/73	5001	17.0C	8.6			3	--	--	--	--		--		--	--	--	--	--	--
1100	5050	5000			--		--	--	--	178	5	18		--	--	--	--	--	--
05/04/73	5001	17.0C	8.6			12	--	--	--	--		--		--	--	--	--	--	--
1101	5050	5000			--		--	--	--	216	5	20		--	--	--	--	--	--
05/04/73	5001	17.0C	9.0			3	--	--	--	--		--		--	--	--	--	--	--
1200	5050	3800			--		--	--	--	157	5	17		--	--	--	--	--	--
05/04/73	5001	17.0C	8.8			20	--	--	--	--		--		--	--	--	--	--	--
1201	5050	4500			--		--	--	--	191	5	18		--	--	--	--	--	--
05/04/73	5001	17.0C	9.0			3	--	--	--	--		--		--	--	--	--	--	--
1300	5050	4000			--		--	--	--	118	5	12		--	--	--	--	--	--
05/04/73	5001	17.0C	8.7			20	--	--	--	--		--		--	--	--	--	--	--
1301	5050	4700			--		--	--	--	154	5	16		--	--	--	--	--	--
05/04/73	5001	17.0C	8.7			3	--	--	--	--		--		--	--	--	--	--	--
1400	5050	4900			--		--	--	--	102	5	12		--	--	--	--	--	--
05/04/73	5001	17.0C	8.7			20	--	--	--	--		--		--	--	--	--	--	--
1401	5050	6000			--		--	--	--	270	5	28		--	--	--	--	--	--
05/04/73	5001	17.0C	8.5			3	--	--	--	--		--		--	--	--	--	--	--
1500	5050	8000			--		--	--	--	231	5	25		--	--	--	--	--	--
05/04/73	5001	17.0C	8.5			20	--	--	--	--		--		--	--	--	--	--	--
1501	5050	8000			--		--	--	--	254	5	28		--	--	--	--	--	--
05/04/73	5001	17.0C	8.5			3	--	--	--	--		--		--	--	--	--	--	--
1600	5050	9000			--		--	--	--	225	5	23		--	--	--	--	--	--
05/04/73	5001	17.0C	8.5			20	--	--	--	--		--		--	--	--	--	--	--
1601	5050	10000			--		--	--	--	284	5	30		--	--	--	--	--	--
05/04/73	5001	16.0C	8.5			3	--	--	--	--		--		--	--	--	--	--	--
1700	5050	12000			--		--	--	--	226	5	24		--	--	--	--	--	--
05/04/73	5001	16.0C	8.4			20	--	--	--	--		--		--	--	--	--	--	--
1701	5050	12000			--		--	--	--	291	5	31		--	--	--	--	--	--
05/04/73	5001	16.0C	8.4			3	--	--	--	--		--		--	--	--	--	--	--
1800	5050	13000			--		--	--	--	176	5	21		--	--	--	--	--	--
05/04/73	5001	16.0C	8.3			20	--	--	--	--		--		--	--	--	--	--	--
1801	5050	14000			--		--	--	--	317	5	33		--	--	--	--	--	--

TABLE D-4 (CONTINUED)

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.H.	F-PH L-PH	DISCH MBAS	DEPTH TURB	T+L CHLOR	O+G COLOR	SET S ML/L MG/L	BOD SUS	S	COD V SUS	S	CYANIDE PHENOLS	TOC DOC	IODIDE T DOOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
		E0 B 804.0 203.0			SUISUN BAY NEAR PRESTON POINT									CONTINUED					
05/04/73	5001	16.0C	8.9			3	--	--	--	--		--		--	--	--	--	--	--
1900	5050	12000			--		--	--	--	153	5	17		--	--	--	--	--	--
05/04/73	5001	16.0C	8.3			20	--	--	--	--		--		--	--	--	--	--	--
1901	5050	16000			--		--	--	--	126	5	15		--	--	--	--	--	--
05/09/73	5001	17.0C	9.2	8.0		3	--	--	--	1.1	B	--		--	--	--	--	--	--
1140	5050	7640		7.7	--		--	--	--	55	5	15		--	--	--	--	--	--
05/30/73	5001	20.0C	9.3	8.1		3	--	--	--	--		--		--	--	--	--	--	--
1545	5050	8900		8.4	--		--	--	--	186	5	20		--	--	--	--	--	--
06/12/73	5001	21.0C	8.4	7.9		3	--	--	--	1.8	B	--		--	--	--	--	--	--
1625	5050	11250		7.9	--		--	--	--	90	5	14		--	--	--	--	--	--
06/12/73	5001					46	--	--	--	--		--		--	--	--	--	--	--
1626	5050	15020			--		--	--	--	71	5	10		--	--	--	--	--	--
06/27/73	5001	22.0C	8.5	7.9		3	--	--	--	--		--		--	--	--	--	--	--
1440	5050	16250		7.6	--		--	--	--	50	5	10		--	--	--	--	--	--
06/27/73	5001			7.8		47	--	--	--	2.2	B	--		--	--	--	--	--	--
1441	5050	18500			--		--	--	--	212	5	26		--	--	--	--	--	--
07/11/73	5001	22.0C	9.5	8.3		3	--	--	--	--		--		--	--	--	--	--	--
1420	5050	17240		8.2	--		--	--	--	62	5	8		--	--	--	--	--	--
07/11/73	5001					43	--	--	--	--		--		--	--	--	--	--	--
1421	5050	19810			--		--	--	--	435	5	49		--	--	--	--	--	--
08/07/73	5001	20.0C	10.0	8.4		3	--	--	--	1.8	B	--		--	--	--	--	--	--
1440	5050	16400		8.2	--		--	--	--	82	5	11		--	--	--	--	--	--
08/07/73	5001	20.0C				42	--	--	--	--		--		--	--	--	--	--	--
1441	5050	20200			--		--	--	--	23	5	2		--	--	--	--	--	--
08/22/73	5001	20.0C	8.8	8.0		3	--	--	--	--		--		--	--	--	--	--	--
1130	5050	14080		7.9	--		--	--	--	64	5	11		--	--	--	--	--	--
08/22/73	5001	19.0C		8.0		39	--	--	--	--		--		--	--	--	--	--	--
1131	5050	17360			--		--	--	--	142	5	20		--	--	--	--	--	--
09/05/73	5001	18.0C	8.4	8.1		3	--	--	--	1.4	B	--		--	--	--	--	--	--
1330	5050	12600		8.3	--		--	--	--	80	5	10		--	--	--	--	--	--
09/05/73	5001	19.0C		7.9		34	--	--	--	--		--		--	--	--	--	--	--
1331	5050	18380			--		--	--	--	31	5	6		--	--	--	--	--	--
09/19/73	5001	19.0C	7.5	8.1		3	--	--	--	--		--		--	--	--	--	--	--
1000	5050	12120		7.9	--		--	--	--	108	5	16		--	--	--	--	--	--
		E0 B 804.4 156.2			HONKER BAY NEAR WHEELER POINT														
03/15/73	5001	11 C	10.8	8.0		3	--	--	--	--		--		--	--	--	--	--	--
1230	5050			7.5	--		--	--	--	72	5	12		--	--	--	--	--	--
03/29/73	5001	12.0C	10.3	7.7		3	--	--	--	--		--		--	--	--	--	--	--
1050	5050	252		7.8	--		--	--	--	44	5	9		--	--	--	--	--	--
04/12/73	5001	15.0C	9.5	7.6		3	--	--	--	--		--		--	--	--	--	--	--
1130	5050	403		7.6	--		--	--	--	66	5	12		--	--	--	--	--	--
04/26/73	5001	17.0C	10.6	8.3		3	--	--	--	--		--		--	--	--	--	--	--
1020	5050	2220		7.8	--		--	--	--	46	5	7		--	--	--	--	--	--
05/10/73	5001	18.0C	9.0	8.0		3	--	--	--	--		--		--	--	--	--	--	--
1020	5050	2480		7.7	--		--	--	--	99	5	12		--	--	--	--	--	--
05/31/73	5001	20.0C	8.6	7.7		3	--	--	--	--		--		--	--	--	--	--	--
1455	5050	2180		8.9	--		--	--	--	92	5	16		--	--	--	--	--	--
06/13/73	5001	21.0C	8.2	7.8		3	--	--	--	--		--		--	--	--	--	--	--
1545	5050	3300		7.9	--		--	--	--	135	5	16		--	--	--	--	--	--
06/26/73	5001	23.0C	7.8	7.8		3	--	--	--	--		--		--	--	--	--	--	--
1330	5050	6700		8.0	--		--	--	--	80	5	12		--	--	--	--	--	--
07/11/73	5001	22.0C	8.7	8.2		3	--	--	--	--		--		--	--	--	--	--	--
1505	5050	9680		8.0	--		--	--	--	159	5	20		--	--	--	--	--	--
08/08/73	5001	20.0C	9.3	8.2		3	--	--	--	--		--		--	--	--	--	--	--
1350	5050	8430		8.0	--		--	--	--	185	5	20		--	--	--	--	--	--
08/23/73	5001	21.0C	8.6	7.7		3	--	--	--	--		--		--	--	--	--	--	--
1300	5050	7420		7.7	--		--	--	--	196	5	26		--	--	--	--	--	--
09/06/73	5001	19.0C		8.0		3	--	--	--	--		--		--	--	--	--	--	--
1305	5050	5830		8.2	--		--	--	--	97	5	13		--	--	--	--	--	--
09/20/73	5001	20.0C	7.9	8.0		3	--	--	--	--		--		--	--	--	--	--	--
1050	5050	2220		7.8	--		--	--	--	116	5	15		--	--	--	--	--	--
		E0 B 805.3 226.3			SAN PABLO BAY NEAR MOUTH OF PETALUMA RIVER														
04/11/73	5001	17.0C	11.2	7.9		3	--	--	--	--		--		--	--	--	--	--	--
1010	5050	18200		7.4	--		--	--	--	48	5	11		--	--	--	--	--	--
05/09/73	5001	16.0C	10.1	8.3		3	--	--	--	--		--		--	--	--	--	--	--
0845	5050	26500		7.6	--		--	--	--	49	5	10		--	--	--	--	--	--
06/12/73	5001	21.0C	8.1	7.9		3	--	--	--	--		--		--	--	--	--	--	--
1350	5050	27800		7.7	--		--	--	--	96	5	16		--	--	--	--	--	--
07/10/73	5001	21.0C	7.8	8.0		3	--	--	--	--		--		--	--	--	--	--	--
1325	5050	36000		7.8	--		--	--	--	152	5	15		--	--	--	--	--	--
08/07/73	5001	20.0C	8.0	7.7		3	--	--	--	--		--		--	--	--	--	--	--
1200	5050	33500		7.7	--		--	--	--	41	5	6		--	--	--	--	--	--
09/05/73	5001	18.0C	7.5	7.8		3	--	--	--	--		--		--	--	--	--	--	--
1050	5050	34700		7.8	--		--	--	--	111	5	14		--	--	--	--	--	--

TABLE D-4 (CONTINUED)

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.H.	F-PH L-PH	DISCH MBAS	DEPTH TURB	T+L CHLOR	O+G COLOR	SET 5 ML/L MG/L	BOD SUS	S	COD V SUS	S	CYANIDE PHENOLS	TOC DOC	IODIDE T ODOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
		E0 8 807.0 202.3			GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH														
10/03/72	5001	18.5C	8.7	8.0		3	--	--	--	--		--		--	--	--	--	--	--
1300	5050				--		--	--	--	114	5	16		--	--	--	--	--	--
10/18/72	5001	18 C	8.0	7.5		3	--	--	--	--		--		--	--	--	--	--	--
1215	5050			7.3	--		--	--	--	51	5	6		--	--	--	--	--	--
11/15/72	5001	14 C	9.2	7.1		3	--	--	--	--		--		--	--	--	--	--	--
1010	5050			7.6	--		--	--	--	98	5	12		--	--	--	--	--	--
03/15/73	5001	11 C	10.7	7.5		3	--	--	--	--		--		--	--	--	--	--	--
1005	5050			7.6	--		--	--	--	72	5	13		--	--	--	--	--	--
03/29/73	5001	12.0C	10.1	7.7		3	--	--	--	--		--		--	--	--	--	--	--
1000	5050	320		7.6	--		--	--	--	89	5	15		--	--	--	--	--	--
04/12/73	5001	16.0C	9.4	7.7		3	--	--	--	--		--		--	--	--	--	--	--
1040	5050	1210		7.6	--		--	--	--	78	5	12		--	--	--	--	--	--
04/26/73	5001	17.0C	9.9	8.0		3	--	--	--	--		--		--	--	--	--	--	--
0940	5050	4920		7.7	--		--	--	--	56	5	9		--	--	--	--	--	--
05/10/73	5001	17.0C	8.9	8.0		3	--	--	--	--		--		--	--	--	--	--	--
0935	5050	5400		7.7	--		--	--	--	100	5	12		--	--	--	--	--	--
05/31/73	5001	20.0C	8.8	7.9		3	--	--	--	--		--		--	--	--	--	--	--
1415	5050	7600		7.7	--		--	--	--	173	5	24		--	--	--	--	--	--
06/13/73	5001	20.0C	8.1	7.8		3	--	--	--	--		--		--	--	--	--	--	--
1345	5050	7330		7.9	--		--	--	--	79	5	11		--	--	--	--	--	--
06/27/73	5001	23.0C	9.3	7.6		3	--	--	--	--		--		--	--	--	--	--	--
1330	5050	12600		7.5	--		--	--	--	84	5	12		--	--	--	--	--	--
08/08/73	5001	19.0C	9.4	8.0		3	--	--	--	--		--		--	--	--	--	--	--
1145	5050	13600		8.0	--		--	--	--	166	5	20		--	--	--	--	--	--
08/22/73	5001	19.0C	9.1	8.0		3	--	--	--	--		--		--	--	--	--	--	--
1000	5050	11360		8.0	--		--	--	--	85	5	12		--	--	--	--	--	--
09/06/73	5001	18.0C	6.8	8.0		3	--	--	--	--		--		--	--	--	--	--	--
1050	5050	9040		8.0	--		--	--	--	80	5	15		--	--	--	--	--	--
09/19/73	5001	19.0C	8.3	7.9		3	--	--	--	--		--		--	--	--	--	--	--
0850	5050	6348		7.9	--		--	--	--	116	5	15		--	--	--	--	--	--
		E0 5 809.2 205.3			CORDELIA SLOUGH AT CYGNUS														
11/14/72	5001	11 C	7.1	7.1		3	--	--	--	3.4	8	--		--	--	--	--	--	--
0940	5001	5250			--		--	--	--	--		--		--	--	--	--	--	--
02/26/73	5001	13 C	7.9	7.4		3	--	--	--	--		--		--	--	--	--	--	--
1045	5050				--		--	--	--	78	5	23		--	--	--	--	--	--
03/27/73	5001	13 C	8.2	7.2		3	--	--	--	--		--		--	--	--	--	--	--
0920	5050	1780			--		--	--	--	62	5	18		--	--	--	--	--	--
04/26/73	5001	19 C	8.1	7.7		3	--	--	--	--		--		--	--	--	--	--	--
0905	5050	1290			--		--	--	--	102	5	15		--	--	--	--	--	--
05/24/73	5001	19 C	8.3	7.9		3	--	--	--	--		--		--	--	--	--	--	--
0920	5050	5800			--		--	--	--	82	5	14		--	--	--	--	--	--
06/25/73	5001	24 C	6.9	7.5		3	--	--	--	--		--		--	--	--	--	--	--
1125	5050	6600			--		--	--	--	88	5	14		--	--	--	--	--	--
		E0 5 810.8 202.8			SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND														
10/13/72	5001	19 C	6.6	7.5		2	--	--	--	--		--		--	--	--	--	--	--
1125	5050				--		--	--	--	66	5	10		--	--	--	--	--	--
11/14/72	5001	12 C	8.1	7.4		3	--	--	--	2.4	8	--		--	--	--	--	--	--
1330	5050	8020			--		--	--	--	108	5	18		--	--	--	--	--	--
02/26/73	5001	13 C	7.4	7.5		3	--	--	--	--		--		--	--	--	--	--	--
1415	5050				--		--	--	--	131	5	25		--	--	--	--	--	--
03/27/73	5001	14 C	8.4	7.3		3	--	--	--	--		--		--	--	--	--	--	--
1305	5050	1720			--		--	--	--	51	5	16		--	--	--	--	--	--
04/12/73	5001	17.0C	8.0	7.4		3	--	--	--	2.6	8	--		--	--	--	--	--	--
0950	5050	1330			--		--	--	--	116	5	18		--	--	--	--	--	--
04/26/73	5001					15	--	--	--	--		--		--	--	--	--	--	--
0851	5050	1650			--		--	--	--	90	5	14		--	--	--	--	--	--
04/26/73	5001					25	--	--	--	--		--		--	--	--	--	--	--
0852	5050	1670			--		--	--	--	89	5	13		--	--	--	--	--	--
04/26/73	5001					BOT	--	--	--	--		--		--	--	--	--	--	--
0853	5050	1700			--		--	--	--	93	5	14		--	--	--	--	--	--
04/26/73	5001	20 C	8.8	8.1		3	--	--	--	--		--		--	--	--	--	--	--
1310	5050	1660			--		--	--	--	74	5	12		--	--	--	--	--	--
05/10/73	5001	18.0C	7.4	7.7		3	--	--	--	2.2	8	--		--	--	--	--	--	--
0845	5050	3700			--		--	--	--	133	5	20		--	--	--	--	--	--
05/24/73	5001	19 C	8.8	8.3		3	--	--	--	--		--		--	--	--	--	--	--
1340	5050	3880			--		--	--	--	104	5	22		--	--	--	--	--	--
06/13/73	5001	21.0C	7.4	7.7		3	--	--	--	3.0	8	--		--	--	--	--	--	--
1230	5050	4700			--		--	--	--	167	5	22		--	--	--	--	--	--
06/13/73	5001	21 C				29	--	--	--	--		--		--	--	--	--	--	--
1231	5050	4700			--		--	--	--	217	5	30		--	--	--	--	--	--
06/21/73	5001					3	--	--	--	--		--		--	--	--	--	--	--
0900	5050				--		--	--	--	133	5	17		--	--	--	--	--	--
06/21/73	5001					BOT	--	--	--	--		--		--	--	--	--	--	--
0901	5050				--		--	--	--	162	5	18		--	--	--	--	--	--

TABLE D-4 (CONTINUED)

