

TC
824

C2

A2

no. 130:

64

v. 3

c. 2

LIBRARY
UNIVERSITY OF CALIFORNIA
DAVIS



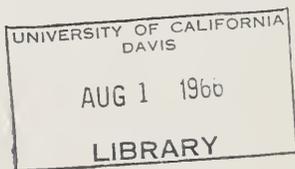
State of California
THE RESOURCES AGENCY
Department of Water Resources

BULLETIN No. 130-64

HYDROLOGIC DATA: 1964

Volume III: CENTRAL COASTAL AREA

JUNE 1966



HUGO FISHER
Administrator
The Resources Agency

EDMUND G. BROWN
Governor
State of California

WILLIAM E. WARNE
Director
Department of Water Resources

State of California
THE RESOURCES AGENCY
Department of Water Resources

BULLETIN No. 130-64

HYDROLOGIC DATA: 1964

Volume III: CENTRAL COASTAL AREA

JUNE 1966

LIBRARY
UNIVERSITY OF CALIFORNIA
DAVIS

HUGO FISHER
Administrator
The Resources Agency

EDMUND G. BROWN
Governor
State of California

WILLIAM E. WARNE
Director
Department of Water Resources

FOREWORD

Bulletin No. 130 is designed to present comprehensive and accurate hydrologic data to the public. The bulletin is published annually in five volumes, each volume reporting data for a specific area of the State. Volume III, "Central Coastal Area", presents data from the area depicted on page iii.

The collection and publication of these data are authorized by Sections 225, 229, 230, 345, 12609, and 12616 of the Water Code of the State of California.

Collection of much of the data presented has been possible only because of the generous help of other agencies. Their assistance has enabled us to make Bulletin No. 130 more complete and accurate.

Acknowledgments of agencies who have directly contributed to Bulletin No. 130-164, Volume III, are made in each appendix.



William E. Warne, Director
Department of Water Resources
The Resources Agency
State of California

ORGANIZATION OF BULLETIN NO. 130 SERIES

- Volume I - NORTH COASTAL AREA
- Volume II - NORTHEASTERN CALIFORNIA
- Volume III - CENTRAL COASTAL AREA
- Volume IV - SAN JOAQUIN VALLEY
- Volume V - SOUTHERN CALIFORNIA

Each volume consists of the following:

TEXT and

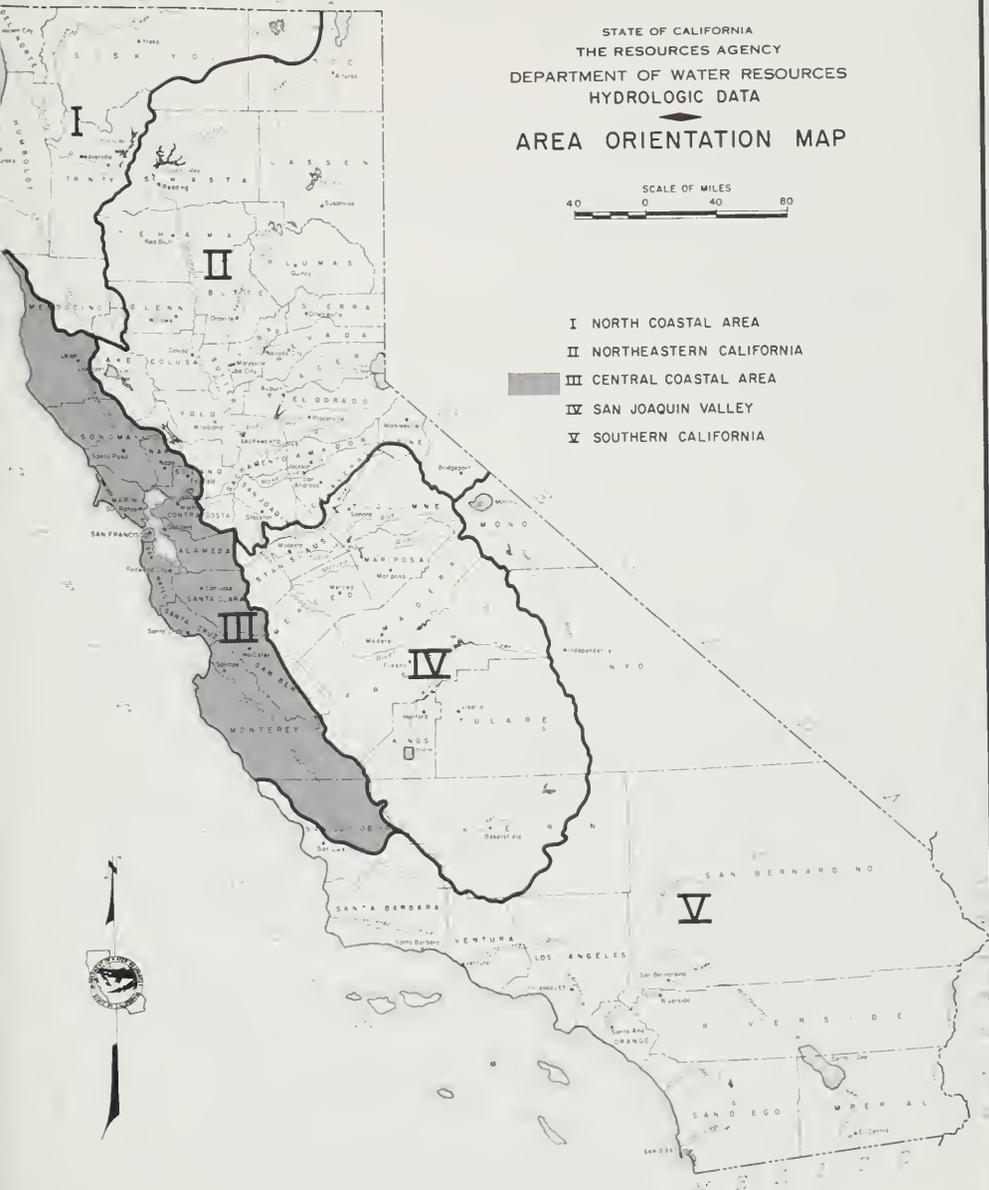
- Appendix A - CLIMATE
- Appendix B - SURFACE WATER FLOW
- Appendix C - GROUND WATER MEASUREMENTS
- Appendix D - SURFACE WATER QUALITY
- Appendix E - GROUND WATER QUALITY