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.H.	F-PH L-PH	DISCH MBAS	DEPTH TURB	T+L CHLOR	O+G COLOR	SET S ML/L MG/L	BOD SUS	S	COD V SUS	S	CYANIDE PHENOLS	TOC DOC	IODIDE T ODOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
		E0 S 810.8 202.8			SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND									CONTINUED					
06/21/73	5001					3	--	--	--	--		--		--	--	--	--	--	--
1130	5050				--		--	--	--	99	5	18		--	--	--	--	--	--
06/21/73	5001					BOT	--	--	--	--		--		--	--	--	--	--	--
1131	5050				--		--	--	--	136	5	18		--	--	--	--	--	--
06/21/73	5001					3	--	--	--	--		--		--	--	--	--	--	--
1500	5050				--		--	--	--	106	5	15		--	--	--	--	--	--
06/21/73	5001					BOT	--	--	--	--		--		--	--	--	--	--	--
1501	5050				--		--	--	--	276	5	32		--	--	--	--	--	--
06/25/73	5001	24 C	8.8	7.9		3	--	--	--	--		--		--	--	--	--	--	--
1455	5050	5900			--		--	--	--	86	5	15		--	--	--	--	--	--
07/23/73	5001	20 C	10.3	8.1		3	--	--	--	--		--		--	--	--	--	--	--
1345	5050	9259			--		--	--	--	78	5	14		--	--	--	--	--	--
08/08/73	5001	20 C	8.3	7.4		3	--	--	--	2.2	B	--		--	--	--	--	--	--
1030	5050	10700			--		--	--	--	117	5	15		--	--	--	--	--	--
08/08/73	5001	20.0C		7.5		30	--	--	--	--		--		--	--	--	--	--	--
1031	5050	11000			--		--	--	--	144	5	17		--	--	--	--	--	--
08/20/73	5001	20.0C	7.4	7.8		3	--	--	--	--		--		--	--	--	--	--	--
1300	5050	10500			--		--	--	--	60	5	10		--	--	--	--	--	--
09/06/73	5001	19.0C	6.9	7.7		3	--	--	--	1.6	B	--		--	--	--	--	--	--
1140	5050	11200			--		--	--	--	55	5	6		--	--	--	--	--	--
09/06/73	5001	20.0C		7.7		28	--	--	--	--		--		--	--	--	--	--	--
1141	5050	11150			--		--	--	--	90	5	13		--	--	--	--	--	--
09/18/73	5001	20 C	8.0	8.1		3	--	--	--	--		--		--	--	--	--	--	--
1235	5050	10000			--		--	--	--	72	5	9		--	--	--	--	--	--
		E0 S 811.0 204.8			CHADBOURNE SLOUGH AT CHADBOURNE ROAD														
11/14/72	5001	11 C	8.5	7.1		3	--	--	--	4.0	B	--		--	--	--	--	--	--
1230	5001	800			--		--	--	--	--		--		--	--	--	--	--	--
02/26/73	5001	13 C	9.0	7.3		3	--	--	--	--		--		--	--	--	--	--	--
1300	5050				--		--	--	--	33	5	16		--	--	--	--	--	--
03/27/73	5001	15 C	8.9	7.3		3	--	--	--	--		--		--	--	--	--	--	--
1135	5050	1320			--		--	--	--	66	5	18		--	--	--	--	--	--
04/26/73	5001	22 C	8.9	8.1		3	--	--	--	--		--		--	--	--	--	--	--
1155	5050	1520			--		--	--	--	77	5	15		--	--	--	--	--	--
05/24/73	5001	20 C	7.6	7.8		3	--	--	--	--		--		--	--	--	--	--	--
1140	5050	3900			--		--	--	--	113	5	19		--	--	--	--	--	--
06/25/73	5001	23 C	7.9	7.6		3	--	--	--	--		--		--	--	--	--	--	--
1320	5050	6500			--		--	--	--	65	5	12		--	--	--	--	--	--
06/25/73	5001	22 C	8.1	8.0		1	--	--	--	--		--		--	--	--	--	--	--
1545	5050	4600			--		--	--	--	64	5	10		--	--	--	--	--	--
		E0 S 811.2 158.5			MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD														
11/14/72	5001	13 C	8.4	7.4		3	--	--	--	2.2	B	--		--	--	--	--	--	--
1435	5001				--		--	--	--	--		--		--	--	--	--	--	--
02/26/73	5001	13 C	9.4	7.4		3	--	--	--	--		--		--	--	--	--	--	--
1520	5050				--		--	--	--	61	5	16		--	--	--	--	--	--
03/27/73	5001	13 C	9.5	7.1		3	--	--	--	--		--		--	--	--	--	--	--
1405	5050	950			--		--	--	--	46	5	16		--	--	--	--	--	--
04/26/73	5001	20 C	8.9	8.0		3	--	--	--	--		--		--	--	--	--	--	--
1405	5050	1660			--		--	--	--	73	5	13		--	--	--	--	--	--
05/24/73	5001	19 C	7.8	7.8		3	--	--	--	--		--		--	--	--	--	--	--
1440	5050	3320			--		--	--	--	80	5	14		--	--	--	--	--	--
06/25/73	5001	23 C	7.4	7.8		3	--	--	--	--		--		--	--	--	--	--	--
1543	5050	5600			--		--	--	--	48	5	10		--	--	--	--	--	--
		E0 S 811.5 207.2			CORDELIA SLOUGH AT UPPER END														
03/27/73	5001	14 C	10.0	7.7		3	--	--	--	--		--		--	--	--	--	--	--
1025	5050	575			--		--	--	--	62	5	18		--	--	--	--	--	--
04/26/73	5001	21 C	17.6	9.1		1	--	--	--	--		--		--	--	--	--	--	--
1055	5050	1070			--		--	--	--	61	5	11		--	--	--	--	--	--
05/24/73	5001	20 C	7.5	8.2		2	--	--	--	--		--		--	--	--	--	--	--
1020	5050	4750			--		--	--	--	190	5	26		--	--	--	--	--	--
06/25/73	5001	22 C	7.0	7.8		3	--	--	--	--		--		--	--	--	--	--	--
1210	5050	3100			--		--	--	--	108	5	16		--	--	--	--	--	--
		E0 S 813.6 201.2			HILL SLOUGH AT GRIZZLY ISLAND ROAD														
11/14/72	5001	11 C	7.1	7.4		3	--	--	--	6.0	B	--		--	--	--	--	--	--
1515	5001				--		--	--	--	--		--		--	--	--	--	--	--
02/26/73	5001	13.0C	7.0	7.5		3	--	--	--	--		--		--	--	--	--	--	--
1545	5050				--		--	--	--	43	5	21		--	--	--	--	--	--
03/27/73	5001	15 C	8.5	7.5		3	--	--	--	--		--		--	--	--	--	--	--
1440	5050	990			--		--	--	--	40	5	6		--	--	--	--	--	--
04/26/73	5001	21 C	9.1	8.3		3	--	--	--	--		--		--	--	--	--	--	--
1453	5050	2540			--		--	--	--	87	5	22		--	--	--	--	--	--
05/24/73	5001	19 C	8.1	8.3		3	--	--	--	--		--		--	--	--	--	--	--
1520	5050	3100			--		--	--	--	175	5	38		--	--	--	--	--	--

TABLE D-4 (CONTINUED)

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.H.	F-PH L-PH	DISCH MBAS	DEPTH TURB	T+L CHLOR	O+G COLOR	SET S ML/L MG/L	BOD SUS	S	COD V SUS	S	CYANIDE PHENOLS	TOC DOC	IODIDE T ODOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
		E0 S 813.6 201.2			HILL SLOUGH AT GRIZZLY ISLAND ROAD									CONTINUED					
06/25/73	5001	24 C	9.4	8.2		3	--	--	--	--		--		--	--	--	--	--	--
1620	5050	3700			--		--	--	--	122	5	23		--	--	--	--	--	--
		E3 2100.51			GREEN VALLEY CREEK AT CORDELIA														
11/14/72	5001	13 C	9.6	7.6		3	--	--	--	2.0	B	--		--	--	--	--	--	--
1115	5001				--		--	--	--	--		--		--	--	--	--	--	--
02/26/73	5001	13 C	9.9	7.5		3	--	--	--	--		--		--	--	--	--	--	--
1200	5050				--		--	--	--	550	5	268		--	--	--	--	--	--
		E5 1423.01			ARROYO VALLE NEAR UPSTREAM END OF LAKE DEL VALLE														
04/06/73	5050	56 F		8.9			--	--	--	--		--		--	--	--	--	--	--
1630	5050	500			--		--	--	--	7	5	5		--	--	--	--	--	--
04/13/73	5050	60.0F	10.9	8.4			--	--	--	--		--		--	--	--	--	--	--
1330	5050	540			--		--	--	--	4	5	3		--	--	--	--	--	--

TABLE D-5

NUTRIENT ANALYSIS OF SURFACE WATER

Sampler and Lab Agency Codes

5001 - U. S. Bureau of Reclamation
5050 - Department of Water Resources
5063 - Santa Cruz County Health Department

Abbreviations and Constituents

TIME	-	Pacific Standard Time on a 24-hour clock
G.H.	-	Instantaneous gage height in feet above an established datum
DISCH.	-	Instantaneous discharge in cubic feet per second
TEMP	-	Water temperature at time of sampling in degrees Fahrenheit (F) and Celsius (C)
DEPTH	-	Depth in feet at which sample was collected
PH	-	Measure of acidity (<7) or alkalinity (>7) of water
EC	-	Electrical conductance in micromhos at 25° C
TURB	-	Jackson Turbidity Units measured with a Hellege Turbidmeter (E) or a Hack Nephelometer (A)
F-CO2	-	Field determination of carbon dioxide in milligrams per liter
CACO3 P	-	Field Alkalinity (Phenol)
CACO3 T	-	Field Alkalinity (Total)
HCO3	-	Bicarbonate in milligrams per liter
CO3	-	Carbonate in milligrams per liter
NH3	-	Unfiltered ammonia
NO2	-	Unfiltered nitrite
NO3	-	Unfiltered nitrate
F ORG N	-	Dissolved organic nitrogen
U ORG N	-	Organic nitrogen
F (NH3 +	-	Ammonia and dissolved organic nitrogen
U ORN N)	-	Ammonia and organic nitrogen
DIS A.H.PO4	-	Dissolved acid hydrolyzable phosphate
F H3PO4	-	Dissolved orthophosphate
U H3PO4	-	Total orthophosphate
F TOT P	-	Dissolved total phosphorus
U TOT P	-	Total Phosphorus

TABLE D-5 (CONTINUED)

NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	FIELD LABORATORY PH	EC	TURB F-CO2	FIELD CACO3 CACO3	P T	LAB HCO3 CO3	NH3	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER NO2 NO3	F U	ORG N ORG N	F U	(NH3 + ORG N)	DIS A.H.PO4	F U	H3PO4 H3PO4	F U	TOT P TOT P
		D0 1100.00			BRANCIFORTE CREEK AT SANTA CRUZ															
03/19/73	5063		50.0F	7.2	300						--		--		--			0.07		--
1415	5050									--	0.94		--		--	--		--		--
09/27/73	5050		62 F	7.7	450		1A		182		--		--		--			0.14		--
1330	5050	1 E		8.3	482				0	--	0.26		--		--	--		--		--
		D0 1180.01			SAN LORENZO RIVER AT PARADISE PARK															
03/19/73	5063		50.0F	7.5	335						--		--		--			0.07		--
1000	5050									--	0.18		--		--	--		--		--
09/27/73	5050		57 F	7.7	330		0A		134		--		--		--			0.14		--
1000	5050			8.3	376				0	--	0.26		--		--	--		--		--
		D0 1220.01			ZAYANTE CREEK AT FELTON															
03/19/73	5063		49.0F	7.4	415						--		--		--			0.22		--
1115	5050									--	0.34		--		--	--		--		--
09/27/73	5050		56 F	7.7	330		0A		125		--		--		--			0.35		--
1115	5050	7 E		8.1	374				0	--	0.44		--		--	--		--		--
		D0 1498.01			SAN LORENZO RIVER AT BOULDER CREEK															
03/19/73	5063		48.0F	7.2	195						--		--		--			0.02		--
1200	5050									--	0.08		--		--	--		--		--
09/27/73	5050		58 F	7.7	440		1A		165		--		--		--			0.06		--
1150	5050	5 E		8.2	485				0	--	0.04		--		--	--		--		--
		D0 2020.00			APTOS CREEK BELOW VALENCIA CREEK															
03/19/73	5063		48 F	7.7	440						--		--		--			0.09		--
1330	5050									--	0.28		--		--	--		--		--
09/27/73	5050		60 F	8.0	670		0A		247		--		--		--			0.19		--
1400	5050	1 E		8.5	778				13	--	0.13		--		--	--		--		--
		D0 3100.00			SOQUEL CREEK AT SOQUEL															
03/19/73	5063		49.0F	7.8	530						--		--		--			0.05		--
1300	5050									--	0.15		--		--	--		--		--
09/27/73	5050	2.72	72 F	8.0	650		4A		196		--		--		--			0.10		--
1330	5050			8.3	724				0	--	0.08		--		--	--		--		--
		D0 4010.01			SCOTT CREEK AT HIGHWAY 1															
03/19/73	5063		50.0F	6.8	225						--		--		--			0.02		--
0930	5050									--	0.16		--		--	--		--		--
09/27/73	5050		61 F	7.3	370		0A		103		--		--		--			0.05		--
1530	5050	2 E		8.3	311				0	--	0.05		--		--	--		--		--
		D1 1250.00			PAJARO RIVER AT CHITTENDEN															
07/18/73	5050	1.00	65 F	8.4	1400				531		--		--		--			0.12		--
0945	5050			8.1	1950				0	--	1.6		--		1.0	--		--		0.40
		D1 1371.50			UVAS CREEK NR MORGAN HILL BL UVAS DAM															
07/18/73	5050		65 F	8.2	250				171		--		--		--			0.00		--
1215	5050			8.1	314				0	--	0.04		--		0.3	--		--		0.05
		D1 2450.00			SAN BENITO RIVER NEAR WILLOW CREEK SCHOOL															
07/18/73	5050		80 F	8.4	850				418		--		--		--			0.00		--
1340	5050			8.5	876				17	--	0.02		--		0.6	--		--		0.07
		D2 1006.60			MERRITT LAKE DRAIN AT PUMP															
07/18/73	5050		64 F	8.2	1950				473		--		--		--			0.02		--
0820	5050			8.3	2950				0	--	0.00		--		4.2	--		--		0.39
08/14/73	5050		70 F	8.0	2890				525		--		--		--			0.10		--
0930	5050			8.1	2850				0	--	0.01		--		--	--		--		0.13
		D2 1030.30			BLANCO DRAIN AT PUMP LIFT															
07/18/73	5050		62 F	8.0	1350				375		--		--		--			1.4		--
0730	5050			8.1	1950				0	--	2.3		--		0.8	--		--		1.4
08/14/73	5050		65 F	8.2	2380				428		--		--		--			0.84		--
0800	5050			7.9	2370				0	--	23.		--		--	--		--		1.2
		D2 1325.10			SALINAS RIVER NEAR GONZALES															
07/17/73	5050		74 F	8.4	350				155		--		--		--			0.01		--
1215	5050			8.1	462				0	--	0.11		--		0.8	--		--		0.20
		D2 1850.00			SALINAS RIVER NEAR BRADLEY															
07/17/73	5050	4.79	70 F	8.4	220				123		--		--		--			0.01		--
1015	5050			8.3	294				0	--	0.09		--		0.3	--		--		0.03
		D4 1200.00			CARMEL RIVER AT ROBLES DEL RIO															
07/17/73	5050	3.53	72 F	8.4	700				186		--		--		--			0.00		--
1335	5050			8.2	731				0	--	0.03		--		0.2	--		--		0.00
		E0 B 735.0 215.0			SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL)															
10/11/72	5050		65 F	7.9	45000		2A				--		--		--			0.29		--
0930	5050				48400					0.00	0.29		0.2		0.2	0.01		--		0.58
11/27/72	5050		57 F	7.9	38000		3A				--		--		--			0.26		--
1230	5050				43700					0.04	0.46		0.2		0.24	0.16		--		0.40
12/11/72	5050		48 F	7.9	40000		3A				--		--		--			0.25		--
1115	5050				42200					0.02	0.43		0.1		0.12	0.19		--		0.96

TABLE D-5 (CONTINUED)

NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	FIELD LABORATORY PH	EC	TUR8 F-CO2	FIELD CACO3 P CACO3 T	LAB HCO3 CO3	NH3	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER NO2 NO3	F ORG N U ORG N	F (NH3 + U ORG N)	DIS A.H.PO4	F H3PO4 U H3PO4	F TOT P U TOT P
E0 B 735.0 215.0 SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL) CONTINUED															
01/23/73	5050		49 F	7.9	28000	2A				--	--	--		0.15	--
1130	5050				29300				0.17	0.42	0.0	0.17	0.00	--	0.17
02/06/73	5050		51 F	7.9	28000	4A				--	--	--		0.16	--
1030	5050				28600				0.13	0.48	0.1	0.23	0.02	--	0.22
03/20/73	5050		53 F	8.1	26000	19A				--	--	--		0.24	--
0915	5050				26600				0.18	0.65	0.0	0.18	0.16	--	0.41
04/05/73	5050		58 F	8.2	26000	7A				--	--	--		0.26	--
0915	5050				27400				0.01	0.59	0.1	0.11	0.01	--	0.36
05/03/73	5050		60 F	8.2	33000	15A				--	--	--		0.24	--
0810	5050				36300				0.01	0.23	0.4	0.41	0.04	--	0.39
06/18/73	5050		66 F	8.0	38000	2A				--	--	--		0.45	--
1000	5050				41300				0.00	0.56	0.3	0.3	0.00	--	0.68
07/30/73	5050		69 F	8.1	41000	2A				--	--	--		0.53	--
0830	5050				44400				0.00	0.38	0.3	0.3	0.01	--	0.85
08/14/73	5050		67 F	8.2	43000	3A				--	--	--		0.46	--
0920	5050				43600				0.03	0.35	0.0	0.03	0.13	--	0.59
09/13/73	5050		66 F	8.2	44000	1A				--	--	--		0.43	--
0810	5050				46900				0.07	0.41	0.3	0.37	0.21	--	0.69
E0 B 736.2 212.0 SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)															
10/11/72	5050		65 F	7.9	45000	3A				--	--	--		0.38	--
1100	5050				47500				0.00	0.32	0.2	0.2	0.00	--	0.64
11/27/72	5050		57 F	8.1	40000	4A				--	--	--		0.29	--
1330	5050				43600				0.04	0.48	0.1	0.14	0.13	--	0.43
12/11/72	5050		45 F	8.0	41000	4A				--	--	--		0.24	--
1200	5050				42300				0.01	0.42	0.0	0.01	0.14	--	0.40
01/23/73	5050		49.6	7.9	32000	6A				--	--	--		0.18	--
1220	5050				32600				0.16	0.47	0.0	0.16	0.00	--	0.21
02/06/73	5050		51 F	7.9	28000	4A				--	--	--		0.18	--
1100	5050				28100				0.13	0.51	0.0	0.13	0.03	--	0.23
03/20/73	5050		53 F	8.0	26000	53A				--	--	--		0.22	--
1015	5050				25700				0.20	0.74	0.1	0.3	0.24	--	0.46
04/05/73	5050		59 F	8.2	26000	17A				--	--	--		0.28	--
1005	5050				26800				0.00	0.62	0.0	0.0	0.00	--	0.37
05/03/73	5050		60 F	8.2	34000	10A				--	--	--		0.19	--
0900	5050				36400				0.00	0.19	0.3	0.3	0.00	--	0.28
06/18/73	5050		66 F	8.0	40000	3A				--	--	--		0.29	--
1045	5050				42500				0.00	0.31	0.2	0.2	0.00	--	0.47
07/30/73	5050		70 F	8.1	43000	8A				--	--	--		0.48	--
0930	5050				44500				0.00	0.33	0.4	0.4	0.04	--	0.80
08/14/73	5050		66 F	8.0	44000	21A				--	--	--		0.40	--
1000	5050				43900				0.00	0.29	0.0	0.0	0.15	--	0.57
09/13/73	5050		64 F	8.2	45000	2A				--	--	--		0.36	--
0910	5050				47400				0.04	0.28	0.2	0.24	0.08	--	0.61
E0 B 749.2 222.4 SAN FRANCISCO BAY AT TREASURE ISLAND															
10/11/72	5050		62 F	7.9	42000	2A				--	--	--		0.11	--
0850	5050				45500				0.00	0.17	0.2	0.2	0.00	--	0.16
11/27/72	5050		56 F	7.9	37500	6A				--	--	--		0.10	--
1100	5050				40000				0.07	0.28	0.1	0.17	0.03	--	0.16
12/11/72	5050		48 F	8.1	39000	4A				--	--	--		0.07	--
1000	5050				40100				0.10	0.22	0.1	0.2	0.00	--	0.14
01/23/73	5050		48 F	7.8	15000	20A				--	--	--		0.07	--
1000	5050				16900				0.02	0.40	0.0	0.02	0.00	--	0.15
02/06/73	5050		50 F	8.3	23000	10A				--	--	--		0.06	--
0840	5050				23700				0.07	0.38	0.0	0.07	0.18	--	0.23
03/20/73	5050		52 F	8.1	34000	6A				--	--	--		0.10	--
0730	5050				36400				0.07	0.31	0.1	0.17	0.03	--	0.13
04/05/73	5050		55 F	8.2	34000	5A				--	--	--		0.08	--
0800	5050				37600				0.02	0.34	0.2	0.22	0.00	--	0.16
05/03/73	5050		56 F	8.2	41000	5A				--	--	--		0.08	--
0645	5050				45500				0.02	0.20	0.2	0.22	0.02	--	0.11
06/18/73	5050		64 F	8.1	40000	3A				--	--	--		0.12	--
0845	5050				45200				0.00	0.22	0.1	0.1	0.01	--	0.22
07/30/73	5050		63 F	8.0	44000	3A				--	--	--		0.12	--
0700	5050				47900				0.00	0.19	0.3	0.3	0.03	--	0.25
08/14/73	5050		63 F	8.1	44000	1A				--	--	--		0.10	--
0755	5050				48000				0.08	0.18	0.0	0.08	0.03	--	0.16
09/13/73	5050		62 F	8.1	45000	1A				--	--	--		0.10	--
0640	5050				47700				0.06	0.20	0.2	0.26	0.07	--	0.18

TABLE 0-5 (CONTINUED)

NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	FIELD LABORATORY PH	EC	TURB F-CO2	FIELD CACO3 P CACO3 T	LAB HCO3 CO3	NH3	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER NO2 NO3	F U ORG N ORG N	F U (NH3 + ORG N)	DIS A.H.PO4	F U H3PO4 H3PO4	F U TOT P TOT P
E0 B 801.8 222.3 SAN PABLO BAY NEAR PINOLE POINT															
10/04/72	5001		17 C	8.0		3AF		124		--	0.200	--		--	--
1300	5001		3	8.0	39300			0	0.05	0.13	0.20	0.25	--	0.08	0.12
11/16/72	5001		14 C	7.8		4AF		102		--	0.300	--		--	--
1010	5001		3	7.8	29700			0	0.13	0.23	0.30	0.43	--	0.08	0.13
12/13/72	5001		8 C	7.0		8AF		101		--	--	--		--	--
0930	5001		3	7.8	23200			0	0.15	0.35	0.20	0.35	--	0.10	0.10
02/14/73	5001		11 C	7.8		38AF		87		--	0.300	--		0.06	--
1200	5001		3	7.8	5800			0	0.11	0.55	0.30	0.41	--	--	0.16
04/11/73	5001		15.0C	7.6	19100	7AF		112		--	--	--		0.09	--
1115	5001		3	7.9	22400			0	0.06	0.39	--	--	--	--	0.13
05/09/73	5001		15.0C	8.0	27500	9AF		119		--	--	--		0.07	--
0925	5001		3	7.6	32000			0	0.04	0.16	--	--	--	--	0.11
06/12/73	5001		20.0C	7.9	32800	9AF		121		--	--	0.30		0.10	--
1430	5001		3	7.8	37300			0	0.09	0.23	--	--	--	--	0.14
07/10/73	5001			7.9	41000	9AF		131		--	--	0.30		0.12	--
1415	5001		3	7.9	42700			0	0.10	0.32	--	--	--	--	0.16
08/07/73	5001		20.0C	7.9	38300	5AF		132		--	--	0.40		0.13	--
1235	5001		3	8.1	42500			0	0.09	0.33	--	--	--	--	0.15
09/05/73	5001		18.0C	7.9	38580	9AF		130		--	--	0.30		0.08	--
1135	5001		3	8.0	42600			0	0.07	0.19	--	--	--	--	0.14
E0 B 802.7 207.0 SUISUN BAY OFF BULLS HEAD POINT NEAR MARTINES															
10/18/72	5001		18 C	7.8		5AF		108		--	0.200	--		--	--
1300	5001		3	7.8	23800			0	0.07	0.08	0.30	0.37	--	0.05	0.09
11/16/72	5001		14 C	7.7		16AF		99		--	0.400	--		--	--
1140	5001		3	7.7	20700			0	0.12	0.26	0.40	0.52	--	0.08	0.14
12/13/72	5001		8 C	7.9		13AF		95		--	0.100	--		--	--
1045	5001		3	7.8	17100			0	0.15	0.36	0.30	0.45	--	0.10	0.10
01/15/73	5001		8 C	7.3		30AF		80		--	0.400	--		--	--
1050	5001		3	7.6	7680			0	0.14	0.41	0.40	0.54	--	0.12	0.08
02/14/73	5001		11 C	7.6		110AF		80		--	0.400	--		0.06	--
1315	5001		3	7.7	310			0	0.11	0.52	--	--	--	--	0.21
03/15/73	5001		12 C	7.8		34AF		86		--	--	0.20		0.05	--
1130	5001		3	7.5	6990			0	0.06	0.38	--	--	--	--	0.12
03/28/73	5001		12.0C	7.6	6900	20AF		91		--	--	0.40		0.07	--
0940	5001		3	7.4	6670			0	0.10	0.47	--	--	--	--	0.11
04/11/73	5001		16.0C	7.5	6900	38AF		98		--	--	0.30		0.08	--
1240	5001		3	7.4	7670			0	0.07	0.42	--	--	--	--	0.08
04/25/73	5001		16.0C	7.6	9800	16AF		98		--	--	0.30		0.02	--
1005	5001		3	7.6	11400			0	0.04	0.15	--	--	--	--	0.10
05/09/73	5001		17.0C	7.9	12350	21AF		78		--	--	0.30		0.08	--
1110	5001		3	7.7	20900			0	0.06	0.18	--	--	--	--	0.12
05/30/73	5001		19.0C	7.9	17300	21AF		78		--	--	0.30		0.08	--
1510	5001		3	7.7	20900			0	0.06	0.18	--	--	--	--	0.12
06/12/73	5001		21.0C	7.9	18000	8AF		102		--	--	0.40		0.08	--
1600	5001		3	7.9	17000			0	0.10	0.23	--	--	--	--	0.11
06/27/73	5001		22.0C	7.9	21500	13AF		103		--	--	0.20		0.07	--
1410	5001		3	7.9	14600			0	0.10	0.21	--	--	--	--	0.11
07/11/73	5001		21.0C	8.1	22740	18AF		108		--	--	0.20		0.10	--
1355	5001		3	8.0	24200			0	0.07	0.22	--	--	--	--	0.19
08/07/73	5001		20.0C	8.1	23200	18AF		108		--	--	0.40		0.09	--
1410	5001		3	8.1	24500			0	0.08	0.16	--	--	--	--	0.13
08/22/73	5001		19.0C	7.9	21320	14AF		103		--	--	0.30		0.10	--
1100	5001		3	7.9	22500			0	0.08	0.13	--	--	--	--	0.14
09/05/73	5001		18.0C	8.0	21840	11AF		103		--	--	0.30		0.06	--
1305	5001		3	8.1	22900			0	0.07	0.13	--	--	--	--	0.14
09/19/73	5001		19.0C	8.0	14850	15AF		98		--	--	0.30		0.10	--
0935	5001		3	7.9	17600			0	0.08	0.20	--	--	--	--	0.16
E0 B 802.8 155.0 SACRAMENTO RIVER AT CHIPPS ISLAND															
10/18/72	5001		18 C	7.7		29AF		82		--	0.200	--		--	--
1420	5001		3	7.8	5750			0	0.09	0.13	0.40	0.49	--	0.06	0.13
11/15/72	5001		13 C	7.7		34AF		72		--	0.300	--		--	--
1110	5001		3	7.5	2500			0	0.07	0.26	0.50	0.57	--	0.07	0.15
12/12/72	5001		7 C	7.7		21AF		74		--	0.300	--		--	--
0910	5001		3	7.7	429			0	0.08	0.36	0.40	0.48	--	0.07	0.10
01/15/73	5001		8 C	7.0		80AF		58		--	0.600	--		--	--
1200	5001		3	7.4	175			0	0.11	0.64	0.60	0.71	--	0.06	0.15
02/13/73	5001		11 C	7.8		110AF		73		--	0.300	--		0.06	--
1240	5001		3	7.6	205			0	0.08	0.55	0.40	0.48	--	--	0.20
03/15/73	5001		12 C	8.0		37AF		83		--	--	0.40		0.05	--
1245	5001		3	7.3	254			0	0.07	0.48	--	--	--	--	0.13
03/28/73	5001		12.0C	7.6	265	40AF		83		--	--	0.40		0.05	--
1100	5001		3	7.7	246			0	0.07	0.34	--	--	--	--	0.13
04/11/73	5001		16.0C	7.5	350	32AF		93		--	--	0.30		0.07	--
1345	5001		3	7.5	352			0	0.03	0.42	--	--	--	--	0.10

TABLE D-5 (CONTINUED)

NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	FIELD PH	LABORATORY EC	TURB F-CO2	FIELD CACO3 CACO3	P T	LAB HCO3 CO3	NH3 -	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER NO2 NO3	F U	ORG N ORG N	F U	(NH3 + ORG N)	DIS A.H.PO4	F U	H3PO4 H3PO4	F U	TOT P TOT P
		E0 B 802.8 155.0		SACRAMENTO RIVER AT CHIPPS ISLAND											CONTINUED					
04/25/73	5001		16.0C	8.2	445	32AF			89		--		--		0.30			0.06		--
1200	5001		3	7.7	416				0	0.03	0.23		--		--	--		--		0.10
05/09/73	5001		18.0C	8.1	1930	33AF			85		--		--		0.10			0.06		--
1225	5001		3	7.9	2140				0	0.04	0.11		--		--	--		--		0.10
05/30/73	5001		21.0C	7.8	2500	48AF			70		--		--		0.30			0.07		--
1640	5001		3	8.5	2550				4	0.06	0.23		--		--	--		--		0.18
06/12/73	5001		22.0C	7.9	2890	45AF			82		--		--		0.30			0.08		--
1710	5001		3	8.0	2790				0	0.07	0.32		--		--	--		--		0.15
06/27/73	5001		23.0C	8.0	6300	31AF			82		--		--		0.30			0.07		--
1530	5001		3	7.6	6630				0	0.05	0.30		--		--	--		--		0.15
07/11/73	5001		23.0C	8.1	8571	48AF			87		--		--		0.30			0.08		--
1530	5001		3	8.2	8800				0	0.05	0.23		--		--	--		--		0.25
07/31/73	5001		25 C	7.8	370	18AF			73		--		--		0.20			0.06		--
1340	5001		3						0	0.02	0.03		--		--	--		--		0.14
08/07/73	5001		20.0C	9.3	8170	37AF			85		--		--		0.40			0.07		--
1525	5001		3	8.2	8830				0	0.06	0.14		--		--	--		--		0.18
08/22/73	5001		20.0C	7.9	6920	60AF			86		--		--		0.20			0.07		--
1220	5001		3	8.0	7460				0	0.03	0.12		--		--	--		--		0.20
09/05/73	5001		19.0C	8.1	5542	38AF			85		--		--		0.30			0.05		--
1425	5001		3	8.3	6050				0	0.05	0.15		--		--	--		--		0.17
09/19/73	5001		20.0C	8.1	1940	50AF			86		--		--		--			--		--
1050			3	7.8	2110				0	0.07	0.23		--		--	--		--		--
		F0 B 803.5 217.0		SAN PABLO BAY NEAR RODEO																
10/04/72	5001		19 C	8.0		6AF			930		--		0.200		--			--		--
1350	5001		3	7.9	31800				0	0.05	0.14		0.20		0.25	--		0.08		0.11
11/16/72	5001		14 C	7.8		10AF			101		--		0.300		--			--		--
1055	5001		3	7.8	24900				0	0.17	0.27		0.30		0.47	--		0.08		0.14
12/13/72	5001		8 C	7.9		12AF			100		--		0.200		--			--		--
1005	5001		3	7.9	21100				0	0.16	0.36		0.30		0.46	--		0.10		0.10
02/14/73	5001		11 C	7.6		50AF			86		--		0.400		--			0.06		--
1230	5001		3	7.7	5000				0	0.12	0.52		0.40		0.52	--		--		0.12
04/11/73	5001		16.0C	7.6	15200	10AF			106		--		--		0.20			0.08		--
1150	5001		3	7.3	17600				0	0.06	0.36		--		--	--		--		0.08
05/09/73	5001		16.0C	8.0	20700	16AF			112		--		--		--			0.06		--
1010	5001		3	7.6	23800				0	0.05	0.13		--		--	--		--		0.11
06/12/73	5001		20.0C	7.9	27800	26AF			112		--		--		0.60			0.10		--
1510	5001		3	7.8	21800				0	0.10	0.23		--		--	--		--		0.16
07/11/73	5001		20.0C	7.9	31920	31AF			121		--		--		0.30			0.08		--
1305	5001		3	7.9	35200				0	0.08	0.36		--		--	--		--		0.13
08/07/73	5001		19.0C	7.9	33400	17AF			124		--		--		0.40			0.13		--
1310	5001		3	8.1	37200				0	0.10	0.31		--		--	--		--		0.17
09/05/73	5001		18.0C	7.8	32500	29AF			121		--		--		0.40			0.11		--
1210	5001		3	7.9	36300				0	0.11	0.28		--		--	--		--		0.20
		E0 B 803.6 159.3		SUISUN BAY OFF MIDDLE POINT																
03/28/73	5001		12.0C	7.7	305	33AF			84		--		--		0.40			0.06		--
1030	5001		3	7.7	279				0	0.05	0.45		--		--	--		--		0.12
04/25/73	5001		17.0C	8.4	1480	15AF			89		--		--		0.30			0.06		--
1130	5001		3	7.9	1060				0	0.04	0.45		--		--	--		--		0.06
05/30/73	5001		21.0C	8.0	6000	46AF			73		--		--		0.40			0.07		--
1615	5001		3	8.5	6310				5	0.05	0.19		--		--	--		--		0.18
06/27/73	5001		23.0C	8.0	9200	24AF			86		--		--		0.50			0.09		--
1505	5001		3	7.5	9200				0	0.06	0.32		--		--	--		--		0.13
08/22/73	5001		20.0C	7.4	8640	45AF			87		--		--		0.20			0.06		--
1150	5001		3	8.0	9820				0	0.01	0.07		--		--	--		--		0.17
09/19/73	5001		19.0C	8.2	3950	45AF			88		--		--		0.20			0.09		--
1025	5001		3	8.0	4090				0	0.05	0.22		--		--	--		--		0.19
		E0 B 804.0 203.0		SUISUN BAY NEAR PRESTON POINT																
03/15/73	5001		12 C	7.9		40AF			82		--		--		0.30			0.05		--
1200	5001		3	7.5	1150				0	0.06	0.43		--		--	--		--		0.12
03/28/73	5001		12.0C	7.9	690	33AF			80		--		--		0.30			0.06		--
1005	5001		3	7.8	739				0	0.05	0.44		--		--	--		--		0.13
04/11/73	5001		16.0C	7.6	1750	39AF			95		--		--		0.20			--		--
1305	5001		3	7.6	1960				0	0.06	0.45		--		--	--		--		0.08
04/25/73	5001		16.0C	8.0	6300	26AF			95		--		--		0.40			0.06		--
1045	5001		3	7.8	7160				0	0.06	0.33		--		--	--		--		0.09
05/09/73	5001		17.0C	8.0	7640	46AF			95		--		--		0.40			0.06		--
1140	5001		3	7.7	8860				0	0.10	0.16		--		--	--		--		0.19
05/30/73	5001		20.0C	8.1	8900	66AF			80		--		--		0.40			0.07		--
1545	5001		3	8.4	9580				4	0.06	0.19		--		--	--		--		0.26
06/12/73	5001		21.0C	7.9	11250	37AF			93		--		--		0.20			0.07		--
1625	5001		3	7.9	10200				0	0.07	0.23		--		--	--		--		0.18
06/27/73	5001		22.0C	7.9	16250	25AF			96		--		--		0.30			0.09		--
1440	5001		3	7.6	14500				0	0.07	0.30		--		--	--		--		0.15

TABLE D-5 (CONTINUED)

NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	FIELD LABORATORY PH	EC	FIELD TURB F-CO2	CACO3 P CACO3 T	LAB HCO3 CO3	NH3	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER NO2 NO3	F U ORG N ORG N	F U (NH3 + ORG N)	DIS A.H.PO4	F U H3PO4 H3PO4	F U TOT P TOT P
		E0 B 804.0 203.0	SUISUN BAY NEAR PRESTON POINT								CONTINUED				
07/11/73	5001		22.0C	8.3	17240	33AF		100		--	--	0.30		0.08	--
1420	5001		3	8.2	18300			0	0.06	0.13	--	--	--	--	0.20
08/07/73	5001		20.0C	8.4	16400	33AF		90		--	--	0.50		0.07	--
1440	5001		3	8.2	17500			0	0.04	0.10	--	--	--	--	0.19
08/22/73	5001		20.0C	8.0	14080	31AF		95		--	--	0.30		0.08	--
1130	5001		3	7.9	16200			0	0.03	0.07	--	--	--	--	0.13
09/05/73	5001		18.0C	8.1	12600	45AF		92		--	--	0.30		0.04	--
1330	5001		3	8.3	13400			0	0.03	0.10	--	--	--	--	0.18
09/19/73	5001		19.0C	8.1	12120	50AF		93		--	--	0.30		0.09	--
1000	5001		3	7.9	12700			0	0.07	0.18	--	--	--	--	0.28
		E0 B 804.4 156.2	MONKER BAY NEAR WHEELER POINT												
10/18/72	5001		18 C	7.6		30AF		84		--	0.300	--		--	--
1410	5001		3	7.6	5700			0	0.08	0.12	0.30	0.38	--	0.05	0.12
11/15/72	5001		13 C	7.7		31AF		73		--	0.400	--		--	--
1055	5001		3	7.6	2860			0	0.11	0.28	0.40	0.51	--	0.07	0.14
12/12/72	5001		6 C	7.8		21AF		74		--	0.300	--		--	--
0845	5001		3	7.7	349			0	0.08	0.35	0.50	0.58	--	0.07	0.10
02/13/73	5001		11 C	8.0		110AF		72		--	0.040	--		0.06	--
1210	5001		3	7.5	178			0	0.07	0.44	0.40	0.47	--	--	0.19
03/15/73	5001		11 C	8.0		50AF		89		--	--	0.14		0.05	--
1230	5001		3	7.5	230			0	0.05	0.35	--	--	--	--	0.12
03/29/73	5001		12.0C	7.7	252	27AF		86		--	--	0.30		0.05	--
1050	5001		3	7.8	236			0	0.06	0.29	--	--	--	--	0.11
04/12/73	5001		15.0C	7.6	403	33AF		92		--	--	0.30		0.07	--
1130	5001		3	7.6	372			0	0.05	0.42	--	--	--	--	0.10
04/26/73	5001		17.0C	8.3	2220	22AF		89		--	--	0.30		0.05	--
1020	5001		3	7.8	1950			0	0.04	0.22	--	--	--	--	0.08
05/10/73	5001		18.0C	8.0	2480	45AF		85		--	--	0.10		0.06	--
1020	5001		3	7.7	2700			0	0.05	0.11	--	--	--	--	0.19
05/31/73	5001		20.0C	7.7	2180	68AF		55		--	--	0.20		0.07	--
1455	5001		3	8.9	1890			13	0.06	0.24	--	--	--	--	0.23
06/13/73	5001		21.0C	7.8	3300	75AF		85		--	--	0.20		0.08	--
1545	5001		3	7.9	3160			0	0.08	0.33	--	--	--	--	0.21
06/26/73	5001		23.0C	7.8	6700	84AF		84		--	--	0.30		0.05	--
1330	5001		3	8.0	6810			0	0.04	0.24	--	--	--	--	0.16
07/11/73	5001		22.0C	8.2	9680	80AF		88		--	--	0.50		0.07	--
1505	5001		3	8.0	10300			0	0.05	0.20	--	--	--	--	0.34
08/08/73	5001		20.0C	8.2	8430	90AF		84		--	--	0.50		0.07	--
1350	5001		3	8.0	9850			0	0.05	0.12	--	--	--	--	0.29
08/23/73	5001		21.0C	7.7	7420	84AF		84		--	--	0.20		0.07	--
1300	5001		3	7.7	8680			0	0.03	0.10	--	--	--	--	0.29
09/06/73	5001		19.0C	8.0	5830	55AF		83		--	--	0.40		0.08	--
1305	5001		3	8.2	5860			0	0.05	0.21	--	--	--	--	0.21
09/20/73	5001		20.0C	8.0	2220	60AF		86		--	--	0.20		0.09	--
1050	5001		3	7.8	2310			0	0.04	0.23	--	--	--	--	0.23
		E0 B 805.3 226.3	SAN PABLO BAY NEAR MOUTH OF PETALUMA RIVER												
10/04/72	5001		18 C	7.9		7AF		116		--	0.200	--		--	--
1225	5001		3	8.1	34400			0	0.01	0.03	0.20	0.21	--	0.11	0.12
11/16/72	5001		12 C	7.6		38AF		103		--	0.500	--		--	--
0940	5001		3	7.8	28600			0	0.17	0.40	0.50	0.67	--	0.15	0.20
12/13/72	5001		4 C	7.9		28AF		98		--	0.300	--		--	--
0905	5001		3	7.8	22200			0	0.15	0.44	0.30	0.45	--	0.09	0.11
02/14/73	5001		11 C	7.9		50AF		82		--	0.400	--		0.13	--
1135	5001		3	7.8	6500			0	0.21	0.75	0.50	0.71	--	--	0.18
04/11/73	5001		17.0C	7.9	18200	26AF		106		--	--	0.10		0.07	--
1010	5001		3	7.4	20500			0	0.01	0.19	--	--	--	--	0.10
05/09/73	5001		16.0C	8.3	26500	21AF		117		--	--	0.00		0.02	--
0845	5001		3	7.6	30700			0	0.00	0.01	--	--	--	--	0.15
06/12/73	5001		21.0C	7.9	27800	60AF		112		--	--	0.10		0.11	--
1350	5001		3	7.7	31400			0	0.03	0.05	--	--	--	--	0.22
07/10/73	5001		21.0C	8.0	36000	78AF		124		--	--	0.30		0.16	--
1325	5001		3	7.8	37900			0	0.07	0.47	--	--	--	--	0.35
08/07/73	5001		20.0C	7.7	33500	20AF		129		--	--	0.50		0.16	--
1200	5001		3	7.7	39500			0	0.06	0.39	--	--	--	--	0.21
09/05/73	5001		18.0C	7.8	34700	65AF		123		--	--	0.30		0.10	--
1050	5001		3	7.8	38400			0	0.03	0.26	--	--	--	--	0.28
		E0 B 807.0 202.3	GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH												
10/18/72	5001		18 C	7.5		27AF		90		--	0.300	--		--	--
1215	5001		3	7.3	10800			0	0.08	0.12	0.40	0.48	--	0.04	0.12
11/15/72	5001		14 C	7.1		45AF		79		--	0.400	--		--	--
1010	5001		3	7.0	6780			0	0.16	0.28	0.50	0.66	--	0.07	0.20
12/12/72	5001		6 C	7.1		38AF		77		--	0.400	--		--	--
0800	5001		3	7.7	2840			0	0.13	0.39	0.50	0.63	--	0.08	0.11

TABLE D-5 (CONTINUED)

NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	FIELD LABORATORY PH	EC	TURB F-CO2	FIELD CACO3 P CACO3 T	LAB HCO3 CO3	NH3	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER NO2 NO3	F ORG N U ORG N	F (NH3 + U ORG N)	DIS A.H.PO4	F H3PO4 U H3PO4	F TOT P U TOT P
E0 B 807.0 202.3 GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH CONTINUED															
02/13/73	5001		11 C	7.4		100AF		76		--	0.300	--		0.06	--
1130	5001		3	7.8	180			0	0.08	0.40	0.50	0.58	--	--	0.22
03/15/73	5001		11 C	7.5		83AF		83		--	--	0.10		0.05	--
1005	5001		3	7.6	222			0	0.04	0.35	--	--	--	--	0.12
03/29/73	5001		12.0C	7.7	320	55AF		86		--	--	0.40		0.06	--
1000	5001		3	7.6	292			0	0.05	0.38	--	--	--	--	0.15
04/12/73	5001		16.0C	7.7	1210	55AF		93		--	--	0.30		0.07	--
1040	5001		3	7.6	1120			0	0.07	0.46	--	--	--	--	0.10
04/26/73	5001		17.0C	8.0	4920	26AF		95		--	--	--		0.04	--
0940	5001		3	7.7	5450			0	0.04	0.19	--	--	--	--	0.08
05/10/73	5001		17.0C	8.0	5400	50AF		89		--	--	0.20		0.07	--
0935	5001		3	7.7	5820			0	0.09	0.18	--	--	--	--	0.20
05/31/73	5001		20.0C	7.9	7600	76AF		82		--	--	0.30		0.07	--
1415	5001		3	7.7	8130			0	0.05	0.17	--	--	--	--	0.27
06/13/73	5001		20.0C	7.8	7330	37AF		90		--	--	0.50		0.08	--
1345	5001		3	7.9	8000			0	0.12	0.28	--	--	--	--	0.16
06/27/73	5001		23.0C	7.6	12600	37AF		83		--	--	0.30		0.06	--
1330	5001		3	7.5	13100			0	0.04	0.21	--	--	--	--	0.18
08/08/73	5001		19.0C	8.0	13600	80AF		92		--	--	0.40		0.06	--
1145	5001		3	8.0	15200			0	0.03	0.06	--	--	--	--	0.30
09/06/73	5001		18.0C	8.0	9040	45AF		86		--	--	0.30		0.08	--
1050	5001		3	8.0	9340			0	0.03	0.17	--	--	--	--	0.19
09/19/73	5001		19.0C	7.9	6348	50AF		89		--	--	0.20		0.08	--
0850	5001		3	7.9	7090			0	0.04	0.15	--	--	--	--	0.25
E0 S 809.2 205.3 CORDELIA SLOUGH AT CYGNUS															
11/14/72	5001		11 C	7.1	5250	34AF				--	--	--		--	--
0940	5001		3		4350				.20	.23	1.30	1.5	--	.03	.08
01/29/73	5001		8 C	7.0		80AF				--	.60	--		--	--
1010	5001		3		998				.17	.46	.80	0.97	--	.04	.14
02/26/73	5001		13 C	7.4		70AF				--	.50	--		.04	--
1045	5001		3		1020				.14	.46	.80	0.94	--	--	.17
03/27/73	5001		13 C	7.2	1780	40AF		114		--	--	.80		.03	--
0920	5001		3	7.3	1810			0	.16	.45	--	--	--	--	.15
04/26/73	5001		19 C	7.7	1290	75AF		100		--	--	.40		.05	--
0905	5001		3	7.8	1330			0	.02	.29	--	--	--	--	.18
05/24/73	5001		19 C	7.9	5800	42AF		97		--	--	.30		.04	--
0920	5001		3	7.8	6530			0	.01	.15	--	--	--	--	.19
06/25/73	5001		24 C	7.5	6600	44AF		96		--	--	.30		.06	--
1125	5001		3	7.8	6730			0	.04	.18	--	--	--	--	.23
07/23/73	5001		19 C	7.9	12980	33AF		100		--	--	0.20		0.04	--
0940	5001		3	7.9	13600			0	0.03	0.03	--	--	--	--	0.16
08/20/73	5001		20.0C	6.8	11600	55AF		91		--	--	0.50		0.04	--
0845	5001		3	7.8	13200			0	0.03	0.04	--	--	--	--	0.23
09/18/73	5001		19 C	7.9	9600	62AF		96		--	--	0.40		0.05	--
0940	5001		3	7.9	9730			0	0.05	0.05	--	--	--	--	0.23
F0 S 810.8 202.8 SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND															
11/14/72	5001		12 C	7.4	8020	70AF				--	--	--		--	--
1330	5001		3		7270				.32	.42	1.20	1.52	--	.18	.20
02/13/73	5001		11 C	6.8		65AF		102		--	.60	--		.05	--
1040	5001		3	7.7	945			0	.26	1.15	.60	0.86	--	--	.21
02/26/73	5001		13 C	7.5		80AF				--	.50	--		.06	--
1415	5001		3		1090				.16	.61	.90	1.06	--	--	.27
03/27/73	5001		14 C	7.3	1720	32AF		162		--	--	1.00		.07	--
1305	5001		3	7.4	1750			0	.23	.75	--	--	--	--	.20
04/12/73	5001		17.0C	7.4	1330	75AF		114		--	--	.90		.05	--
0950	5001		3	7.7	1310			0	.12	.53	--	--	--	--	.13
04/26/73	5001		20 C	8.1	1660	60AF		142		--	--	.70		.07	--
1310	5001		3	7.8	1690			0	.03	.62	--	--	--	--	.22
05/10/73	5001		18.0C	7.7	3700	70AF		114		--	--	0.50		0.05	--
0845	5001		3	7.7	4050			0	0.10	0.83	--	--	--	--	0.27
05/24/73	5001		19 C	8.3	3880	60AF		148		--	--	.70		.07	--
1340	5001		3	8.0	4250			0	.02	.10	--	--	--	--	.40
06/13/73	5001		21.0C	7.7	4700	75AF		122		--	--	.60		.06	--
1230	5001		3	7.9	4540			0	.10	.20	--	--	--	--	.30
06/25/73	5001		24 C	7.9	5900	38AF		127		--	--	.50		.07	--
1455	5001		3	7.9	5380			0	.07	.19	--	--	--	--	.25
07/23/73	5001		20 C	8.1	9259	27AF		138		--	--	0.30		0.07	--
1345	5001		3	8.1	10100			0	0.03	0.08	--	--	--	--	0.27
08/08/73	5001		20 C	7.4	10700	60AF		110		--	--	0.50		0.04	--
1030	5001		3	8.1	12600			0	0.05	0.07	--	--	--	--	0.25
08/20/73	5001		20 C	7.8	10500	32AF		128		--	--	0.50		0.07	--
1300	5001		3	8.1	11300			0	0.01	0.03	--	--	--	--	0.19
09/06/73	5001		19.0C	7.7	11200	30AF		101		--	--	0.40		0.03	--
1140	5001		3	8.2	11700			0	0.05	0.05	--	--	--	--	0.14

TABLE 0-5 (CONTINUED)

NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	FIELD LABORATORY PH	EC	TURB F-CO2	FIELD CACO3 P CACO3 T	LAB HCO3 CO3	NH3	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER NO2 NO3	F U ORG N ORG N	F U (NH3 + ORG N)	DIS A.H.PO4	F U H3PO4 H3PO4	F U TOT P TOT P
		E0 S 810.8 202.8	SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND									CONTINUED			
09/18/73	5001		20 C	8.1	10000	33AF		119		--	--	0.30		0.07	--
1235	5001		3	8.0	10200			0	0.03	0.02	--	--	--	--	0.24
		E0 S 811.0 204.8	CHADBOURNE SLOUGH AT CHADBOURNE ROAD												
11/14/72	5001		11 C	7.1	800	950AF				--	--	--		--	--
1230	5001		3		466				.29	.94	2.60	2.89	--	.05	.44
01/29/73	5001		8 C			60AF				--	.90	--		--	--
1150	5001		3		1400				.30	.73	.90	1.2	--	.05	.15
02/26/73	5001		13 C	7.3		21AF				--	.30	--		.02	--
1300	5001		3		949				.20	1.40	.60	0.8	--	--	.07
03/27/73	5001		15 C	7.3	1320	30AF		171		--	--	.60		.02	--
1135	5001		3	7.4	1340			0	.21	.95	--	--	--	--	.10
04/26/73	5001		22 C	8.1	1520	50AF		148		--	--	.80		.02	--
1155	5001		3	7.8	1550			0	.02	.40	--	--	--	--	.17
05/24/73	5001		20 C	7.8	3900	60AF		144		--	--	.60		.01	--
1140	5001		3	8.0	4290			0	.09	.40	--	--	--	--	.24
06/25/73	5001		23 C	7.6	6500	37AF		108		--	--	.30		.03	--
1320	5001		3	7.8	6300			0	.06	.11	--	--	--	--	.19
06/25/73	5001		22 C	8.0	4600	34AF		149		--	--	.50		.02	--
1545	5001		1	8.2	4330			0	.03	.49	--	--	--	--	.15
07/23/73	5001		20 C	7.7	8928	32AF		129		--	--	0.30		0.02	--
1215	5001		3	8.0	10200			0	0.04	0.25	--	--	--	--	0.16
08/20/73	5001		19.0C	7.3	10300	40AF		95		--	--	0.50		0.01	--
1130	5001		3	7.7	12800			0	0.03	0.05	--	--	--	--	0.15
09/18/73	5001		18 C	7.6	10000	30AF		100		--	--	0.30		0.02	--
1125	5001		3	7.7	9730			0	0.12	0.09	--	--	--	--	0.12
		E0 S 811.2 158.5	MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD												
11/14/72	5001		13 C	7.4		25AF				--	--	--		--	--
1435	5001		3		7270				.28	.17	1.00	1.28	--	.03	.12
01/29/73	5001		8 C			75AF				--	.80	--		--	--
1335	5001		3		1070				.16	.44	1.00	1.16	--	.03	.14
02/26/73	5001		13 C	7.4		55AF				--	.40	--		.03	--
1520	5001		3		632				.13	.33	.50	0.63	--	--	.13
03/27/73	5001		13 C	7.1	950	27AF		95		--	--	.60		.03	--
1405	5001		3	7.3	962			0	.10	.35	--	--	--	--	.11
04/26/73	5001		20 C	8.0	1660	55AF		123		--	--	.80		.02	--
1405	5001		3	7.6	1690			0	.03	.22	--	--	--	--	.16
05/24/73	5001		19 C	7.8	3320	40AF		104		--	--	.70		.02	--
1440	5001		3	7.8	3680			0	.07	.14	--	--	--	--	.21
06/25/73	5001		23 C	7.8	5600	29AF		105		--	--	.40		.03	--
1543	5001		3	7.9	5160			0	.05	.10	--	--	--	--	.16
07/23/73	5001		20 C	8.0	8109	22AF		106		--	--	0.30		0.02	--
1430	5001		3	8.1	8870			0	0.01	0.02	--	--	--	--	0.14
08/20/73	5001		22.0C	7.8	9800	24AF		110		--	--	0.40		0.03	--
1350	5001		3	7.9	10300			0	0.02	0.03	--	--	--	--	0.13
09/18/73	5001		20 C	8.0	10700	30AF		101		--	--	0.40		0.03	--
1315	5001		3	8.2	10400			0	0.03	0.01	--	--	--	--	0.13
		E0 S 811.5 207.2	CORDELIA SLOUGH AT UPPER END												
03/27/73	5001		14 C	7.7	575	32AF		170		--	--	.30		.05	--
1025	5001		3	7.8	597			0	.05	.45	--	--	--	--	.10
04/26/73	5001		21 C	9.1	1070	18AF		201		--	--	.40		.02	--
1055	5001		1	8.2	1130			0	.01	.03	--	--	--	--	.10
05/24/73	5001		20 C	8.2	4750	75AF		163		--	--	.40		.07	--
1020	5001		2	8.5	4580			4	.06	.21	--	--	--	--	.28
06/25/73	5001		22 C	7.8	3100	65AF		180		--	--	.50		.03	--
1210	5001		3	8.1	2870			0	.04	.02	--	--	--	--	.25
07/23/73	5001		20 C	8.1	593	60AF		173		--	--	0.20		0.05	--
1100	5001		3	8.5	669			5	0.03	0.10	--	--	--	--	0.23
08/20/73	5001		20.0C	7.6	6200	65AF		168		--	--	0.60		0.02	--
1015	5001		3	8.0	7060			0	0.02	0.07	--	--	--	--	0.25
09/18/73	5001		19 C	8.2	550	84AF		170		--	--	0.40		0.04	--
1030	5001		2	8.5	527			0	0.15	0.07	--	--	--	--	0.15
		E0 S 813.6 201.2	HILL SLOUGH AT GRIZZLY ISLAND ROAD												
11/14/72	5001		11 C	7.4		120AF				--	--	--		--	--
1515	5001		3		834				.89	.46	1.40	2.29	--	.62	.77
01/29/73	5001		8 C			55AF				--	.90	--		--	--
1415	5001		3		1160				.34	.68	1.20	1.54	--	.16	.33
02/26/73	5001		13.0C	7.5		32AF				--	1.00	--		.21	--
1545	5001		3		1870				.29	.66	1.20	1.49	--	--	.50
03/27/73	5001		15 C	7.5	990	45AF		194		--	--	.60		.14	--
1440	5001		3	7.7	1010			0	.12	.30	--	--	--	--	.30
04/26/73	5001		21 C	8.3	2540	60AF		263		--	--	1.10		.29	--
1453	5001		3	8.0	2570			0	.02	1.15	--	--	--	--	.71

TABLE D-5 (CONTINUED)

NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	FIELD LABORATORY PH	EC	TURB F-CO2	FIELD CACO3 P CACO3 T	LAB HCO3 CO3	NH3	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER NO2 NO3	F ORG N U ORG N	F (NH3 + U ORG N)	DIS A.H.PO4	F H3PO4 U H3PO4	F TOT P U TOT P
E0 S 813.6 201.2 HILL SLOUGH AT GRIZZLY ISLAND ROAD CONTINUED															
05/24/73	5001		19 C	8.3	3100	120AF		248		--	--	1.20		.24	--
1520	5001		3	8.0	2890			0	.04	.06	--	--	--	--	.92
06/25/73	5001		24 C	8.2	3700	65AF		231		--	--	.90		.26	--
1620	5001		3	8.2	3350			0	.06	.32	--	--	--	--	.74
07/23/73	5001		20 C	7.9	3765	55AF		212		--	--	0.80		0.26	--
1500	5001		3	8.2	4180			0	0.10	0.36	--	--	--	--	0.56
08/20/73	5001		24.0C	8.7	11000	55AF		208		--	--	0.70		0.31	--
1440	5001		3	7.9	7350			0	0.02	0.24	--	--	--	--	0.60
09/18/73	5001		19 C	8.3	8700	39AF		190		--	--	0.30		0.36	--
1345	5001		3	8.3	8290			0	0.03	0.05	--	--	--	--	0.61
E3 2100.51 GREEN VALLEY CREEK AT CORDELIA															
11/14/72	5001		13 C	7.6		65AF				--	--	--		--	--
1115	5001		3		178				.05	1.70	1.00	1.05	--	.11	.26
01/29/73	5001		9 C			28AF				--	.50	--		--	--
1110	5001		3		323				.04	1.40	.60	0.64	--	.08	.10
02/26/73	5001		13 C	7.5		140AF				--	.30	--		.05	--
1200	5001		3		428				.05	.66	.90	0.95	--	--	.26
E4 L 748.1 215.6 LAKE MERRITT AT BOATHOUSE DOCK															
12/11/72	5050		44 F	8.9	13000	11A		110		--	--	--		0.24	--
1345	5050			7.1	13300			0	--	0.19	--	1.5	--	--	0.49
03/20/73	5050		56 F	9.0	6000	1A		122		--	--	--		0.22	--
1150	5050			7.6	6480			0	--	0.06	--	0.8	--	--	0.27
06/18/73	5050		71 F	8.5	37000	0A		133		--	--	--		0.13	--
1230	5050			7.5	41200			0	--	0.00	--	0.3	--	--	0.30
09/13/73	5050		68 F	8.5	42000	2A		134		--	--	--		0.09	--
1020	5050			7.5	45200			0	0.00	0.02	0.4	0.4	--	--	0.52
E5 1423.01 ARROYO VALLE NEAR UPSTREAM END OF LAKE DEL VALLE															
11/15/72	5050		54.0F	8.7	360	37A		148		--	--	--		0.05	--
1105	5050			7.5	372			0	0.02	1.4	0.9	0.92	--	--	0.10
04/18/73	5050		58.0F	8.9	580	1A		278		--	--	--		0.01	--
1100	5050			8.0	582			0	0.03	0.11	0.1	0.13	--	--	0.01
05/16/73	5050		70 F	8.7	580	1A		277		--	--	--		0.00	--
1015	5050			8.0	616			0	0.00	0.55	0.1	0.1	--	--	0.00

TABLE D-6

PESTICIDES IN SURFACE WATER

Sampler and Lab Agency Codes

5001 - U. S. Bureau of Reclamation
5050 - Department of Water Resources

Abbreviations

TIME - Pacific Standard Time on a 24-hour clock

TEMP - Water temperature at time of sampling in degrees Fahrenheit (F) and Celsius (C)

EC - Electrical conductance in micromhos at 25°C

DO - Dissolved oxygen content in milligrams per liter

PH - Measure of acidity (<7) or alkalinity (>7) of water

DEPTH - Depth in feet at which sample was collected

DISCHARGE - Instantaneous discharge in cubic feet per second

Pesticides

Chlorinated Hydrocarbons

Code		Most Common Name
CAPTAN	-	CAPTAN
DACTHAL	-	DACTHAL
DDT	-	DDT (Code includes all Isomers; Para Para etc.)
DIELDRIN	-	DIELDRIN
UNKNOWNS	-	Complex chlorinated compound mixture as (Reported as DDT), one or more
NONE DETECTED	-	No detectable amount of Chlorinated Hydrocarbons

Organic Phosphorus

ORGANIC P	-	Organic Phosphorus compounds as Parathion
UNKNOWNS	-	Complex mixture as Parathion (Reported as Parathion), one or more
NONE DETECTED	-	No detectable amount of organic phosphorus.

TABLE D-6 (CONTINUED)
PESTICIDES IN SURFACE WATER
COMPOUNDS REPORTED IN NANOGRAMS/LITER

DATE TIME	SAMP LAB	TEMP EC	DO PH	G.H. DEP DISCHARGE	CHLORINATED HYDROCARBON		ORGANIC PHOSPHORUS		OTHER
	D2	1006.60			MERRITT LAKE DRAIN AT PUMP				
08/14/73 0930	5050 5050	70 F 2890	7.6 8.0		450 DDT		NONE DETECTED		
	D2	1030.30			BLANCO DRAIN AT PUMP LIFT				
08/14/73 0800	5050 5050	65 F 2380	8.2 8.2		40 CAPTAN	150 UNKNOWNS	55 ORGANICP	55 UNKNOWNS	
	E0 B	735.0	215.0		SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL)				
11/27/72 1230	5050 5050	57 F 38000	7.8 7.9		NONE DETECTED				
01/23/73 1130	5050 5050	49 F 28000	9.7 7.9		NONE DETECTED				
03/20/73 0915	5050 5050	53 F 26000	9.2 8.1		NONE DETECTED				
05/03/73 0810	5050 5050	60 F 33000	8.8 8.2		30 UNKNOWNS				
07/30/73 0830	5050 5050	69 F 41000	6.6 8.1		70 UNKNOWNS				
09/13/73 0810	5050 5050	66 F 44000	6.9 8.2		110 UNKNOWNS				
	E0 B	736.2	212.0		SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)				
11/27/72 1330	5050 5050	57 F 40000	8.2 8.1		NONE DETECTED				
01/23/73 1220	5050 5050	49 F 32000	9.1 7.9		NONE DETECTED				
03/20/73 1015	5050 5050	53 F 26000	9.6 8.0		NONE DETECTED				
05/03/73 0900	5050 5050	60 F 34000	9.0 8.2		40 UNKNOWNS				
07/30/73 0930	5050 5050	70 F 43000	6.3 8.1		70 UNKNOWNS				
09/13/73 0910	5050 5050	64 F 45000	7.0 8.2		130 UNKNOWNS				
	E0 B	749.2	222.4		SAN FRANCISCO BAY AT TREASURE ISLAND				
11/27/72 1100	5050 5050	56 F 37500	8.1 7.9		NONE DETECTED				
01/23/73 1000	5050 5050	48 F 15000	9.8 7.8		NONE DETECTED				
03/20/73 0730	5050 5050	52 F 34000	9.0 8.1		NONE DETECTED				
05/03/73 0645	5050 5050	56 F 41000	8.2 8.2		20 UNKNOWNS				
07/30/73 0700	5050 5050	63 F 44000	6.5 8.0		80 UNKNOWNS				
09/13/73 0640	5050 5050	62 F 45000	7.4 8.1		20 DACTHAL	100 UNKNOWNS			
	E0 B	802.7	207.0		SUISUN BAY OFF BULLS HEAD POINT NEAR MARTINES				
01/15/73 1050	5001 5050	8 C	10.5 7.3	3	NONE DETECTED				
02/14/73 1315	5001 5050	11 C	9.8 7.6	3	NONE DETECTED				
05/09/73 1110	5001 5050	17.0C 12350	9.0 7.9	3	20 UNKNOWNS				
09/05/73 1305	5001 5050	18.0C 21840	8.1 8.0	3	30 UNKNOWNS	20 DACTHAL			
	E0 B	802.8	155.0		SACRAMENTO RIVER AT CHIPPS ISLAND				
05/09/73 1225	5001 5050	18.0C 1930	9.3 8.1	3	5 DACTHAL	20 UNKNOWNS			
09/05/73 1425	5001 5050	19.0C 5542	8.6 8.1	3	NONE DETECTED				
	E0 B	803.5	217.0		SAN PABLO BAY NEAR RODEO				
05/09/73 1010	5001 5050	16.0C 20700	8.8 8.0	3	15 UNKNOWNS				
09/05/73 1210	5001 5050	18.0C 32500	7.8	3	20 UNKNOWNS				
	E0 B	804.0	203.0		SUISUN BAY NEAR PRESTON POINT				
05/09/73 1140	5001 5050	17.0C 7640	9.2 8.0	3	5 DACTHAL	15 UNKNOWNS			
09/05/73 1330	5001 5050	18.0C 12600	8.4 8.1	3	NONE DETECTED				
	E4 L	748.1	215.6		LAKE MERRITT AT BOATHOUSE DOCK				
12/11/72 1345	5050 5050	44 F 13000	12.1 8.9		45 UNKNOWNS				
03/20/73 1150	5050 5050	56 F 6000	9.3 9.0		75 UNKNOWNS 5 DIELDRIN	10 DACTHAL			
06/18/73 1230	5050 5050	71 F 3700	10.0 8.5		NONE DETECTED				
09/13/73 1020	5050 5050	68 F 42000	6.8 8.5		100 UNKNOWNS				

TABLE D-7 (Cont.)

DAILY MAXIMUM, MINIMUM, AND AVERAGE SPECIFIC CONDUCTANCE

DO 1180.01 SAN LORENZO RIVER AT PARADISE PARK

(October 1, 1972, through September 30, 1973)

(In Micromhos at 25° C)

Day	October			November			December			January			February			March		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	390	370	380	400	390	395	360	360	360	355	350	350	278	260	272			
2	370	365	370	395	390	395	360	360	360	355	350	350	288	278	284			
3	370	360	365	395	385	390	360	330	355	355	350	350	290	103	236			
4	365	360	360	390	260	335	350	280	320	360	350	355	131	106	122			
5	370	360	370	405	360	380	350	345	345	350	350	350	144	131	140			
6	370	370	370	370	360	365	345	250	300	350	350	350	145	75	103			
7	380	370	375	375	330	360	290	274	280	350	345	350	108	76	95			
8	385	380	380	380	345	370	305	285	298	350	155	298	141	107	121			
9	380	360	375	385	370	375	310	305	310	184	132	155	150	112	137			
10	380	345	355	370	262	322	310	300	305	198	146	175	115	73	92		N	
11	400	365	390	340	278	290	325	320	320	222	198	210	120	86	104		O	
12	420	355	390	330	284	310	330	325	325	210	200	204	NR	NR	NR			
13	380	360	375	345	85	310	330	325	330	230	210	222	NR	NR	NR			
14	390	340	370	230	193	215	340	330	335	242	230	238	NR	NR	NR			
15	345	310	335	254	197	233	345	335	340	248	242	246	NR	NR	NR		R	
16	345	296	325	260	197	233	340	335	335	248	55	137	NR	NR	NR		E	
17	310	250	282	289	260	277	340	320	330	98	59	84	NR	NR	NR			
18	340	310	325	300	289	297	350	330	340	104	58	80	NR	NR	NR		C	
19	365	340	360	313	300	309	330	300	315	NR	NR	NR	NR	NR	NR			
20	380	360	370	315	315	315	340	330	335	NR	NR	NR	NR	NR	NR		O	
21	390	375	385	330	315	325	350	335	345	NR	NR	NR	NR	NR	NR		R	
22	400	390	395	335	330	330	345	320	335	NR	NR	NR	NR	NR	NR			
23	400	390	395	335	335	335	335	330	335	NR	NR	NR	NR	NR	NR		D	
24	405	395	400	345	335	340	330	330	330	NR	NR	NR	NR	NR	NR			
25	410	400	405	350	345	350	335	330	335	NR	NR	NR	NR	NR	NR			
26	400	400	400	350	335	345	335	330	330	NR	NR	NR	NR	NR	NR			
27	405	400	400	355	350	355	350	330	345	NR	NR	NR	NR	NR	NR			
28	420	405	410	360	355	360	360	355	355	250	240	245	NR	NR	NR			
29	410	395	400	360	360	360	355	350	355	255	220	230						
30	395	390	390	360	360	360	355	350	350	235	285	215						
31	400	390	395				355	350	350	260	235	250						

Day	April			May			June			July			August			September		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1										NR	NR	NR	355	340	345	350	345	350
2										NR	NR	NR	355	335	345	355	345	350
3										350	335	340	350	325	340	350	340	345
4										350	340	345	340	325	335	350	340	345
5										350	340	345	340	325	330	350	340	345
6										350	340	345	335	325	330	350	345	350
7										350	335	340	335	320	330	355	345	350
8										345	330	340	340	325	330	355	350	350
9										340	325	335	340	325	330	360	350	355
10		N			N			N		340	325	335	340	325	335	350	345	350
11		O			O			O		340	325	335	340	325	335	350	345	350
12										340	320	330	335	320	325	350	345	350
13										340	320	320	330	320	325	350	345	345
14										335	320	330	330	320	325	350	350	350
15		R			R			R		340	320	330	330	320	325	350	350	350
16		E			E			E		340	315	330	340	325	335	355	350	350
17										340	315	335	340	325	330	350	345	350
18		C			C			C		340	315	335	340	320	330	355	350	350
19										335	310	330	335	320	330	355	350	350
20		O			O			O		340	315	330	335	325	330	355	350	355
21		R			R			R		340	315	325	335	325	330	355	350	355
22										340	315	330	335	325	330	355	350	355
23		D			D			D		340	310	330	335	325	330	350	350	350
24										340	315	330	335	320	330	350	350	350
25										340	310	325	335	325	330	360	350	355
26										340	315	330	335	325	330	375	360	370
27										340	310	330	335	325	330	375	360	370
28										340	315	330	340	330	335	360	360	360
29										340	335	335	345	335	340	360	360	360
30										350	345	345	345	335	340	370	360	365
31													350	345	350			

NR - No Record.

TABLE D-7 (Cont.)

DAILY MAXIMUM, MINIMUM, AND AVERAGE SPECIFIC CONDUCTANCE

F9 1100.00 RUSSIAN RIVER NEAR GUERNEVILLE
(October 1972 through September 1973)

(In Micromhos at 25° C)

Day	October			November			December			January			February			March		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	335	270	280	280	280	280	255	245	250	265	260	265	220	210	215	188	166	180
2	275	265	270	280	280	280	250	245	250	270	265	265	230	220	225	204	188	196
3	275	270	275	NR	NR	NR	250	245	250	270	270	270	235	230	235	208	180	200
4	275	250	270	NR	NR	NR	250	245	250	270	270	270	235	152	202	193	180	183
5	285	265	280	290	265	275	250	245	245	275	270	270	152	133	139	208	193	202
6	295	285	290	295	290	290	245	190	220	275	275	275	164	145	158	208	172	190
7	290	285	290	340	250	290	215	190	200	280	275	275	149	139	142	197	173	185
8	285	275	280	270	250	260	215	215	215	280	168	250	174	149	164	198	190	195
9	280	270	275	280	270	275	220	215	220	168	107	123	185	174	179	215	198	205
10	300	270	280	290	240	265	225	220	225	143	106	134	169	140	148	220	215	215
11	300	260	285	230	210	220	230	225	225	155	87	120	164	143	152	215	215	215
12	260	245	255	239	225	235	230	230	230	98	86	92	178	164	174	225	215	220
13	260	255	255	250	123	170	235	230	235	130	98	115	180	161	170	230	225	225
14	NR	NR	NR	180	125	140	235	235	235	162	130	145	184	164	174	235	230	230
15	NR	NR	NR	186	157	180	235	235	235	175	156	168	179	164	174	NR	NR	NR
16	290	250	270	163	144	154	235	230	235	156	97	106	183	179	181	NR	NR	NR
17	300	255	280	184	161	174	NR	NR	NR	135	96	115	194	183	189	NR	NR	NR
18	310	295	305	200	184	194	NR	NR	NR	135	107	115	200	194	196	NR	NR	NR
19	310	300	305	210	200	206	NR	NR	NR	151	113	133	204	200	201	NR	NR	NR
20	300	298	300	215	210	210	NR	NR	NR	171	151	162	209	204	206	NR	NR	NR
21	298	295	295	220	215	220	NR	NR	NR	174	171	172	215	208	210	NR	NR	NR
22	295	295	295	230	220	225	210	190	201	185	171	180	254	215	230	NR	NR	NR
23	295	290	290	235	230	235	205	187	295	190	185	188	263	248	253	NR	NR	NR
24	290	290	290	255	235	245	215	205	210	206	190	197	263	140	198	NR	NR	NR
25	290	290	290	255	250	250	220	210	215	215	200	206	160	142	150	NR	NR	NR
26	290	285	290	260	250	255	235	220	230	230	215	225	172	147	162	NR	NR	NR
27	285	285	285	260	255	260	240	235	240	240	230	235	160	148	156	NR	NR	NR
28	285	282	285	255	255	255	240	240	240	250	240	245	166	157	161	NR	NR	NR
29	285	282	283	255	255	255	250	240	245	250	190	235				NR	NR	NR
30	282	280	280	255	255	255	260	250	255	190	172	178				NR	NR	NR
31	280	280	280				260	255	260	210	185	202				NR	NR	NR

Day	April			May			June			July			August			September		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	NR	NR	NR	295	295	295	345	330	335	280	270	270	250	240	245	270	260	265
2	NR	NR	NR	300	295	295	340	330	335	285	265	275	250	240	245	270	260	265
3	NR	NR	NR	295	290	295	340	325	335	320	280	295	250	240	245	270	260	265
4	NR	NR	NR	295	290	295	335	320	325	285	270	275	250	240	245	265	255	260
5	NR	NR	NR	300	285	295	330	310	325	280	270	270	255	245	250	270	265	270
6	NR	NR	NR	290	285	285	330	315	320	280	265	275	255	250	255	275	265	270
7	NR	NR	NR	285	285	285	330	320	325	275	255	265	255	250	255	275	265	270
8	NR	NR	NR	290	285	285	340	320	325	270	260	265	255	255	255	275	265	270
9	NR	NR	NR	290	285	285	340	315	325	275	265	270	255	245	255	275	260	265
10	NR	NR	NR	290	285	285	330	315	325	275	260	265	260	250	255	275	270	270
11	NR	NR	NR	290	290	290	330	315	325	270	260	265	260	245	255	275	265	270
12	285	280	285	290	285	285	330	310	320	265	255	260	260	250	255	265	260	260
13	295	260	285	290	285	285	325	310	315	260	250	255	260	250	255	275	260	270
14	295	280	285	290	285	285	310	305	310	260	250	255	260	245	255	340	270	300
15	295	290	290	290	285	285	NR	NR	NR	255	250	255	260	250	255	NR	NR	NR
16	295	295	295	310	290	295	NR	NR	NR	255	250	255	260	245	255	NR	NR	NR
17	305	295	300	325	310	315	310	295	305	255	250	255	260	245	255	NR	NR	NR
18	315	305	305	340	325	330	305	295	300	260	250	255	260	250	255	NR	NR	NR
19	315	315	315	345	340	340	300	270	285	265	260	265	260	245	255	NR	NR	NR
20	320	315	315	345	340	345	290	280	285	270	265	270	260	250	255	NR	NR	NR
21	320	315	315	345	335	340	295	285	290	270	265	270	260	250	250	NR	NR	NR
22	315	310	315	345	345	345	290	280	285	275	265	270	260	245	255	NR	NR	NR
23	310	305	305	345	335	340	290	280	285	275	270	275	255	245	250	NR	NR	NR
24	305	305	305	395	345	370	280	270	275	275	270	275	260	250	255	335	295	310
25	305	305	305	385	335	350	280	270	280	275	270	275	270	255	260	310	285	295
26	310	305	305	340	330	335	280	270	275	270	260	265	270	255	265	315	290	300
27	310	310	310	340	330	335	275	265	270	265	250	255	265	255	260	300	295	300
28	310	305	305	335	330	330	290	275	280	260	255	260	265	250	260	310	300	305
29	305	285	295	330	320	325	275	265	270	260	250	255	260	245	255	315	305	310
30	300	295	295	335	320	330	280	270	275	260	250	255	265	260	265	310	300	305
31				345	330	335				250	240	245	270	255	265			

NR - No Record

TABLE D-8

PHYTOPLANKTON ANALYSIS OF SURFACE WATER

Codes and Abbreviations

Total - Total phytoplankton per milliliter

Bl-Gr - Blue-Green Algae

Green - Green Algae

Flag - Flagellates

C/P - Centric over Pennate

Samp - 5050 - Department of Water Resources

Lab - 5050 - Department of Water Resources Laboratory

Most Abundant Phytoplankton

Green Algae

G 02 Ankistrodesmus
G 14 Pediastrum
G 19 Schroderia
G 20 Elakatothrix
G 22 Selenastrum

Flagellates

F 07 Phacus
F 08 Trachelomonas
F 56 Cryptomonas
F 59 Glenodinium
F 99 Unidentified

Diatoms

Centric

D 02 Coscinodiscus
D 03 Cyclotella
D 04 Melosira (salt water)
D 06 Stephanodiscus

Pennate

D 50 Unidentified
D 57 Cocconeis
D 62 Fragilaria
D 64 Gyrosigma
D 65 Navicula
D 66 Nitzschia
D 69 Surirella
D 70 Synedra

TABLE D-8 (Cont.)

PHYTOPLANKTON ANALYSIS OF SURFACE WATER

Station Number	Station	Date Time	Phytoplankton (number per milliliter) Total	Bl-Gr	Green	Flag	Diatoms C/P	Most Abundant Phytoplankton (genus %) 1	2	3	4	5	6	Samp	Lab
EO B 735.0 215.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL)	10-11-72 0930	316			284	0/32	F 99 89.9	D 65 10.1					5050	5050
		11-27-72 1230	610			610		F 99 73.8	F 56 26.2					5050	5050
		12-11-72 1115	706			674	0/32	F 99 86.4	F 56 9.1	D 65 4.5				5050	5050
		01-23-73 1130	734			670	64/0	F 99 73.6	F 56 17.7	D 03 8.7				5050	5050
		02-06-73 1030	1032			1032		F 99 96.9	F 56 3.1					5050	5050
		03-20-73 0915	674			482	64/128	F 99 66.8	D 65 14.2	D 03 9.5	F 56 4.7	D 70 4.7		5050	5050
		04-05-73 0915	1360			1200	32/128	F 99 88.2	D 70 7.0	D 03 2.4	D 62 2.4			5050	5050
		05-03-73 0810	992			832	128/32	F 99 80.6	D 03 9.7	F 56 3.2	D 03 3.2	D 66 3.2		5050	5050
		06-18-73 1000	130			130		F 99 100						5050	5050
		07-30-73 0830	190			190		F 99 100						5050	5050
		08-14-73 0920	0											5050	5050
		09-13-73 0810	96			96		F 99 100						5050	5050
EO B 736.2 212.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)	10-11-72 1100	386			386		F 99 100						5050	5050
		11-27-72 1330	576			576		F 99 83.3	F 56 16.7					5050	5050
		12-11-72 1200	636			636		F 99 84.9	F 56 15.1					5050	5050
		01-23-73 1220	260			260		F 99 100						5050	5050
		02-06-73 1100	1196			1100	64/32	F 99 92.0	D 03 5.4	D 65 2.6				5050	5050
		03-20-73 1015	574			380	130/64	F 99 66.2	D 03 22.6	D 65 11.2				5050	5050
		04-05-73 1005	1658			1432	130/96	F 99 84.5	D 03 7.9	F 56 1.9	D 62 1.9	D 65 1.9	D 70 1.9	5050	5050
		05-03-73 0900	2428			2396	0/32	F 99 94.7	F 56 4.0	D 50 1.3				5050	5050
		06-18-73 1045	416			384	0/32	F 99 76.9	F 56 15.4	D 66 7.7				5050	5050
		07-30-73 0930	190			190		F 99 100						5050	5050
		08-14-73 1000	0											5050	5050
		09-13-73 0910	96		64	32		G 20 66.7	F 08 33.3					5050	5050
EO B 749.2 222.4	SAN FRANCISCO BAY AT TREASURE ISLAND	10-11-72 0850	450			450		F 99 100						5050	5050
		11-27-72 1100	356			260	0/96	F 99 73.0	D 65 18.0	D 57 9.0				5050	5050
		12-11-72 1000	740			708	0/32	F 99 78.4	F 56 13.0	F 07 4.3	D 64 4.3			5050	5050
		01-23-73 1000	386			290	32/64	F 99 75.1	D 04 8.3	D 62 8.3	D 65 8.3			5050	5050
		02-06-73 0840	992		64	800	96/32	F 99 80.6	G 02 3.3	G 14 3.3	D 02 3.2	D 03 3.2	D 06 3.2	5050	5050
		03-20-73 0730	578		32	450	96/0	F 99 77.9	D 03 11.1	G 22 5.5	D 02 5.5			5050	5050
		04-05-73 0800	1488		32	1200	128/128	F 99 80.6	D 03 6.5	D 65 4.3	G 02 2.2	D 02 2.2	D 57 2.1	5050	5050
		05-03-73 0645	1258			1032	226/0	F 99 79.5	D 03 10.3	D 02 5.1	F 56 2.5	D 65 2.5		5050	5050
		06-18-73 0845	290			290		F 99 100						5050	5050
		07-30-73 0700	194		32	130	0/32	F 99 67.0	G 19 16.5	D 69 16.5				5050	5050
		08-14-73 0755	64		32		32/0	G 02 50.0	D 03 50.0					5050	5050
		09-13-73 0640	476			476		F 99 79.8	F 59 13.5	F 56 6.7				5050	5050

APPENDIX E

GROUND WATER QUALITY DATA

This appendix presents ground water quality data collected during the period from October 1, 1972, through September 30, 1973. The data were collected from a number of major ground water sources in the Central Coastal Area in cooperation with other state, local, and federal agencies. During the 1973 water year, 226 wells were sampled in 34 ground water basins and subbasins or subareas.

At the time of field sampling, pH and temperature measurements are normally made. Comments on current conditions are noted in field books which are available in the files of the Department of Water Resources.

Laboratory analyses of ground waters were performed in accordance with "Standard Methods for the Examination of Water and Wastewater", 13th Edition.

The Region and Basin and State Well Numbering Systems are described in Appendix C, "Ground Water Measurements", on page 19. The locations of the ground water basins and subbasins are shown on Figure C-1, pages 21, 22, and 23.

INDEX TO GROUND WATER QUALITY DATA
IN THE CENTRAL COASTAL AREA

Number	Name	Page
	NORTH COASTAL REGION 1-00.00 (Figure C-1, Page 21)	
1-14.00	Potter Valley	86
1-15.00	Ukiah Valley	86
1-16.00	Sanel Valley	86
1-17.00	Alexander Valley	86
1-18.00	Santa Rosa Valley	
1-18.01	Santa Rosa Area	86, 98
1-18.02	Healdsburg Area	86
1-19.00	Anderson Valley	87
1-20.00	Point Arena	87
1-21.00	Fort Bragg Terrace	87
1-80.00	Miscellaneous Area	98
1-98.00	Lower Russian River Valley	87, 98
	SAN FRANCISCO BAY REGION 2-00.00 (Figure C-1, Page 22)	
2-01.00	Petaluma Valley	88, 98
2-02.00	Napa-Sonoma Valley	
2-02.01	Napa Valley	88
2-02.02	Sonoma Valley	88, 98
2-03.00	Suisun-Fairfield Valley	89
2-04.00	Pittsburg Plain	89
2-05.00	Clayton Valley	89
2-06.00	Ygnacio Valley	89
2-09.00	Santa Clara Valley	
2-09.01	East Bay Area	90
2-09.02	South Bay Area	91, 98
2-10.00	Livermore Valley	91
2-22.00	Half Moon Bay Terrace	92
2-24.00	San Gregorio Valley	92
2-26.00	Pescadero Valley	92
	CENTRAL COASTAL REGION 3-00.00 (Figure C-1, Page 23)	
3-01.00	Soquel Valley	93
3-02.00	Pajaro Valley	
3-03.00	Gilroy-Hollister Valley	
3-03.01	South Santa Clara County	93
3-03.02	San Benito County	94
3-04.00	Salinas Valley	
3-04.01	Pressure Area	95
3-04.02	East Side Area	96
3-04.03	Forebay Area	96
3-04.05	Upper Valley Area	96
3-04.08	Seaside Area	96
3-07.00	Carmel Valley	96
3-26.00	West Santa Cruz Terrace	97

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

Sampler and Lab Agency Codes

2400	-	Santa Clara Valley Water District
5000	-	U. S. Geological Survey
5050	-	Department of Water Resources
5100	-	Alameda County Flood Control and Water Conservation District
5114	-	Santa Clara County
5115	-	Monterey County Flood Control and Water Conservation District
5401	-	Alameda County Water District

Abbreviations

TIME	-	Pacific Standard Time on a 24-hour clock
TEMP	-	Water temperature in degrees Fahrenheit (F) and Celsius (C) at the time of field sampling
PH	-	Measure of acidity (<7) or alkalinity (>7) of water
EC	-	Electrical conductance in micromhos at 25° C
TDS	-	Gravimetric determination of total dissolved solids at 180° C
SUM	-	Total dissolved solids by summation of analyzed constituents
TH	-	Total hardness
NCH	-	Noncarbonate hardness - any excess of total hardness over total alkalinity
SAR	-	Sodium adsorption ratio

Mineral Constituents

B	-	Boron	K	-	Potassium
CA	-	Calcium	MG	-	Magnesium
CL	-	Chloride	NA	-	Sodium
CO3	-	Carbonate	NO3	-	Nitrate
F	-	Fluoride	SIO2	-	Silica
HCO3	-	Bicarbonate	SO4	-	Sulfate