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
HYDROLOGIC DATA

AREA ORIENTATION MAP



- I NORTH COASTAL AREA
- II NORTHEASTERN CALIFORNIA
- III CENTRAL COASTAL AREA
- IV SAN JOAQUIN VALLEY
- V SOUTHERN CALIFORNIA



METRIC CONVERSION TABLE

ENGLISH UNIT	EQUIVALENT METRIC UNIT
Inch (in)	2.54 Centimeters
Foot (ft)	0.3048 Meter
Mile (mi)	1.609 Kilometers
Acre	0.405 Hectare
Square mile (sq. mi.)	2.590 Square kilometer
U. S. gallon (gal)	3.785 Liters
Acre foot (acre-ft)	1,233.5 Cubic meters
U. S. gallon per minute (gpm)	0.0631 Liters per second
Cubic feet per second (cfs)	1.7 Cubic meters per minute

TABLE OF CONTENTS

	<u>Page</u>
ORGANIZATION OF BULLETIN NO. 130 SERIES	iv
AREA ORIENTATION MAP	v
METRIC CONVERSION TABLE	vi
ORGANIZATION	xi
DATA COLLECTION ACTIVITIES	1
Climate	1
Surface Water Flow	2
Ground Water Measurements	2
Surface Water Quality	5
Ground Water Quality	5

APPENDIXES

Appendix
Number

A.	CLIMATE	7
	Acknowledgments	9
	Introduction	10
	Drainage Basin Designation	11
	Alpha Order Number and Subnumber	11
	Climatological Station Index	12
	Interim Monthly Precipitation	13
	Seasonal Precipitation	13
	Interim Monthly Temperature	13
	Monthly Temperature	13
	Interim Monthly Evaporation	13
	Monthly Evaporation	13
B.	SURFACE WATER FLOW	39
	Acknowledgments	41
	Introduction	42
	Maximum and Minimum Tides	42
	Daily Mean Discharge	43
	Daily Mean Gage Height	44
	Imports	44
	Numbering System of Recording Stations	45

TABLE OF CONTENTS
APPENDIXES (Continued)

<u>Appendix Number</u>		<u>Page</u>
C.	GROUND WATER MEASUREMENTS	53
	Acknowledgments	55
	Introduction	56
	Description of Selected Wells	56
	State Well Number	56
	Agency Well Number	57
	Agency Supplying Data	57
	Well Use	60
	Well Depth	60
	Data Available	60
	Record Begins and Ends	61
	Ground Water Levels at Wells	61
	Ground Surface Elevation	61
	Date	61
	Ground Surface to Water Surface in Feet	62
	Water Surface Elevation in Feet	62
	Agency Supplying Data	62
D.	SURFACE WATER QUALITY	95
	Acknowledgments	97
	Introduction	98
	Laboratory Methods and Procedures	98
	Sampling Station Data and Index	98
	Analyses of Surface Water	99
	Summary of Coliform Analyses	99
	Spectrographic Analyses of Surface Water	99
	Radioassays of Surface Water	100
	Salinity Observations at Bay and Delta Stations	100
	Electrical Conductance	101
E.	GROUND WATER QUALITY	177
	Acknowledgments	179
	Introduction	180
	Analyses of Ground Water	180
	Radioassay of Ground Water	181

TABLE OF CONTENTS

TABLES

<u>Table Number</u>		<u>Page</u>
DATA COLLECTION ACTIVITIES		
1	Summary of Ground Water Data Collected in the Central Coastal Area, July 1, 1963 - June 30, 1964	4
APPENDIX A - CLIMATE		
A-1	Climatological Station Index	14
A-2	Interim Monthly Precipitation, 1963	17
A-3	Seasonal Precipitation, 1963-64	19
A-4	Interim Monthly Temperature, 1963	23
A-5	Monthly Temperatures, 1963-64	26
A-6	Interim Monthly Evaporation, 1963	35
A-7	Monthly Evaporation, 1963-64	37
APPENDIX B - SURFACE WATER FLOW		
B-1	Daily Maximum and Minimum Tides	47
B-2	Daily Mean Discharge	49
B-3	Daily Mean Gage Height	51
B-4	Surface Water Imports to the Central Coastal Area	52
APPENDIX C - GROUND WATER MEASUREMENTS		
C-1	Ground Water Level Conditions in the Central Coastal Area, Spring, 1964	63
C-2	Description of Selected Wells	
	North Coastal Region	64
	San Francisco Bay Region	65
	Central Coastal Region	67
C-3	Ground Water Levels at Wells	
	North Coastal Region	70
	San Francisco Bay Region	74
	Central Coastal Region	83
APPENDIX D - SURFACE WATER QUALITY		
D-1	Sampling Station Data and Index	102
D-2	Analyses of Surface Water	
	North Coastal Region (No. 1)	104
	San Francisco Bay Region (No. 2)	112
	Central Coastal Region (No. 3)	131
	South Bay Aqueduct	163
D-3	Summary of Coliform Analyses	165
D-4	Spectrographic Analyses of Surface Water	166

TABLE OF CONTENTS

TABLES

<u>Table Number</u>		<u>Page</u>
	APPENDIX D - SURFACE WATER QUALITY (Continued)	
D-5	Radioassays of Surface Water	167
D-6	Description of Salinity Observation Stations and Maximum Observed Salinity at Bay and Delta Stations	171
D-7	Salinity Observations at Bay and Delta Stations	172
	APPENDIX E - GROUND WATER QUALITY	
E-1	Analyses of Ground Water	
	North Coastal Region (No. 1)	182
	San Francisco Bay Region (No. 2)	185
	Central Coastal Region (No. 3)	209
E-3	Radioassays of Ground Water	219

FIGURES

<u>Figure Number</u>		
	APPENDIX C	
C-1	Fluctuation of Water Levels in Wells	
	North Coastal Region	87
	San Francisco Bay Region	88
	Central Coastal Region	91
	APPENDIX D	
D-1	Electrical Conductance - Daily Mean	
	Alameda Creek near Niles (Station 73)	182
D-2	Electrical Conductance - Daily Readings at 1300 Hours	
	Bethany Forebay at South Bay Pumping Plant (Station 207)	183

PLATES

(Plates are bound at end of report)

<u>Plate No.</u>	
1	Climatological Stations in the Central Coastal Area, 1964
2	Surface Water Measurement Stations in the Central Coastal Area, 1964
3	Ground Water Basins or Units in the Central Coastal Area, 1964
4	Surface Water Quality Stations in the Central Coastal Area, 1964
5	Status of Sea-Water Intrusion, Santa Clara Valley, East Bay Area, 1964

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

EDMUND G. BROWN, Governor
HUGO D. FISHER, Administrator, The Resources Agency
WILLIAM E. WARNE, Director, Department of Water Resources
ALFRED R. GOLZE', Chief Engineer
JOHN R. TEERINK, Assistant Chief Engineer, Area Management

- - - - 0 - - - -

SAN FRANCISCO BAY DISTRICT

Charles A. McCullough District Director
Vernon Bengal Chief, Water Supply and Quality Section