TABLE E-1 (CONTINUED)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR
	1-00.00	NORTH COASTAL REGION																	
	1-14.00	POTTER VALLEY																	
	17N/11W-29F01	M																	
07/24/73	5050		59	F 7.1	340	27	21	14	.3	0	198	7.2	7.1	.9	.10	--	174	153	
1100	5050		15	C 8.2	340	1.35	1.73	.61	.01	.00	3.25	.15	.20	.01		--	175	0	0.5
						36	47	16			90	4	6						
	1-15.00	UKIAH VALLEY																	
	14N/12W-11N01	M																	
07/24/73	5050			7.1	375	27	25	12	1.0	0	177	19	10	22.0	.20	--	204	172	
1400	5050			8.1	386	1.35	2.06	.52	.03	.00	2.90	.40	.28	.35		--	203	26	0.4
						34	52	13	1		74	10	7	9					
	15N/12W-08P01	M																	
07/24/73	5050		68	F 7.3	500	40	29	24	.9	0	276	13	21	.6	.00	--	262	218	
1645	5050		20	C 7.9	503	2.00	2.38	1.04	.02	.00	4.52	.27	.59	.01		--	264	0	0.7
						37	44	19			84	5	11						
	15N/12W-35D01	M																	
07/24/73	5050			7.3	420	37	9.8	31	.3	0	221	.3	15	4.1	.20	--	199	133	
1450	5050			8.2	389	1.85	.81	1.35	.01	.00	3.62	.01	.42	.07		--	206	0	1.2
						46	20	34			88		10	2					
	1-16.00	SANEL VALLEY																	
	12N/11W-02F01	M																	
07/25/73	5050		66	F 7.7	375	37	21	12	1.2	0	218	16	6.2	2.9	.30	--	207	180	
1330	5050		19	C 8.2	386	1.85	1.73	.52	.03	.00	3.57	.33	.17	.05		--	204	1	0.4
						45	42	13	1		87	8	4	1					
	13N/11W-18E01	M																	
07/25/73	5050		61	F 7.0	370	--	--	18	--	0	201	--	12	--	--	--		158	
1245	5050		16	C 7.6	380			.78		.00	3.29		.34			--			0.6
								20											
	1-17.00	ALEXANDER VALLEY																	
	09N/08W-07Q01	M																	
07/25/73	5050			7.7	575	--	--	128	--	0	313	--	35	--	--	--		12	
1730	5050			7.7	593			5.57		.00	5.13		.99			--			16.1
								96											
	09N/09W-01P01	M																	
07/26/73	5050		57	F 7.1	380	30	26	9.2	.6	0	192	28	6.2	9.8	.00	--	215	184	
1030	5050		14	C 8.1	388	1.50	2.14	.40	.02	.00	3.15	.58	.17	.16		--	204	25	0.3
						37	53	10			78	14	4	4					
	10N/09W-26L02	M																	
07/25/73	5050		67	F 6.9	510	30	44	11	.1	0	193	73	10	37.0	.10	--	322	258	
1615	5050		19	C 8.0	535	1.50	3.62	.48	.00	.00	3.16	1.52	.28	.60		--	300	98	0.3
						27	65	9			57	27	5	11					
	1-18.00	SANTA ROSA VALLEY																	
	1-18.01	SANTA ROSA AREA																	
	05N/09W-03F01	M																	
07/27/73	5050		68	F 6.7	675	--	--	44	--	0	132	--	75	--	--	--		225	
1000	5050		20	C 7.1	656			1.91		.00	2.16		2.12			--			1.3
								30											
	06N/07W-18R01	M																	
07/27/73	5050			7.0	625	--	--	50	--	0	279	--	44	--	--	--		220	
0845	5050			8.1	628			2.18		.00	4.57		1.24			--			1.5
								33											
	07N/06W-29P01	M																	
07/26/73	5050			7.3	245	--	--	22	--	0	150	--	4.9	--	--	--		83	
1800	5050			7.8	238			.96		.00	2.46		.14			--			1.1
								37											
	07N/07W-15C01	M																	
07/26/73	5050			7.5	255	--	--	25	--	0	152	--	5.7	--	--	--		80	
1730	5050			7.7	255			1.09		.00	2.49		.16			--			1.2
								41											
	07N/08W-30P01	M																	
07/26/73	5050		64	F 7.1	1175	--	--	57	--	0	218	--	137	--	--	--		421	
1400	5050		18	C 7.6	1130			2.48		.00	3.57		3.86			--			1.2
								23											
	07N/09W-09F01	M																	
07/26/73	5050			6.5	160	--	--	14	--	0	69	--	13	--	--	--		39	
1300	5050			7.4	152			.61		.00	1.13		.37			--			1.0
								44											
	1-18.02	HEALDSBURG AREA																	
	09N/10W-01C01	M																	
07/26/73	5050			7.1	210	--	--	16	--	0	119	--	6.3	--	--	--		71	
1115	5050			7.5	208			.70		.00	1.95		.18			--			0.8
								33											

TABLE E-1 (CONTINUED)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD PH	LABORATORY EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR
	1-00.00		NORTH COASTAL REGION																
	1-19.00		ANDERSON VALLEY																
	13N/14W-02L01	M																	
09/19/73	5050		64.0F		225	--	--	--	--	--	--	--	--	--	--	--			
1150			17.8C													--			
	13N/14W-11A01	M																	
09/19/73	5050		65.0F	7.0	260	--	--	--	--	--	--	--	--	--	--	--			
1205			18.3C													--			
	14N/14W-18R02	M																	
09/19/73	5050		68.0F		150	--	--	--	--	--	--	--	--	--	--	--			
1230			20.0C													--			
	14N/14W-19B01	M																	
09/19/73	5050		66.0F		275	--	--	19	--	0	95	--	30	--	--	--		88	
1240	5050		18.9C	7.8	263			.83		.00	1.56		.85			--			0.9
								32											
	14N/14W-34G06	M																	
09/19/73	5050		65.0F	7.3	510	23	14	72	.6	0	274	.0	40	.6	3.60	--	297	115	
1220	5050		18.3C	8.3	534	1.15	1.15	3.13	.02	.00	4.49	.00	1.13	.01		--	289	0	2.9
						21	21	57			80		20						
	1-20.00		POINT ARENA																
	12N/16W-18K01	M																	
09/19/73	5050		66.0F		340	--	--	--	--	--	--	--	--	--	--	--			
1000			18.9C													--			
	12N/17W-12L01	M																	
09/19/73	5050		59.0F		125	--	--	--	--	--	--	--	--	--	--	--			
0855			15.0C													--			
	13N/17W-24D01	M																	
09/19/73	5050		62.0F		220	--	--	--	--	--	--	--	41	12.0	--	--		32	
0800	5050		16.7C		225								1.16	.19		--			
	13N/17W-25H01	M																	
09/19/73	5050		60.0F		380	41	4.7	32	.6	0	145	20	35	5.4	.00	--	230	122	
0820	5050		15.5C	8.0	400	2.05	.39	1.39	.02	.00	2.38	.42	.99	.09		--	210	3	1.3
						53	10	36	1		61	11	26	2					
	1-21.00		FORT BRAGG TERRACE																
	17N/17W-30F01	M																	
09/18/73	5050		61.0F		600	--	--	--	--	0	29	--	137	41.0	--	--		143	
1810	5050		16.1C	6.9	638					.00	.48		3.86	.66		--			
											10		77	13					
	17N/17W-30M01	M																	
09/18/73	5050		65.0F		335	--	--	--	--	--	--	--	--	--	--	--			
1800			18.3C													--			
	19N/17W-30G01	M																	
09/18/73	5050		63.0F		325	--	--	--	--	--	--	--	--	--	--	--			
1650			17.2C													--			
	19N/17W-30Q01	M																	
09/18/73	5050		62.0F	7.1	395	--	--	--	--	--	--	--	--	--	--	--			
1625			16.7C													--			
	1-98.00		LOWER RUSSIAN RIVER VALLEY																
	07N/11W-14E02	M																	
05/16/73	5117					14	42	8.8	.9	0	243	14	8.4	5.5	.00	.1	230	208	
	5050			7.8	439	.70	3.45	.38	.02	.00	3.98	.29	.24	.09		37.0	250	9	0.3
						15	76	8			87	6	5	2					

TABLE E-1 (CONTINUED)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR
	2-00.00		SAN FRANCISCO BAY REGION															
	2-01.00		PETALUMA VALLEY															
	03N/06W-11B01	M																
07/27/73	5050		7.7	2000	--	--	310	--	0	575	--	316	--	--	--		257	
1400	5050		7.8	1860			13.49		.00	9.42		8.91			--			8.4
							72											
	03N/06W-16H01	M																
07/27/73	5050	67 F	6.3	178	--	--	14	--	0	27	--	16	--	--	--		44	
1430	5050	19 C	7.1	176			.61		.00	.44		.45			--			0.9
							41											
	04N/06W-08E01	M																
07/27/73	5050	62 F	7.7	1010	--	--	77	--	0	546	--	42	--	--	--		392	
1230	5050	17 C	8.1	964			3.35		.00	8.95		1.18			--			1.7
							30											
	04N/06W-27N01	M																
05/17/73	5117				46	35	164	2.0	0	494	3.6	143	.1	.30	.1	663	261	
	5050		8.1	1190	2.30	2.88	7.13	.05	.00	8.10	.07	4.03	.00		30.0	667	0	4.4
					19	23	58			66	1	33						
	04N/06W-33R01	M																
07/27/73	5050		7.1		--	--	--	--	--	--	--	6280	--	--	--			
1330	5050			18800								177.10			--			
	05N/06W-30D01	M																
07/27/73	5050		8.3	825	22	9.2	155	.8	5.0	401	38	54	.6	.80	--	473	93	
1200	5050		8.4	836	1.10	.76	6.74	.02	.17	6.57	.79	1.52	.01		--	483	0	7.0
					13	9	78		2	73	9	17						
	2-02.00		NAPA-SONOMA VALLEY															
	2-02.01		NAPA VALLEY															
	03N/03W-18G02	M																
07/31/73	5050		7.9	1250	--	--	103	--	0	364	--	161	--	--	--		427	
1000	5050		8.0	1260			4.48		.00	5.97		4.54			--			2.2
							34											
	03N/04W-05M01	M																
07/31/73	5050	65 F	7.5	1825	--	--	283	--	0	691	--	184	--	--	--		254	
1130	5050	18 C	8.0	1620			12.31		.00	11.33		5.19			--			7.7
							71											
	04N/04W-05D02	M																
08/01/73	5050	71 F	7.3	1050	--	--	113	--	0	258	--	160	--	--	--		244	
1330	5050	22 C	7.9	1040			4.92		.00	4.23		4.51			--			3.1
							50											
	04N/04W-14C02	M																
07/31/73	5050		7.2	1750	--	--	148	--	0	327	--	325	--	--	--		468	
1245	5050		8.0	1620			6.44		.00	5.36		9.17			--			3.0
							41											
	05N/04W-11F03	M																
07/31/73	5050		7.5	710	17	8.9	117	4.6	0	237	.5	101	.7	2.40	--	436	79	
1345	5050		8.2	716	.85	.73	5.09	.12	.00	3.88	.01	2.85	.01		--	369	0	5.7
					13	11	75	2		57		42						
	05N/04W-21P02	M																
08/01/73	5050		8.0	3500	--	--	--	--	--	--	--	648	--	--	--			
1415	5050											18.27			--			
	05N/04W-22M02	M																
08/01/73	5050		7.9	590	--	--	96	--	0	306	--	32	--	--	--		78	
1440	5050		8.0	587			4.18		.00	5.02		.90			--			4.7
							73											
	06N/04W-15Q01	M																
08/01/73	5050	68 F	7.1	250	9.3	4.9	34	4.8	0	134	8.2	6.6	.4	.10	--	202	43	
1545	5050	20 C	8.0	249	.46	.40	1.48	.12	.00	2.20	.17	.19	.01		--	134	0	2.2
					19	16	60	5		86	7	7						
	07N/05W-06F01	M																
08/02/73	5050		7.5	320	--	--	27	--	0	180	--	6.7	--	--	--		109	
0900	5050		8.1	313			1.17		.00	2.95		.19			--			1.1
							35											
	08N/06W-06L05	M																
08/02/73	5050	76 F	7.3	275	--	--	45	--	0	137	--	6.9	--	--	--		37	
1030	5050	24 C	8.0	279			1.96		.00	2.25		.19			--			3.2
							73											
	09N/07W-25N01	M																
08/02/73	5050	82 F	7.7	1000	--	--	180	--	0	185	--	201	--	--	--		46	
1130	5050	28 C	7.8	973			7.83		.00	3.03		5.67			--			11.6
							89											
	2-02.02		SONOMA VALLEY															
	04N/05W-14D02	M																
07/30/73	5050	77 F	7.3	1025	13	9.1	196	3.2	0	310	51	132	.4	.10	--	635	70	
1315	5050	25 C	8.1	1020	.65	.75	8.53	.08	.00	5.08	1.06	3.72	.01		--	557	0	10.2
					6	7	85	1		51	11	38						
	04N/05W-34D80	M																
05/16/73	5117				64	72	385	14	0	610	.0	561	32.0	1.90	.1	1520	450	
	5050		7.8	2750	3.19	5.92	16.75	.36	.00	10.00	.00	15.82	.52		56.0	1486	0	7.8
					12	23	64	1		38		60	2					

TABLE E-1 (CONTINUED)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR
	2-00.00		SAN FRANCISCO BAY REGION															
	2-02.00		NAPA-SONOMA VALLEY															
	2-02.02		SONOMA VALLEY															
	05N/05W-28R01 M																	
07/30/73	5050	70 F	8.2	1125	--	--	223	--	11	436	--	91	--	--	--		70	
1415	5050	21 C	8.5	1070			9.70		.37	7.15		2.57			--			11.6
							87											
	05N/06W-12F01 M																	
07/30/73	5050	64 F	7.0	460	19	18	51	1.6	0	227	9.5	30	3.3	.70	--	290	122	
1515	5050	18 C	8.1	464	.95	1.48	2.22	.04	.00	3.72	.20	.85	.05		--	245	0	2.0
					20	32	47	1		77	4	18	1					
	05N/06W-25P02 M																	
07/30/73	5050	84 F	8.3	545	--	--	128	--	0	316	--	21	--	--	--		12	
1630	5050	29 C	8.3	562			5.57		.00	5.18		.59			--			16.1
							96											
	2-03.00		SUISUN-FAIRFIELD VALLEY															
	03N/01E-04B01 M																	
07/18/73	5050		8.7	1175	--	--	254	--	0	546	--	73	--	--	--		46	
1530	5050		8.2	1140			11.05		.00	8.95		2.06			--			16.3
							92											
	04N/01E-08F01 M																	
07/18/73	5050		7.3	1025	--	--	128	--	0	242	--	157	--	--	--		215	
1630	5050		8.0	1020			5.57		.00	3.97		4.43			--			3.8
							56											
	04N/01W-33A01 M																	
07/19/73	5050		7.7		--	--	650	--	0	599	--	859	--	--	--		425	
1015	5050		8.1	3660			28.28		.00	9.82		24.22			--			13.7
							77											
	04N/02W-09H01 M																	
07/19/73	5050		7.9		--	--	--	--	--	--	--	977	--	--	--			
1200	5050			3560								27.55			--			
	05N/01W-25R01 M																	
07/19/73	5050		7.3	2000	--	--	206	--	0	233	--	485	--	--	--		462	
1315	5050		7.9	1910			8.96		.00	3.82		13.68			--			4.2
							49											
	05N/01W-28P01 M																	
07/19/73	5050	68 F	7.5	825	--	--	59	--	0	294	--	102	--	--	--		283	
1430	5050	20 C	7.8	811			2.57		.00	4.82		2.88			--			1.5
							31											
	05N/01W-30H01 M																	
07/18/73	5050	65 F	7.3	1400	94	37	119	.2	0	333	26	221	39.0	1.30	--	789	386	
1315	5050	18 C	7.8	1320	4.69	3.04	5.18	.01	.00	5.46	.54	6.23	.63		--	701	114	2.6
					36	24	40			42	4	48	5					
	05N/01W-30J02 M																	
07/18/73	5050	64 F	7.5	2000	84	47	188	.6	0	328	54	336	21.0	3.80	--	966	404	
1400	5050	18 C	7.5	1700	4.19	3.87	8.18	.02	.00	5.38	1.12	9.48	.34		--	896	134	4.1
					26	24	50			33	7	58	2					
	05N/02W-21P03 M																	
07/19/73	5050	66 F	7.3	1025	--	--	67	--	0	454	--	57	--	--	--		427	
1530	5050	19 C	8.1	985			2.91		.00	7.44		1.61			--			1.4
							25											
	05N/02W-34N01 M																	
07/19/73	5050		7.5	1400	35	40	192	.0	0	528	164	39	16.0	1.90	--	732	253	
1600	5050		8.2	1230	1.75	3.29	8.35	.00	.00	8.65	3.41	1.10	.26		--	748	0	5.3
					13	25	62			64	25	8	2					
	2-04.00		PITTSBURG PLAIN															
	02N/01E-07R02 M																	
08/09/73	5050	69 F	7.7	4000	--	--	385	--	0	383	--	479	--	--	--		746	
1145	5050	21 C	8.1	2950			16.75		.00	6.28		13.51			--			6.1
							53											
	02N/01W-09Q01 M																	
08/02/73	5050	67 F	7.9	3300	--	--	418	--	0	395	--	602	--	--	--		522	
1430	5050	19 C	7.9	2840			18.18		.00	6.47		16.98			--			8.0
							64											
	2-05.00		CLAYTON VALLEY															
	02N/01W-30J01 M																	
08/02/73	5050		7.5	1020	83	54	50	.5	0	382	130	54	33.0	.50	--	605	431	
1630	5050		8.3	997	4.14	4.44	2.18	.01	.00	6.26	2.71	1.52	.53		--	593	116	1.1
					38	41	20			57	25	14	5					
	02N/02W-26B01 M																	
08/09/73	5050	67 F	7.9	1050	--	--	121	--	0	350	--	138	--	--	--		232	
1030	5050	19 C	8.1	985			5.26		.00	5.74		3.89			--			3.5
							53											
	02N/02W-36J01 M																	
08/03/73	5050	65 F	7.2	1300	--	--	121	--	0	357	--	135	--	--	--		351	
0845	5050	18 C	8.1	1200			5.26		.00	5.85		3.81			--			2.8
							43											
	2-06.00		YGNACIO VALLEY															
	01N/01W-07K01 M																	
08/03/73	5050		7.4	2500	--	--	272	--	0	411	--	202	--	--	--		610	
0930	5050		8.2	2240			11.83		.00	6.74		5.70			--			4.8
							49											

TABLE E-1 (CONTINUED)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR
	2-00.00			SAN FRANCISCO BAY REGION															
	2-06.00			YGNACIO VALLEY															
	01N/02W-11N01	M																	
08/03/73	5050		68	F 7.5	1450	73	39	142	2.6	0	472	43	165	.6	1.40	--	690	344	
1015	5050		20	C 7.9	1290	3.64	3.21	6.18	.07	.00	7.74	.90	4.65	.01		--	699	0	3.3
						28	25	47	1		58	7	35						
	02N/02W-35D01	M																	
08/03/73	5050		65	F 7.4	3500	--	--	272	--	0	482	--	395	--	--	--		863	
1100	5050		18	C 7.9	2720			11.83		.00	7.90		11.14			--			4.0
								41											
	2-09.00			SANTA CLARA VALLEY															
	2-09.01			EAST BAY AREA															
	01S/04W-04A01	M																	
08/14/73	5100		66	F		--	--	115	--	0	384	--	221	--	--	--		512	
1030	5050		19	C 7.8	1480			5.00		.00	6.29		6.23			--			2.2
								33											
	01S/04W-34F02	M																	
08/14/73	5100		65	F		28	35	133	1.8	0	261	30	176	12.0	.20	--	573	214	
1100	5050		18	C 8.4	1040	1.40	2.88	5.79	.05	.00	4.28	.62	4.96	.19		--	544	0	4.0
						14	28	57			43	6	49	2					
	02S/03W-28G01	M																	
08/14/73	5100					--	--	2.7	--	0	30	--	2.4	--	--	--		27	
1220	5050			7.5	67			.12		.00	.49		.07			--			0.2
								18											
	02S/04W-25A01	M																	
08/14/73	5100		64	F		40	17	117	1.8	0	299	44	90	.1	.40	--	490	168	
1240	5050		18	C 8.3	834	2.00	1.40	5.09	.05	.00	4.90	.92	2.54	.00		--	457	0	3.9
						23	16	60	1		59	11	30						
	03S/02W-07J01	M																	
08/14/73	5100		64	F		--	--	71	--	0	387	--	67	--	--	--		367	
1400	5050		18	C 7.6	965			3.09		.00	6.34		1.89			--			1.6
								30											
	03S/02W-32D02	M																	
08/14/73	5100		74	F		--	--	142	--	0	2	--	94	--	--	--		278	
1450	5050		23	C 4.4	2080			6.18		.00	.03		2.65			--			3.7
								53											
	03S/03W-24J01	M																	
08/14/73	5100		65	F		--	--	--	--	--	--	--	505	--	--	--			
1500	5050		18	C	2620								14.24			--			
	04S/01W-07R05	M																	
09/18/73	5401		66	F 7.3	1700	--	--	104	--	0	342	--	326	--	--	--		636	
0945	5050		19	C 8.1	1730			4.52		.00	5.61		9.19			--			1.8
								26											
	04S/01W-21P06	M																	
09/18/73	5401		64	F 7.8	700	--	--	45	--	0	211	--	49	--	--	--		188	
0850	5050		18	C 7.9	573			1.96		.00	3.46		1.38			--			1.4
								34											
	04S/01W-27K01	M																	
09/18/73	5401		64	F 8.2	2100	--	--	449	--	51	810	--	174	--	--	--		376	
1000	5050		18	C 8.6	2440			19.53		1.70	13.28		4.91			--			10.1
								72											
	04S/01W-28C01	M																	
09/18/73	5401		64	F 7.8	800	34	30	55	1.5	0	167	62	82	10.0	.50	--	383	209	
1010	5050		18	C 8.0	671	1.70	2.47	2.39	.04	.00	2.74	1.29	2.31	.16		--	357	72	1.7
						26	37	36	1		42	20	36	2					
	04S/01W-30E03	M																	
09/18/73	5401		64	F 7.6	1900	--	--	110	--	0	79	--	684	--	--	--		898	
1545	5050		18	C 7.5	2450			4.79		.00	1.29		19.29			--			1.6
								21											
	04S/01W-33A02	M																	
09/19/73	5401		64	F 7.7	1400	--	--	71	--	0	254	--	143	--	--	--		364	
1000	5050		18	C 7.7	1050			3.09		.00	4.16		4.03			--			1.6
								30											
	04S/01W-33C01	M																	
09/18/73	5401		65	F 7.3	1800	--	--	172	--	0	423	--	177	--	--	--		447	
0830	5050		18	C 7.8	1570			7.48		.00	6.93		4.99			--			3.5
								46											
	04S/01W-34Q04	M																	
09/18/73	5401		75	F 7.4	1600	94	55	116	1.9	0	392	59	194	81.0	.20	--	814	462	
1445	5050		24	C 7.9	1400	4.69	4.52	5.05	.05	.00	6.42	1.23	5.47	1.31		--	794	140	2.4
						33	32	35			44	9	38	9					
	04S/01W-34R02	M																	
09/18/73	5401		69	F 8.1	750	--	--	75	--	0	254	--	42	--	--	--		124	
1500	5050		21	C 8.2	555			3.26		.00	4.16		1.18			--			2.9
								57											
	04S/02W-10C01	M																	
09/18/73	5401		68	F 7.9	800	--	--	55	--	0	199	--	47	--	--	--		166	
1140	5050		20	C 7.9	572			2.39		.00	3.26		1.33			--			1.9
								42											
	04S/02W-11Q10	M																	
09/18/73	5401		67	F 7.8	950	--	--	45	--	0	183	--	113	--	--	--		294	
1110	5050		19	C 7.8	802			1.96		.00	3.00		3.19			--			1.1
								25											