Activities covered by this report were under the supervision

of

Glenn R. Peterson Supervisor, Water Supply Unit

Assisted by

John C. Etchells Water Resources Engineering Associate
John S. Bartok Water Resources Technician II
Larry K. Gage Assistant Civil Engineer
Kenneth R. Hamilton Assistant Civil Engineer
Dale L. Zeiders Assistant Civil Engineer
Lloyd J. Grant Junior Civil Engineer
Michael L. Helm Junior Civil Engineer

Reviewed and coordinated by
Statewide Planning Office
Data Coordination Branch



DATA COLLECTION ACTIVITIES

The Department of Water Resources, in cooperation with federal, state, and local agencies, as well as with the generous and public-spirited assistance of many individuals, has gradually developed a continuing program of basic hydrologic data collection. This continuity enables systematic and orderly handling, filing, and publication of the data for all uses both now and in the future.

The data collection activities involve the maintenance of a network of stations adequate to provide reliable, meaningful, representative, and needed information. The number of stations in the network is maintained at a minimum needed for general evaluation of water conditions and for a long term base for water management and planning purposes. Water samples or water measurements are taken at these stations, chemical analyses of the samples are made and the data are compiled, analyzed, summarized, and published. These data include information on climate, surface water flows and tidal stages, ground water levels, and chemical quality of surface and ground waters. The climate data include precipitation, air temperature, wind movement, and evaporation. Pacific Standard Time is used throughout the report.

CLIMATE

The reporting period for climatologic data was changed in this report from a fiscal year, July 1 through June 30, to a water year, October 1 through September 30, to make the period the same as for surface water flow and surface water quality data. Climatologic data for the period July 1, 1963, through September 30, 1963, are also included in this 1964 report.

The climatology station network shown on Plate 1, "Climatological Stations in the Central Coastal Area", includes stations established by the U. S. Weather Bureau and the Department of Water Resources. The Department supplements the Weather Bureau network of 143 stations with a network of 75 selected stations which are operated by individual, private industry and governmental agencies. Data from these 218 stations are tabulated in Appendix A of this report.

SURFACE WATER FLOW

The four surface water stations shown on Plate 2 are operated by the Department of Water Resources. In addition, the Department cooperates with the United States Geological Survey in the operation of 58 of the 114 stations operated by that agency in the area covered by this report. Also, the United States Coast and Geodetic Survey operates two tide stations in the area. The United States Geological Survey publishes data from the 114 stations in its water supply papers. There are a number of surface water stations operated by local agencies for local purposes from which data are not routinely collected by the Department. Data from the four stations and from Rector Reservoir and information on surface water imports into the area are tabulated in Appendix B.

GROUND WATER MEASUREMENTS

The Department cooperates with the U. S. Geological Survey and many local agencies for the systematic observation of ground water levels. The Department collects water level measurement data from approximately 1,700 wells in the Central Coastal Area. Data from 204 wells are presented in Appendix C of this report. These 204 wells were selected as representative of wells in the respective ground water basins or units. The wells were

selected on the basis of a number of factors such as geographical density of one or two wells per township; length of water level record; frequency of measurements; conformity with respect to water level fluctuations in the ground water basin or area, aquifer represented, and availability of a geologic log, mineral analyses, and production records.

The depth to water in most wells is usually a direct measurement made with a tape; however, in some wells, especially deep ones, measurements are made with an air line and gauge or an electric sounder. Field work was performed by local cooperators, the U. S. Geological Survey and Department personnel. The Department has full responsibility for reviewing, editing, processing and publishing ground water level data. An electric computer program has been developed to perform a part of the processing and tabulating.

Ground water basins or units in the Central Coastal area are shown on Plate 3. The number of wells measured in these areas and the measuring agency are shown in Table 1.

The data are summarized in Table C-1, "Ground Water Level Conditions in the Central Coastal Area", which presents average depths to ground waters, and average changes by basin and region from the spring of 1963 to the spring of 1964.

Water level fluctuations are depicted graphically on hydrographs of 22 wells distributed among significant basins of the area. These wells were selected insofar as possible as representative of their respective basins or units. The hydrographs are presented in Figure C-1 by region, basin, and well number.

TABLE 1
SUMMARY OF GROUND WATER DATA
COLLECTED IN THE CENTRAL COASTAL AREA
July 1, 1963 - June 30, 1964

Ground Water Basin or Unit	Basin Number	Measuring or Sampling Agency	Number of Wells	
			Measured	Sampled
<u>REGION 1</u>				
Potter Valley	1-14.00	U. S. Geological Survey	2	
Ukiah Valley	1-15.00	U. S. Geological Survey Mendocino County	2	11
Sanel Valley	1-16.00	U. S. Geological Survey Mendocino County	3	6
Alexander Valley	1-17.00	U. S. Geological Survey Department of Water Resources	6	6
Santa Rosa Valley	1-18.00			
Santa Rosa Area	1-18.01	U. S. Geological Survey Department of Water Resources	3	
Healdsburg Area	1-18.02	U. S. Geological Survey Department of Water Resources	12	22
			4	
Lower Russian River Valley	1-98.00	U. S. Geological Survey	3	1
<u>REGION 2</u>				
Petaluma Valley	2-1.00	U. S. Geological Survey Sonoma County F. C. & W. C. D. Department of Water Resources	3	15
			3	4
Napa-Sonoma Valley	2-2.00			
Napa Valley	2-2.01	U. S. Geological Survey Napa County Department of Water Resources	4	123
Sonoma Valley	2-2.02	U. S. Geological Survey Sonoma County F. C. & W. C. D. Department of Water Resources	3	26
			2	10
Suisun-Fairfield Valley	2-3.00	U. S. Geological Survey Solano County Department of Water Resources	2	
			73	
			4	11
Pittsburg Plain	2-4.00	Department of Water Resources		3
Clayton Valley	2-5.00	Department of Water Resources		8
Ygnacio Valley	2-6.00	Department of Water Resources	5	7
Santa Clara Valley	2-9.00			
East Bay Area	2-9.01	Alameda County Water District Alameda County F. C. & W. C. D. Department of Water Resources	77	73
			59	24
			3	
South Bay Area	2-9.02	U. S. Geological Survey Santa Clara Valley W. C. D.	3	
			259	22
Livermore Valley	2-10.00	Alameda County F. C. & W. C. D.	177	37
Half Moon Bay Terrace	2-22.00	Department of Water Resources	8	
San Gregorio Valley	2-24.00	Department of Water Resources	5	
Pescadero Valley	2-26.00	Department of Water Resources	7	
<u>REGION 3</u>				
West Santa Cruz Terrace	3-26.00	Santa Cruz County	7	
Soquel Valley	3-1.00	Santa Cruz County Department of Water Resources	5	
			4	
Pajaro Valley	3-2.00	Monterey County F. C. & W. C. D. Santa Cruz County City of Watsonville Department of Water Resources	19	15
			56	
			6	
			14	17
Gilroy-Hollister Valley	3-3.00			
South Santa Clara County	3-3.01	South Santa Clara County W. C. D. Santa Clara Valley W. C. D. Department of Water Resources City of Gilroy	25	
			16	
			20	13
			5	
San Benito County	3-3.02	Pacheco Pass Water District and San Benito County Department of Water Resources	90	
			5	14
Salinas Valley	3-4.00	Monterey County F. C. & W. C. D. San Luis Obispo County	437	70
			51	31
Carmel Valley	3-7.00	Monterey County F. C. & W. C. D.	37	9

SURFACE WATER QUALITY

Surface water was sampled and analyzed both by the Department of Water Resources and by the U. S. Geological Survey in cooperation with the Department. The data from these sampling activities are shown in Appendix D of this report. The appendix includes data from a network of basic monitoring stations, operational stations on the South Bay Aqueduct and investigational stations. It includes all of the surface water quality data collected by this Department in the Central Coastal Area, except data from investigational stations in the San Francisco Bay system below Antioch. These data are specialized in nature and not included in this report. The stations for which data are reported in Appendix D are shown on Plate 4.

GROUND WATER QUALITY

During the year from July 1, 1963, through June 30, 1964, ground water samples were collected from 455 wells in the Central Coastal Area. These wells or stations were selected by the Department in the areas shown on Plate 3. Table 1 indicates the number of wells sampled in each basin and the sampling agency. The data from these stations are tabulated in Appendix E of this report.

Plate 5 depicts the status of sea water intrusion in the East Bay area of Santa Clara Valley. The 1964 line showing 350 parts per million chloride concentration is based on the spring 1964 analyses of samples from monitored wells shown on this plate. The 1962 line is based on the spring 1962 analyses for essentially the same station network.

Ground water is sampled and analyzed to provide information on the quality characteristics, to identify problem areas, to determine the quality

trends, and if possible, to identify the factors that control or affect the quality. Analyses made of ground water include mineral and radiological determinations. The frequency of sampling, types of analyses and density of the station network depend largely on conditions in the area being monitored.