TABLE E-1 (CONTINUED)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR
	2-00.00			SAN FRANCISCO BAY REGION															
	2-09.00			SANTA CLARA VALLEY															
	2-09.01			EAST BAY AREA															
	04S/02W-23F02	M																	
09/19/73	5401		66 F	7.8	1500	135	61	57	3.0	0	131	95	347	13.0	.30	--	1210	589	
0845	5050		19 C	7.5	1520	6.74	5.02	2.48	.08	.00	2.15	1.98	9.79	.21		--	776	481	1.0
						47	35	17	1		15	14	69	1					
	04S/02W-27L01	M																	
09/18/73	5401		68 F	8.1	700	--	--	109	--	0	291	--	40	--	--	--		105	
1450	5050		20 C	8.3	636			4.74		.00	4.77		1.13			--			4.6
								69											
	05S/01W-04D01	M																	
09/18/73	5401		72 F	8.0	800	--	--	119	--	0	278	--	48	--	--	--		79	
1430	5050		22 C	8.3	669			5.18		.00	4.56		1.35			--			5.8
								77											
	05S/01W-08A03	M																	
09/18/73	5401		74 F	8.4	700	--	--	128	--	11	343	--	21	--	--	--		90	
1420	5050		23 C	8.5	666			5.57		.37	5.62		.59			--			5.9
								76											
	05S/01W-17A01	M																	
09/18/73	5401		70 F	8.2	700	--	--	110	--	0	295	--	21	--	--	--		66	
1400	5050		21 C	8.3	573			4.79		.00	4.84		.59			--			5.9
								78											
	05S/02W-01N01	M																	
09/18/73	5401		75 F	8.3	500	--	--	95	--	0	224	--	15	--	--	--		23	
1430	5050		24 C	8.3	438			4.13		.00	3.67		.42			--			8.6
								90											
	05S/02W-14E03	M																	
09/19/73	5401		66 F	8.1	500	--	--	68	--	0	231	--	14	--	--	--		93	
1400	5050		19 C	8.2	440			2.96		.00	3.79		.39			--			3.1
								61											
	2-09.02			SOUTH BAY AREA															
	05S/01E-31R01	M																	
08/10/73	5050			7.3	1800	106	59	125	.4	0	459	76	149	123	.20	--	958	506	
1100	5050			7.5	1500	5.29	4.85	5.44	.01	.00	7.52	1.58	4.20	1.98		--	864	131	2.4
						34	31	35			49	10	27	13					
	06S/01E-30M01	M																	
08/14/73	5050		68 F	7.5	750	80	30	31	1.6	0	303	73	43	9.1	.10	--	408	324	
1000	5050		20 C	7.9	741	3.99	2.47	1.35	.04	.00	4.97	1.52	1.21	.15		--	417	75	0.8
						51	31	17	1		63	19	15	2					
	08S/01E-17D01	M																	
08/17/73	5050		68 F	7.2	500	--	--	28	--	0	182	--	30	--	--	--		193	
1015	5050		20 C	8.2	511			1.22		.00	2.98		.85			--			0.9
								24											
	08S/02E-07F01	M																	
08/16/73	5050		64 F	7.5	700	58	40	28	1.1	0	326	69	18	14.0	.10	--	393	311	
1330	5050		18 C	7.9	688	2.89	3.29	1.22	.03	.00	5.34	1.44	.51	.23		--	388	42	0.7
						39	44	16			71	19	7	3					
	08S/02E-17L01	M																	
08/16/73	5050			7.7	535	--	--	22	--	0	244	--	17	--	--	--		236	
1045	5050			8.1	529			.96		.00	4.00		.48			--			0.6
								17											
	09S/02E-02C01	M																	
08/16/73	5050		63 F	7.3	740	--	--	31	--	0	310	--	23	--	--	--		312	
1200	5050		17 C	8.0	715			1.35		.00	5.08		.65			--			0.8
								18											
	05S/03W-27L02	M																	
06/28/73	5050		64 F	7.1	1800	82	54	100	1.1	0	314	124	156	41.0	.40	--	742	428	
1600	5050		18 C	7.6	1280	4.09	4.44	4.35	.03	.00	5.15	2.58	4.40	.66		--	713	169	2.1
						32	34	34			40	20	34	5					
	2-10.00			LIVERMORE VALLEY															
	02S/02E-35G02	M																	
08/20/73	5100		74 F			--	--	626	--	0	430	--	1120	--	--	--		746	
1245	5050		23 C	8.2	4300			27.23		.00	7.05		31.58			--			10.0
								65											
	03S/01E-06G04	M																	
08/20/73	5100		65 F			40	20	110	1.6	9.0	315	34	74	.2	.50	--	469	182	
1300	5050		18 C	8.5	795	2.00	1.64	4.79	.04	.30	5.16	.71	2.09	.00		--	444	0	3.5
						24	19	57		4	62	9	25						
	03S/01E-08H03	M																	
08/20/73	5100		62 F			--	--	74	--	0	416	--	154	--	--	--		508	
0950	5050		17 C	8.2	1270			3.22		.00	6.82		4.34			--			1.4
								24											
	03S/01E-11H01	M																	
08/20/73	5100		72 F			--	--	51	--	0	335	--	79	--	--	--		338	
1010	5050		22 C	8.0	851			2.22		.00	5.49		2.23			--			1.2
								25											
	03S/01E-13P02	M																	
08/20/73	5100		64 F			50	28	67	1.0	0	298	32	69	.2	.90	--	406	239	
1030	5050		18 C	8.0	729	2.50	2.30	2.91	.03	.00	4.88	.67	1.95	.00		--	395	0	1.9
						32	30	38			65	9	26						

TABLE E-1 (CONTINUED)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR
	2-00.00			SAN FRANCISCO BAY REGION															
	2-10.00			LIVERMORE VALLEY															
	03S/01E-19A05	M																	
08/20/73	5100		60	F		56	30	32	1.5	0	253	55	40	5.6	.30	--	352	262	
1345	5050		16	C	8.0 631	2.79	2.47	1.39	.04	.00	4.15	1.15	1.13	.09		--	345	56	0.9
						42	37	21	1		64	18	17	1					
	03S/02E-29D01	M																	
08/20/73	5100		66	F		--	--	48	--	0	280	--	60	--	--	--		284	
1045	5050		19	C	8.1 741			2.09		.00	4.59		1.69			--			1.2
								27											
	03S/03E-19C01	M																	
08/20/73	5100		80	F		--	--	121	--	0	296	--	194	--	--	--		308	
1130	5050		27	C	7.7 1170			5.26		.00	4.85		5.47			--			3.0
								46											
	2-22.00			HALF MOON BAY TERRACE															
	05S/05W-20E01	M																	
05/23/73	5050		61	F	7.1 490	38	17	40	.5	0	116	42	56	32.0	.00	--	347	164	
0930	5050		16	C	8.0 577	1.90	1.40	1.74	.01	.00	1.90	.87	1.58	.52		--	283	70	1.4
						38	28	34			39	18	32	11					
	05S/05W-32D01	M																	
05/23/73	5050		60	F	7.1 900	59	23	136	1.2	0	198	90	190	26.0	.00	--	663	241	
1030	5050		16	C	8.2 1160	2.94	1.89	5.92	.03	.00	3.25	1.87	5.36	.42		--	623	79	3.8
						27	18	55			30	17	49	4					
	2-24.00			SAN GREGORIO VALLEY															
	07S/05W-15B01	M																	
06/07/73	5050		76	F	6.8 1600	115	66	154	1.4	0	214	294	270	28.0	.20	--	1220	560	
1315	5050		24	C	8.2 1770	5.74	5.43	6.70	.04	.00	3.51	6.12	7.61	.45		--	1034	383	2.8
						32	30	37			20	35	43	3					
	07S/05W-15E01	M																	
05/30/73	5050				7.2 1200	53	54	206	1.4	16	349	148	242	12.0	.60	--	906	356	
1445	5050				8.5 1570	2.64	4.44	8.96	.04	.53	5.72	3.08	6.82	.19		--	905	42	4.8
						16	28	56		3	35	19	42	1					
	2-26.00			PESCADERO VALLEY															
	08S/05W-09J01	M																	
05/30/73	5050		63	F	7.0 950	17	38	117	2.2	4.0	267	17	156	1.7	.20	--	490	198	
1530	5050		17	C	8.3 932	.85	3.13	5.09	.06	.13	4.38	.35	4.40	.03		--	484	0	3.6
						9	34	56	1	1	47	4	47						
	08S/05W-10M01	M																	
05/31/73	5050		58	F	7.1 975	81	41	68	1.2	0	196	142	88	122	.00	--	730	371	
1100	5050		14	C	8.1 1080	4.04	3.37	2.96	.03	.00	3.21	2.96	2.48	1.97		--	640	210	1.5
						39	32	28			30	28	23	19					

TABLE E-1 (CONTINUED)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR
	3-00.00			CENTRAL COASTAL REGION															
	3-01.00			SOQUEL VALLEY															
	11S/01E-28C01	M																	
06/19/73	5050		67	F 7.5	355	26	21	18	2.4	1.0	169	20	18	.7	.00	--	229	150	
1400	5050		19	C 8.3	364	1.30	1.73	.78	.06	.03	2.77	.42	.51	.01		--	190	12	0.6
						34	45	20	2	1	74	11	14						
	11S/01W-11K01	M																	
06/14/73	5050			7.5	1150	88	43	62	8.0	0	202	76	199	10.0	.00	--	763	396	
1300	5050			8.2	1120	4.39	3.54	2.70	.20	.00	3.31	1.58	5.61	.16		--	585	231	1.4
						41	33	25	2		31	15	53	2					
	11S/01W-12D01	M																	
06/14/73	5050		71	F 7.5	750	27	25	68	3.7	1.0	238	102	28	2.1	.30	--	407	171	
1345	5050		22	C 8.3	669	1.35	2.06	2.96	.09	.03	3.90	2.12	.79	.03		--	374	0	2.3
						21	32	46	1		57	31	11						
	3-03.00			GILROY-HOLLISTER VALLEY															
	3-03.01			SOUTH SANTA CLARA COUNTY															
	09S/03E-25N03	M																	
08/22/73	5114		68	F 7.7	462	40	24	25	--	0	190	--	25	45.0	--	--		201	
	5050		20	C 8.1	495	2.00	1.97	1.09		.00	3.11		.71	.73		--		43	0.8
						40	39	22			68		16	16					
	09S/03E-33G02	M																	
08/07/73	5114		67	F 7.6	577	.7	.6	144	.0	10	271	26	22	26.0	.00	--	407	4	
	5050		19	C 8.6	633	.03	.05	6.26	.00	.33	4.44	.54	.62	.42		--	363	0	30.5
							1	99		5	70	9	10	7					
	10S/03E-02C03	M																	
09/18/73	5050				490	--	--	19	.1	0	166	--	--	--	--	--			
0935	5050			7.9	534			.83	.00	.00	2.72					--			
	10S/03E-02F03	M																	
09/18/73	5050				430	--	--	16	.0	0	190	24	--	--	--	--			
0815	5050			7.8	472			.70	.00	.00	3.11	.50				--			
	10S/03E-02F05	M																	
09/18/73	5050				440	--	--	16	.0	0	186	22	--	--	--	--			
0830	5050			7.5	465			.70	.00	.00	3.05	.46				--			
	10S/03E-02F06	M																	
09/18/73	5050				700	--	--	37	.3	0	405	--	--	--	--	--			
0905	5050			7.7	758			1.61	.01	.00	6.64					--			
	10S/03E-02F07	M																	
09/18/73	5050				500	--	--	15	.0	0	249	--	--	--	--	--			
0955	5050			7.9	528			.65	.00	.00	4.08					--			
	10S/03E-02K01	M																	
08/22/73	5114		66	F 7.7	397	40	25	12	--	0	210	--	12	16.0	--	--		203	
	5050		19	C 8.3	425	2.00	2.06	.52		.00	3.44		.34	.26		--		31	0.4
						44	45	11			85		8	6					
	10S/03E-02K06	M																	
09/18/73	5050				490	--	--	13	.0	0	237	--	--	--	--	--			
1025	5050			7.9	518			.57	.00	.00	3.88					--			
	10S/03E-11G06	M																	
08/22/73	5114		63	F 7.4	408	39	27	13	.6	2.0	216	24	14	10.0	.10	--	256	209	
	5050		17	C 8.4	442	1.95	2.22	.57	.02	.07	3.54	.50	.39	.16		--	236	28	0.4
						41	47	12		2	76	11	8	3					
	10S/03E-13D03	M																	
08/21/73	5114		64	F 7.4	508	51	34	14	--	0	254	--	28	19.0	--	--		266	
	5050		18	C 8.1	554	2.54	2.80	.61		.00	4.16		.79	.31		--		59	0.4
						43	47	10			79		15	6					
	10S/03E-14D01	M																	
08/07/73	5114		64	F 7.5	581	29	56	16	--	8.0	251	--	40	33.0	--	--		302	
	5050		18	C 8.5	617	1.45	4.61	.70		.27	4.11		1.13	.53		--		84	0.4
						21	68	10											
	10S/03E-23J01	M																	
08/07/73	5114		70	F 7.6	519	39	33	21	.3	5.0	183	26	38	46.0	.00	--	335	235	
	5050		21	C 8.4	560	1.95	2.71	.91	.01	.17	3.00	.54	1.07	.74		--	298	75	0.6
						35	49	16		3	54	10	19	13					
	10S/03E-26J01	M																	
08/07/73	5114		68	F 7.3	453	39	28	19	--	0	180	--	30	36.0	--	--		215	
	5050		20	C 8.3	490	1.95	2.30	.83		.00	2.95		.85	.58		--		65	0.6
						38	45	16			67		19	13					
	10S/04E-17F01	M																	
08/21/73	5114		71	F 7.6	824	49	46	73	--	6.0	345	--	96	12.0	--	--		311	
	5050		22	C 8.4	875	2.45	3.78	3.18		.20	5.65		2.71	.19		--		19	1.8
						26	40	34											
	10S/04E-18G02	M																	
08/21/73	5114		65	F 7.5	486	44	30	19	--	2.0	208	--	25	35.0	--	--		233	
	5050		18	C 8.4	521	2.20	2.47	.83		.07	3.41		.71	.56		--		60	0.5
						40	45	15											
	10S/04E-18J01	M																	
08/21/73	5114		70	F 7.8	428	42	22	22	--	5.0	190	--	20	28.0	--	--		194	
	5050		21	C 8.5	462	2.10	1.81	.96		.17	3.11		.56	.45		--		32	0.7
						43	37	20											

TABLE E-1 (CONTINUED)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR
	3-00.00		CENTRAL COASTAL REGION															
	3-03.00		GILROY-HOLLISTER VALLEY															
	3-03.01		SOUTH SANTA CLARA COUNTY															
	10S/04E-28002 M																	
08/21/73	5114	69 F	7.8	491	28	34	32	--	0	237	--	26	23.0	--	--		210	
	5050	21 C	8.3	524	1.40	2.80	1.39		.00	3.88		.73	.37		--		16	1.0
					25	50	25			78		15	7					
	10S/04E-31G01 M																	
08/25/73	5114	66.5F			39	30	22	.9	1.0	192	35	26	40.0	.00	--	315	219	
	5050	19.1C	8.3	525	1.95	2.47	.96	.02	.03	3.15	.73	.73	.65		--	288	62	0.6
					36	46	18		1	60	14	14	12					
	10S/04E-34L05 M																	
08/21/73	5114	67 F	7.3	670	50	37	44	--	10	266	--	46	43.0	--	--		277	
	5050	19 C	8.6	701	2.50	3.04	1.91		.33	4.36		1.30	.69		--		43	1.2
					34	41	26											
	11S/04E-03L02 M																	
08/21/73	5114	65 F	7.3	1005	62	59	50	1.0	0	359	86	52	75.0	.10	--	560	396	
	5050	18 C	8.3	988	3.09	4.85	2.18	.03	.00	5.88	1.79	1.47	1.21		--	562	103	1.1
					30	48	21			57	17	14	12					
	11S/04E-04Q03 M																	
08/22/73	5114	64 F	7.2	753	70	50	23	--	0	306	--	28	82.0	--	--		383	
	5050	18 C	8.1	801	3.49	4.11	1.00		.00	5.02		.79	1.32		--		129	0.5
					41	48	12			70		11	19					
	11S/04E-08K02 M																	
08/20/73	5114	68 F	7.4	698	71	43	23	--	0	265	--	72	76.0	--	--		354	
	5050	20 C	8.3	746	3.54	3.54	1.00		.00	4.34		2.03	1.23		--		137	0.5
					44	44	12			57		27	16					
	11S/04E-09R03 M																	
08/20/73	5114	67 F	7.6	742	53	43	27	1.1	0	305	46	34	29.0	.00	--	426	310	
	5050	19 C	8.1	711	2.64	3.54	1.17	.03	.00	5.00	.96	.96	.47		--	383	59	0.7
					36	48	16			68	13	13	6					
	11S/04E-10P01 M																	
08/20/73	5114	67 F	7.6	724	66	40	32	1.0	0	310	72	34	36.0	.10	--	476	329	
	5050	19 C	8.3	767	3.29	3.29	1.39	.03	.00	5.08	1.50	.96	.58		--	434	75	0.8
					41	41	17			63	18	12	7					
	11S/04E-16G02 M																	
08/20/73	5114	68 F	7.5	813	63	45	31	1.3	0	311	76	38	39.0	.10	--	506	341	
	5050	20 C	8.2	815	3.14	3.70	1.35	.03	.00	5.10	1.58	1.07	.63		--	446	87	0.7
					38	45	16			61	19	13	8					
	11S/04E-21B02 M																	
08/20/73	5114	66 F	7.6	744	79	44	26	--	0	329	--	31	57.0	--	--		379	
	5050	19 C	8.1	795	3.94	3.62	1.13		.00	5.39		.87	.92		--		109	0.6
					45	42	13			75		12	13					
	3-03.02		SAN BENITO COUNTY															
	12S/05E-01F06 M																	
05/10/73	5050		7.0		150	98	114	2.2	0	516	78	341	58.0	1.50	--	1180	776	
0735	5050		7.1	2020	7.49	8.06	4.96	.06	.00	8.46	1.62	9.62	.94		--	1096	355	1.8
					36	39	24			41	8	47	5					
	12S/05E-01N02 M																	
05/10/73	5050		7.0		83	51	100	2.3	0	502	48	129	3.1	2.60	--	731	416	
0750	5050		7.5	1260	4.14	4.19	4.35	.06	.00	8.23	1.00	3.64	.05		--	666	5	2.1
					32	33	34			64	8	28						
	12S/05E-04K01 M																	
05/10/73	5050		7.8		45	46	120	2.1	0	359	163	73	2.0	1.00	--	643	303	
0820	5050		7.8	1080	2.25	3.78	5.22	.05	.00	5.88	3.39	2.06	.03		--	629	8	3.0
					20	33	46			52	30	18						
	12S/05E-05F01 M																	
05/10/73	5050		7.4		74	99	195	3.0	0	452	423	157	.9	1.20	--	1200	591	
0840	5050		7.6	1860	3.69	8.14	8.48	.08	.00	7.41	8.81	4.43	.01		--	1175	221	3.5
					18	40	42			36	43	21						
	12S/05E-16B01 M																	
05/10/73			7.2		101	141	245	4.1	0	544	509	251	65.0	1.60	--	1620	832	
0900	5050		7.4	2430	5.04	11.60	10.66	.10	.00	8.92	10.60	7.08	1.05		--	1585	386	3.7
					18	42	39			32	38	26	4					
	12S/05E-24H01 M																	
05/10/73	5050		7.6		51	29	46	1.9	0	256	29	78	.0	1.70	--	418	249	
1000	5050		7.7	711	2.54	2.38	2.00	.05	.00	4.20	.60	2.20	.00		--	362	36	1.3
					36	34	29	1		60	9	31						
	12S/05E-25M01 M																	
05/16/73	5050	78.0F	7.8	975	39	34	135	2.6	0	272	185	87	1.1	1.10	--	654	236	
0850	5050	25.5C	7.8	1060	1.95	2.80	5.87	.07	.00	4.46	3.85	2.45	.02		--	619	15	3.8
					18	26	55	1		41	36	23						
	12S/05E-26E04 M																	
05/10/73	5050		7.4		60	70	130	2.6	0	361	260	113	11.0	.90	--	849	437	
1025	5050		7.6	1350	2.99	5.76	5.66	.07	.00	5.92	5.41	3.19	.18		--	825	142	2.7
					21	40	39			40	37	22	1					
	12S/05E-27E01 M																	
05/16/73	5050	70.0F	7.4	1400	64	83	142	2.6	0	436	290	110	9.7	1.00	--	952	502	
0950	5050	21.1C	7.9	1500	3.19	6.83	6.18	.07	.00	7.15	6.04	3.10	.16		--	917	144	2.8
					20	42	38			43	37	19	1					
	12S/05E-28N03 M																	
05/10/73	5050		7.6		52	70	190	4.4	0	502	231	120	5.7	1.00	--	954	416	
1220	5050		7.6	1520	2.59	5.76	8.27	.11	.00	8.23	4.81	3.38	.09		--	921	6	4.0
					15	34	49	1		50	29	20	1					

TABLE E-1 (CONTINUED)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD PH	LABORATORY EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE: CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F / SIO2	TDS SUM	TH NCH	SAR
	3-00.00				CENTRAL COASTAL REGION													
	3-03.00				GILROY-HOLLISTER VALLEY													
	3-03.02				SAN BENITO COUNTY													
	12S/05E-35B02 M																	
05/16/73	5050	72.0F	7.4	960	46	47	108	2.6	0	316	183	74	4.4	.90	--	665	310	
1035	5050	22.2C	8.0	1070	2.30	3.87	4.70	.07	.00	5.18	3.81	2.09	.07		--	621	50	2.7
					21	35	43	1		46	34	19	1					
	13S/05E-04E01 M																	
05/10/73	5050		7.0		40	47	69	.7	0	178	16	167	59.0	.00	--	593	294	
1245	5050		7.2	956	2.00	3.87	3.00	.02	.00	2.92	.33	4.71	.95		--	486	148	1.8
					22	44	34			33	4	53	11					
	13S/05E-13F02 M																	
05/16/73	5050	69.0F	7.4	1450	58	81	159	3.1	0	384	307	130	27.0	1.10	--	1000	482	
1120	5050	20.5C	7.8	1560	2.89	6.66	6.92	.08	.00	6.29	6.39	3.67	.44		--	955	163	3.2
					17	40	42			37	38	22	3					
	3-04.00				SALINAS VALLEY													
	3-04.01				PRESSURE AREA													
	13S/02E-28M01 M																	
07/13/73	5115			800	52	39	74	4.1	0	247	44	137	21.0	.00	--	531	289	
	5050		7.5	982	2.59	3.21	3.22	.10	.00	4.05	.92	3.86	.34		--	493	88	1.9
					28	35	35	1		44	10	42	4					
	13S/02E-33R01 M																	
08/13/73	5115	64.0F		950	101	39	71	3.2	0	258	90	174	3.7	.00	--	635	411	
	5050	17.8C	7.8	1170	5.04	3.21	3.09	.08	.00	4.23	1.87	4.91	.06		--	609	201	1.5
					44	28	27	1		38	17	44	1					
	13S/02E-35L01 M																	
08/13/73	5115			460	34	18	48	2.6	0	234	5.8	43	2.0	.00	--	289	160	
	5050		7.9	548	1.70	1.48	2.09	.07	.00	3.84	.12	1.21	.03		--	268	0	1.7
					32	28	39	1		74	2	23	1					
	13S/02E-36J01 M																	
08/13/73	5115			430	46	13	39	1.9	0	241	5.9	30	.0	.00	--	288	168	
	5050		7.6	487	2.30	1.07	1.70	.05	.00	3.95	.12	.85	.00		--	254	0	1.3
					45	21	33	1		80	2	17						
	14S/02E-02M01 M																	
08/06/73	5115	64.0F		490	55	40	74	2.4	0	454	8.2	58	.9	.00	--	467	301	
	5050	17.8C	7.9	748	2.74	3.29	3.22	.06	.00	7.44	.17	1.64	.01		--	462	0	1.9
					29	35	35	1		80	2	18						
	14S/02E-23A01 M																	
08/13/73	5115	68.0F		790	82	30	74	3.1	0	293	66	122	1.2	.10	--	560	326	
	5050	20.0C	7.7	982	4.09	2.47	3.22	.08	.00	4.80	1.37	3.44	.02		--	522	88	1.8
					41	25	33	1		50	14	36						
	14S/02E-23J01 M																	
08/20/73	5115	68.0F		1010	83	47	91	4.6	0	218	181	158	1.0	.20	--	730	401	
	5050	20.0C	7.7	1220	4.14	3.87	3.96	.12	.00	3.57	3.77	4.46	.02		--	673	222	2.0
					34	32	33	1		30	32	38						
	14S/02E-35G01 M																	
08/20/73	5115	70 F		400	60	14	32	3.5	0	165	85	35	1.2	.00	--	355	209	
	5050	21 C	7.9	586	2.99	1.15	1.39	.09	.00	2.70	1.77	.99	.02		--	312	72	1.0
					53	20	25	2		49	32	18						
	14S/02E-35Q01 M																	
08/29/73	5115	62.0F		350	54	13	27	2.9	0	163	82	15	1.3	.00	--	320	188	
	5050	16.7C	7.9	512	2.69	1.07	1.17	.07	.00	2.67	1.71	.42	.02		--	275	55	0.9
					54	21	23	1		55	35	9						
	14S/02E-36E01 M																	
08/29/73	5115	62.0F		1500	210	80	85	6.3	0	352	432	201	.1	.10	--	1340	852	
	5050	16.7C	7.5	1830	10.48	6.58	3.70	.16	.00	5.77	8.99	5.67	.00		--	1188	565	1.3
					50	31	18	1		28	44	28						
	14S/03E-19Q02 M																	
08/21/73	5115	64.0F		925	90	43	88	3.2	0	352	48	174	14.0	.00	--	609	402	
	5050	17.8C	7.7	1140	4.49	3.54	3.83	.08	.00	5.77	1.00	4.91	.23		--	633	113	1.9
					38	30	32	1		48	8	41	2					
	14S/03E-24N01 M																	
08/08/73	5115	66.0F		475	36	14	54	1.2	0	148	4.6	77	36.0	.00	--	347	148	
	5050	18.9C	7.7	638	1.80	1.15	2.35	.03	.00	2.43	.10	2.17	.58		--	296	26	1.9
					34	22	44	1		46	2	41	11					
	14S/03E-31Q02 M																	
07/30/73	5115	69.8F		425	41	12	30	2.7	0	152	70	10	.5	.00	--	274	152	
	5050	21.0C	7.9	462	2.05	.99	1.31	.07	.00	2.49	1.46	.28	.01		--	241	28	1.1
					46	22	30	2		59	34	7						
	15S/03E-07D02 M																	
08/17/73	5115			340	50	13	24	2.7	0	161	72	12	1.1	.00	--	290	179	
	5050		7.9	476	2.50	1.07	1.04	.07	.00	2.64	1.50	.34	.02		--	254	47	0.8
					53	23	22	1		59	33	8						
	16S/04E-24A01 M																	
08/10/73	5115			1500	145	76	132	4.9	0	322	444	126	65.0	.40	--	1290	674	
	5050		7.7	1770	7.24	6.25	5.74	.13	.00	5.28	9.24	3.55	1.05		--	1152	411	2.2
					37	32	30	1		28	48	19	5					
	16S/04E-25Q01 M																	
08/15/73	5115	60.0F		750	92	33	56	3.8	0	300	160	46	19.0	.20	--	589	366	
	5050	15.5C	8.1	938	4.59	2.71	2.44	.10	.00	4.92	3.33	1.30	.31		--	558	119	1.3
					47	28	25	1		50	34	13	3					

TABLE E-1 (CONTINUED)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	MILLIGRAMS PER LITER TDS SUM	TH NCH	SAR
	3-00.00	CENTRAL COASTAL REGION																	
	3-04.00	SALINAS VALLEY																	
	3-04.01	PRESSURE AREA																	
	16S/04E-27G01	M																	
08/27/73	5115		60.0F		650	105	29	33	3.9	0	282	157	37	2.1	.00	--	540	382	
	5050		15.5C	8.1	850	5.24	2.38	1.44	.10	.00	4.62	3.27	1.04	.03		--	506	150	0.7
						57	26	16	1		52	36	12						
	3-04.02	EAST SIDE AREA																	
	14S/03E-36A01	M																	
08/08/73	5115		60.0F		400	48	12	42	1.0	0	106	25	55	83.0	.00	--	339	169	
	5050		15.5C	7.6	607	2.40	.99	1.83	.03	.00	1.74	.52	1.55	1.34		--	318	83	1.4
						46	19	35	1		34	10	30	26					
	3-04.03	FOREBAY AREA																	
	17S/05E-09Q01	M																	
08/15/73	5115				450	64	22	27	2.7	0	211	97	25	.0	.00	--	369	251	
	5050			8.1	592	3.19	1.81	1.17	.07	.00	3.46	2.02	.71	.00		--	341	77	0.7
						51	29	19	1		56	33	11						
	17S/06E-27K01	M																	
08/23/73	5115		60.0F		895	84	37	96	2.9	0	260	231	71	12.0	.40	--	737	362	
	5050		15.5C	7.9	1080	4.19	3.04	4.18	.07	.00	4.26	4.81	2.00	.19		--	662	149	2.2
						36	26	36	1		38	43	18	2					
	17S/06E-29K01	M																	
08/23/73	5115		60.0F		700	108	30	40	4.4	0	248	190	44	21.0	.10	--	628	394	
	5050		15.5C	7.9	905	5.39	2.47	1.74	.11	.00	4.06	3.96	1.24	.34		--	559	190	0.9
						56	25	18	1		42	41	13	4					
	17S/06E-35F01	M																	
08/07/73	5115				800	55	30	112	2.9	0	220	222	71	6.5	.70	--	636	263	
	5050			8.3	1010	2.74	2.47	4.87	.07	.00	3.61	4.62	2.00	.10		--	608	80	3.0
						27	24	48	1		35	45	19	1					
	18S/06E-11J01	M																	
08/07/73	5115				860	93	35	58	5.5	0	124	267	78	19.0	.20	--	755	378	
	5050			7.9	1020	4.64	2.88	2.52	.14	.00	2.03	5.56	2.20	.31		--	617	275	1.3
						46	28	25	1		20	55	22	3					
	3-04.05	UPPER VALLEY AREA																	
	19S/07E-13D01	M																	
08/27/73	5115		60.0F		1660	154	79	213	5.4	0	426	576	123	68.0	1.10	--	1530	711	
	5050		15.5C	7.9	2110	7.68	6.50	9.27	.14	.00	6.98	11.99	3.47	1.10		--	1429	360	3.5
						33	28	39	1		30	51	15	5					
	19S/07E-13D02	M																	
08/27/73	5115		60.0F		790	78	36	93	2.3	0	261	228	50	20.0	.40	--	676	344	
	5050		15.5C	7.9	1030	3.89	2.96	4.05	.06	.00	4.28	4.75	1.41	.32		--	636	129	2.2
						35	27	37	1		40	44	13	3					
	19S/07E-23F01	M																	
08/13/73	5115		64.0F		1010	114	49	74	2.4	0	227	209	157	29.0	.20	--	803	485	
	5050		17.8C	7.6	1280	5.69	4.03	3.22	.06	.00	3.72	4.35	4.43	.47		--	746	300	1.5
						44	31	25			29	34	34	4					
	19S/08E-32A01	M																	
08/01/73	5115		64.0F		2150	133	112	314	1.8	0	416	732	242	52.0	1.70	--	779	792	
	5050		17.8C	7.7	2690	6.64	9.21	13.66	.05	.00	6.82	15.24	6.82	.84		--	1793	452	4.9
						22	31	46			23	51	23	3					
	19S/08E-33R01	M																	
08/01/73	5115		64.0F		2800	132	158	417	5.8	0	335	1180	264	28.0	1.70	--	2610	981	
	5050		17.8C	7.6	3330	6.59	12.99	18.14	.15	.00	5.49	24.57	7.44	.45		--	2351	705	5.8
						17	34	48			14	65	20	1					
	20S/08E-06B01	M																	
08/02/73	5115		62.0F		650	56	31	70	1.4	0	312	109	28	16.0	.40	--	496	270	
	5050		16.7C	7.7	796	2.79	2.55	3.05	.04	.00	5.11	2.27	.79	.26		--	465	12	1.9
						33	30	36			61	27	9	3					
	20S/08E-17P01	M																	
08/01/73	5115		64.0F		1780	159	104	142	2.0	0	418	456	217	42.0	.40	--	1450	824	
	5050		17.8C	7.8	2090	7.93	8.55	6.18	.05	.00	6.85	9.49	6.12	.68		--	1328	482	2.2
						35	38	27			30	41	26	3					
	3-04.08	SEASIDE AREA																	
	16S/02E-04L01	M																	
07/27/73	5115		64.0F		1325	28	31	218	4.7	0	65	26	412	12.0	.10	--	898	198	
	5050		17.8C	7.4	1660	1.40	2.55	9.48	.12	.00	1.07	.54	11.62	.19		--	764	144	6.8
						10	19	70	1		8	4	87	1					
	3-07.00	CARMEL VALLEY																	
	16S/01E-22C01	M																	
09/03/73	5115		65.0F		1010	121	61	74	4.4	0	134	465	80	1.2	.10	--	967	554	
	5050		18.3C	7.2	1440	6.04	5.02	3.22	.11	.00	2.20	9.68	2.26	.02		--	873	443	1.4
						42	35	22	1		16	68	16						
	16S/01E-23F03	M																	
07/27/73	5115		62.0F		900	118	39	65	4.1	0	118	392	58	.2	.10	--	825	456	
	5050		16.7C	7.3	1210	5.89	3.21	2.83	.10	.00	1.93	8.16	1.64	.00		--	734	359	1.3
						49	27	24	1		16	70	14						
	16S/01E-25B01	M																	
07/26/73	5115		62.0F		410	46	14	35	3.2	0	135	86	33	.3	.00	--	312	174	
	5050		16.7C	7.7	550	2.30	1.15	1.52	.08	.00	2.21	1.79	.93	.00		--	284	62	1.2
						46	23	30	2		45	36	19						

TABLE E-1 (CONTINUED)
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB		TEMP	FIELD PH	LABORATORY EC	MINERAL CONSTITUENTS IN MILLIGRAMS PER LITER / MILLIEQUIVALENTS PER LITER / PERCENT REACTANCE VALUE CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F SIO2	TDS SUM	TH NCH	SAR
	3-00.00		CENTRAL COASTAL REGION																
	3-07.00		CARMEL VALLEY																
	16S/02E-19N01	M																	
07/26/73	5115		56.0F		470	37	12	26	2.9	0	120	62	24	1.2	.00	--	261	144	
	5050		13.3C	8.2	416	1.85	.99	1.13	.07	.00	1.97	1.29	.68	.02		--	224	44	1.0
						46	25	28	2		50	33	17	1					
	16S/02E-32A01	M																	
07/26/73	5115		60.0F		440	44	13	26	3.2	0	151	49	31	4.6	.00	--	287	165	
	5050		15.5C	8.1	463	2.20	1.07	1.13	.08	.00	2.47	1.02	.87	.07		--	245	40	0.9
						49	24	25	2		56	23	20	2					
	17S/03E-21H01	M																	
07/23/73	5115		66.0F		980	112	36	83	4.3	0	368	156	100	.7	.00	--	734	430	
	5050		18.9C	8.0	1150	5.59	2.96	3.61	.11	.00	6.03	3.25	2.82	.01		--	673	126	1.7
						46	24	29	1		50	27	23						
	18S/04E-06A01	M																	
07/26/73	5115		68.0F		850	116	32	62	4.3	0	340	158	76	4.9	.10	--	638	424	
	5050		20.0C	8.0	1070	5.79	2.63	2.70	.11	.00	5.57	3.29	2.14	.08		--	620	143	1.3
						52	23	24	1		50	30	19	1					
	16S/01W-13L01	M																	
08/27/73	5115		61.0F		700	85	26	59	4.0	0	242	130	82	1.3	.00	--	530	321	
	5050		16.1C	7.9	912	4.24	2.14	2.57	.10	.00	3.97	2.71	2.31	.02		--	506	121	1.4
						47	24	28	1		44	30	26						
	16S/01W-13Q02	M																	
08/27/73	5115		60.0F		800	81	38	67	3.7	0	244	158	92	1.4	.10	--	585	358	
	5050		15.5C	8.1	971	4.04	3.13	2.91	.09	.00	4.00	3.29	2.59	.02		--	561	159	1.5
						40	31	29	1		40	33	26						
	3-26.00		WEST SANTA CRUZ TERRACE																
	11S/02W-19A01	M																	
06/20/73	5050		62 F	7.6	1600	13	6.0	256	2.5	0	230	107	223	12.0	1.20	--	756	57	
1445	5050		17 C	8.3	1370	.65	.49	11.14	.06	.00	3.77	2.23	6.29	.19		--	734	0	14.7
						5	4	90			30	18	50	2					
	11S/02W-21H01	M																	
06/15/73	5050		68 F	7.3	800	52	6.4	60	3.1	0	98	127	60	2.1	.20	--	395	156	
1215	5050		20 C	8.1	644	2.59	.53	2.61	.08	.00	1.61	2.64	1.69	.03		--	359	76	2.1
						45	9	45	1		27	44	28	1					
	11S/02W-22M01	M																	
06/15/73	5050		71 F	7.3	1050	56	8.4	114	4.4	0	121	132	128	4.5	.50	--	546	174	
0930	5050		22 C	8.0	923	2.79	.69	4.96	.11	.00	1.98	2.75	3.61	.07		--	507	75	3.8
						33	8	58	1		24	33	43	1					

TABLE E-2

MINOR ELEMENT ANALYSIS OF GROUND WATER

State Well Number	Date Sampled	Constituents in Milligrams per Liter*						
		Arsenic Lithium	Barium Manganese	Cadmium Mercury	Chromium Selenium	Copper Strontium	Iron Zinc	Lead
NORTH COASTAL REGION 1-00.00								
SANTA ROSA VALLEY 1-18.00								
SANTA ROSA AREA 1-18.01								
06N/09W-03R84 M	5-24-73	0.00d	--	--	--	--	--	--
		0.01d	--	--	--	--	--	
07N/08W-30P01 M	7-26-73	--	--	--	--	--	0.00t	--
		--	0.01t	--	--	--	--	
07N/09W-09F01 M	7-26-73	--	--	--	--	--	2.9t	--
		--	0.04t	--	--	--	--	
08N/09W-13J80 M	7-17-73	0.02d	--	--	--	--	0.33t	0.00t
		0.05d	0.97t	--	--	--	--	
MISCELLANEOUS AREA 1-80.00								
05N/08W-21L01 M	7-17-73	0.00d	--	--	--	--	0.14t	0.00t
		0.00d	0.00t	--	--	--	--	
06N/10W-36N80 M	7-17-73	0.00d	--	--	--	--	0.59t	0.00t
		0.00d	0.01t	--	--	--	--	
06N/11W-22K01 M	7-17-73	0.00d	--	--	--	--	0.02t	0.00t
		0.00d	0.00t	--	--	--	--	
08N/07W-05K80M	5-16-73	0.00d	--	--	--	--	--	--
		0.08d	--	--	--	--	--	
09N/13W-32R01 M	5-16-73	0.00d	--	--	--	--	--	--
		0.02d	--	--	--	--	--	
10N/10W-23B03 M	5-17-73	0.00d	--	--	--	--	--	--
		0.02d	--	--	--	--	--	
10N/13W-07N80M	5-16-73	0.00d	--	--	--	--	--	--
		0.00d	--	--	--	--	--	
10N/14W-12P80 M	5-17-73	0.00d	--	--	--	--	--	--
		0.06d	--	--	--	--	--	
LOWER RUSSIAN RIVER VALLEY 1-98.00								
07N/11W-14E02 M	5-16-73	--	--	--	--	--	--	--
		0.00d	--	--	--	--	--	
SAN FRANCISCO BAY REGION 2-00.00								
PETALUMA VALLEY 2-01.00								
03N/06W-16H01 M	7-27-73	--	--	--	--	--	0.51t	--
		--	0.00t	--	--	--	--	
04N/06W-08E01 M	7-27-73	--	--	--	--	--	0.03t	--
		--	0.01t	--	--	--	--	
04N/06W-21F80 M	5-17-73	0.00d	--	--	--	--	--	--
		0.06d	--	--	--	--	--	
04N/06W-27N01 M	5-17-73	0.00d	--	--	--	--	--	--
		0.03d	--	--	--	--	--	
05N/06W-33H80 M	5-17-73	0.03d	--	--	--	--	--	--
		0.03d	--	--	--	--	--	
05N/07W-20L03 M	5-16-73	0.00d	--	--	--	--	--	--
		0.04d	--	--	--	--	--	
NAPA-SONOMA VALLEY 2-02.00								
SONOMA VALLEY 2-02.01								
04N/05W-03C01 M	5-16-73	0.01d	--	--	--	--	--	--
		0.04d	--	--	--	--	--	
04N/05W-34D80 M	5-16-73	--	--	--	--	--	--	--
		0.04d	--	--	--	--	--	
05N/05W-19L01 M	5-16-73	0.00d	--	--	--	--	--	--
		0.04d	--	--	--	--	--	
05N/05W-28R01 M	7-30-73	--	--	--	--	--	0.10t	--
		--	0.03t	--	--	--	--	
SANTA CLARA VALLEY 2-09.00								
SOUTH BAY AREA 2-09.02								
06S/02W-20N01 M	7-09-73	0.0000	0.0	0.000	0.002	0.00	0.00	0.000
		0.000	0.00	0.0004	0.0003	0.36	0.00	

* d = dissolved, t = total

Appendix F

WASTE WATER DATA

Appendix F, "Waste Water Data", which appeared in certain volumes of Bulletin No. 130 series, has been discontinued. For information regarding waste water, the reader is referred to the recently reactivated Bulletin No. 68 series: "Inventory of Waste Water Production and Waste Water Reclamation Practices in California".

Please note the data presented in Bulletin No. 68 are on a calendar year basis rather than a water year basis as is the case in Bulletin No. 130.

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