APPENDIX A

CLIMATE

ACKNOWLEDGMENTS

The Department of Water Resources gratefully acknowledges the assistance and contributions of the many public agencies, private organizations, and individuals whose cooperation greatly facilitated the preparation of this appendix. Special mention is made of the following agencies:

Federal

United States Weather Bureau

United States Army Corps of Engineers

State

California Division of Highways

Local

Campbell Water Company

Livermore, City of

Marin County Engineer

Marin Municipal Water District

Napa, City of

Santa Clara County Flood Control and Water District

Santa Clara Valley Water Conservation District

Vallejo, City of

INTRODUCTION

This appendix contains station index, interim monthly precipitation, seasonal precipitation, interim monthly temperatures, monthly temperatures, interim monthly evaporation, and monthly evaporation tables. The tables of interim values present data for the months of July, August, and September 1963 and were necessitated by the change in report period from fiscal year (July through June) to water year (October through September). The data compiled are provided by governmental agencies, private industry and individuals.

Symbols and abbreviations used in this appendix are:

B	Adjusted to a full month.
C	Data from recorder stations.
D	Data unavailable for this report.
E	Evaporation.
e	Wholly or partially estimated.
M	All or part of record missing. When used in place of an average monthly temperature value, more than ten days of record are missing.
NR	No record.
P	Precipitation.
RB	Beginning of record.
RE	End of record.
SS	Observation at sunset.
T	Temperature.
T	Trace, an amount too small to measure.
V	Includes total for previous month.
Var	Observation time varied.

The numbering system used by the Department was developed to facilitate station identification by data processing machines. Station numbers are composed from three components - the drainage basin number, the alpha order number and the subnumber.

Drainage Basin Designation

The State was divided into major hydrographic areas, and each of these areas was assigned an alphabetical letter which is the first digit of the drainage basin number. The second digit was obtained by dividing the major hydrographic areas into stream basins of primary importance and assigning a number of 0-9 with 0 generally being the valley floor.

The major hydrographic areas and the sub-areas which are reported in this volume are as follows:

Hydrographic Area D

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

Hydrographic Area E

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

Hydrographic Area F

F8 - Mendocino Coast
F9 - Russian River

Alpha Order Number and Subnumber

The four-digit alpha order numbers are assigned each station to denote its order in alphabetical sequence, mainly for machine processing. As the collection of data progressed, it was found necessary to add a subnumber of two digits to the four-digit alpha number to maintain the alphabetical order of all station names.

Climatological Station Index

Table A-1 includes the station name, number, and the county in which each station is located. It also includes the observer's name, station location, and elevation of the station. The time of observation, beginning of record, and cooperator number complete the information on this table. The cooperator number indicates the source of the data. The cooperator numbers assigned are as follows:

- 000 Private Cooperator
- 403 Sonoma County Flood Control and Water Conservation District
- 407 San Benito County
- 411 Marin County
- 413 Marin Municipal Water District
- 414 Santa Clara Valley Water Conservation District
- 418 Vallejo Water Department
- 426 Santa Clara County Flood Control and Water District
- 801 Pomology Department, U. C., Davis
- 804 State Department of Beaches and Parks
- 806 State Department of Water Resources
- 808 State Division of Forestry
- 809 State Division of Highways
- 900 U. S. Weather Bureau
- 901 Corps of Engineers, San Francisco District
- 902 U. S. Air Force
- 907 State Climatologist (unpublished USWB)
- 909 U. S. Soil Conservation Service

Interim Monthly Precipitation

Table A-2 presents total monthly precipitation in inches for the months of July, August, and September 1963.

Seasonal Precipitation

Table A-3 presents total monthly and seasonal precipitation in inches for the year from October 1, 1963 through September 30, 1964.

Interim Monthly Temperatures

Table A-4 for the period July through September 1963 includes the maximum and minimum temperatures, the average of the daily maximum temperatures, the average of the daily minimum temperatures and the average of the daily maximum and minimum temperatures recorded during the month. The temperatures are recorded in degrees Fahrenheit.

Monthly Temperatures

Table A-5 presents the same type of temperature data as in Table A-4 but for the period October 1, 1963 through September 30, 1964.

Interim Monthly Evaporation

Table A-6 presents total evaporation during each month in inches, total wind movement during the month in miles, the monthly average of daily maximum water temperatures and the monthly average of daily minimum water temperatures for the period July through September 1963.

Monthly Evaporation

Table A-7 presents the same type of data as in Table A-6 but for the period October 1, 1963 through September 30, 1964.

TABLE A-1
CLIMATOLOGICAL STATION INDEX

STATION NAME	STA NUMBER	COUNTY	OBSERVER	LATITUDE		LONGITUDE		ELEV IN FEET	TOWNSHIP RANGE	SECTION	40 ACRES TRACT	TIME OF OBSERVATION			RECORD BEGAN	COOP. NO
				° ' "	° ' "	° ' "	° ' "					P	T	E		
Alamitos Perc. Pond	E6 0053	Santa Clara	SCWCD	37 15 18	145 52 18	200	88 1E 9 Q					9A	9A	9A	1959	426
Alamo IN	E4 0064	Contra Costa	Cuzuello	37 52	122 01	410	15 2M 1 Q					7A	7A	7A	1957	900
Almaden Reservoir	E6 0125	Santa Clara	SCWCD	37 10 00	121 50 00	640	95 1E 11 E					8A	8A	8A	1936	426
Alpine Dam	F9 0135	Marin	Ward	37 56 30	122 38 18	680	18 7W 4					8P	8P	8P	1925	613
Angwin Pec. Union Col.	E3 0212	Napa	Pacific Union Col	38 34 10	122 26 12	1815	88 5W 5 Q					8P	8P	8P	1939	900
Arroyo Seco	02 0322	Monterey	J. Billings	36 14	121 29	800	19S 4E 36					C			1931	900
Atascadero HMS	D3 0360-01	San Luis Obispo	R. Ellis	35 27 30	120 38 24	940	28S 12E 26					8A	8A	8A	1948	809
Atlas Road	E3 0372	Napa	G. Dutra	38 25	122 15	1735	7N 4W 25 C					C			1940	900
San Lombod	D0 0674	Santa Cruz	N. Shaw	37 05	122 06	500	10S 2W 9 Q					5P	5P	5P	1937	900
Berkeley	E4 0693	Alameda	U. of Calif.	37 52	122 15	299	15 3W					C	8P	8P	1887	900
Berryessa 1 E (Toyon Ave.)	E6 0706	Santa Clara	N. Mitchell	37 23	121 50	205	6S 1E 23 P					5P			1921	901
Big Sur State Park	D4 0790	Monterey	Park Ser.	36 15	121 47	240	19S 2E 30					8A			1914	900
Black Mountain 2 SW	E6 0850	Santa Clara	N. Insardi	38 18	122 10	2330	7S 3W 36					8A			1943	900
Blakes Landing	F9 0876	Marin	N. Angress	38 11 42	125 55 00	40	1N 10W 13					8A			1956	000
Bon Tempe Dam	F9 0969	Marin	WWD	37 57 22	122 36 36	723	18 7W 11 M					8A			1958	413
Bonville HMS	F8 0973	Mendocino	Div. of Highways	39 01	123 22	342	13N 14W 2					8A			1936	900
Bonville-Farrier	F8 0973-02	Mendocino	J. Farrier	39 00 45	123 22 10	395	13N 14W 2					9A			1951	901
Bouchers Gap	D4 0998-27	Monterey	B. Alexander	36 21	121 51	2050	18S 1E 24 F					8A			1960	000
Bradley	D3 1034	Monterey	Div. of Forestry	35 52	120 48	540	24S 11E 8					8A			1946	900
Buena Vista	01 1170	San Benito	A. Churchill	36 46	122 11	1640	13S 7E 27 R					C			1932	900
Burlingame	E7 1206	San Mateo	Burlingame	37 35	122 21	10	4S 5W					4P	4P	4P	1946	900
Burton Ranch	E4 1216	Contra Costa	R. Skirton	37 52	122 05	530	18 2W 9 M					8A			1955	900
Buzzard Lagoon	01 1247	Santa Cruz	O. Mohrson	37 02	121 50	1275	10S 1E 26 M					6P			1959	000
Calaveras Reservoir	E5 1281	Alameda	O. McCarthy	37 29 12	121 49 46	805	5S 1E 24 W					7A			1874	900
Calero Reservoir	E6 1285	Santa Clara	SCWCD	37 10 48	121 45 08	500	9S 2E 4 E					8A			1958	414
Calistoga	E3 1312	Napa	J. Schou	38 35	122 35	365	9N 7W 36					7A			1873	900
Cambria Park	E6 1341-10	Santa Clara	SCWCD	37 15 12	121 55 24	225	8S 14 12 8					7A			1962	414
Campbell Water Co.	E6 1377-01	Santa Clara	Campbell Water Co.	37 17	121 57	192	7S 1W 35 C					5P			1897	000
Carmel Valley	D4 1534	Monterey	A. Collins	36 29	121 44	425	17S 2E 5					5P	5P		1957	900
Casadero	F9 1602	Sonoma	H. Borotra	38 32	123 07	1040	8N 12W 13					7A			1939	900
Chittenden Pass	01 1739	San Benito	V. Haskin	36 54	121 36	125	12S 3E 12					8A			1945	900
Chittenden	01 1739-01	Santa Cruz	H. Chadwell	36 54 08	121 36 17	108	12S 3E 11 K					8A			1945	900
Cinegas	01 1766	San Benito	A. Smith	36 42 54	121 20 48	900	14S 6E 18 8					8A			1950	407
Cloverdale 3 SSE	F9 1838	Sonoma	J. Byrd	38 46	122 59	320	11N 10W 29					8A	8A		1950	900
Cloverdale 11 W	F9 1840	Sonoma	F. Ornbau	38 46	123 13	1820	11N 12W 17					C			1939	900
Concord 3 E	E4 1962	Contra Costa	N. Lee	37 58	121 59	200	1N 1W					8A			1954	900
Convent	E3 1976	Santa Cruz	City of Napa	38 28 50	122 22 30	225	7N 5W 1 N					8A			0	000
Covato Dam-Lake Mendocino	F9 2105	Mendocino	C.O.E.	39 11	123 11	784	16N 12W 34					8A	8A	8A	1960	901
Covato Reservoir	F9 2109	Santa Clara	SCWCD	37 05 06	122 32 24	800	10S 4E 9 Q					8A	9A	9A	1938	900
Crest Ranch	00 2159	Contra Costa	H. Nielson	37 05 06	122 08 00	2640	10S 3W 1 R					8A			1948	000
Crockett	E4 2177	Santa Cruz	C & N Sugar	38 02	122 13	12	3W 3W 12					8A	8A		1918	900
Davenport	00 2290	Santa Cruz	F. Tucke	37 01	122 12	273	10S 3W 32 Q					8A	8A		1910	900
Del Monte	02 2362	Monterey	USN School	36 36	121 52	46	15S 1E					C			1911	900
Duttons Landing	E3 2580	Napa	D. Steele	38 12	122 18	20	4N 4W 10					8A	8A	8A	1955	900
Evergreen-Silver Ck. Rd.	E6 2919	Santa Clara	R. Long	37 19	122 02	340	7S 2E 20					8A			0	000
Fairfield	E3 2933	Solano	Co. Surveyor	38 15	122 03	15	5N 2W 25 C					C			1940	900
Fairfield Police Station	E3 2934	Solano	Police Dept.	38 15	122 03	19	5N 2W 26					4P	4P		1951	900
Fort Bragg	F8 3161	Mendocino	Cal. Hest. Bd	39 27	123 48	80	8N 17W 7					8A	8A		1955	900
Fort Bragg Aviation	F8 3164	Mendocino	W.B. Oberster	39 24	123 49	61	8N 18W 25					11P	11P		1940	900
Fort Ross	F8 3191	Sonoma	C. Call	38 21	123 15	116	8N 12W 30 0					6P	6P		1874	900
Freedom 8 NNW	01 3232	Santa Cruz	Westminster	37 03	121 49	1495	10S 1E 24					C			1952	900
Fremont Peak State Park	01 3238	San Benito	L. Seavenu	36 46 18	121 28 54	2500	13S 4E 35					8A	8A		1950	901
Gerber Ranch	E5 3387	Santa Clara	P. Gerber	37 22 00	121 29 12	2140	6S 4E 36 P					8A			1912	900
Gilroy	01 3417	Santa Clara	F. Pier Dist.	37 00	121 34	194	11S 4E 6					9A	9A		1957	900
Gilroy 8 NE	01 3419	Santa Clara	W. Kueh	37 02	121 26	1050	10S 5E 28					C			1942	900
Gilroy 14 ENE	01 3422	Santa Clara	S. Acker	37 06	121 20	1350	10S 6E 5					8A			1940	900
Gonzales 9 ENE	02 3502	San Benito	A. Roque	36 33	121 18	2350	16S 6E 15					C			1943	900
Graeton	F9 3577	Sonoma	L. Halbergs	38 25 54	122 51 48	200	7N 9W 21					7A	7A		1928	000
Graton 1 W	F9 3578	Sonoma	N. Parrnell	38 26	122 53	210	7N 9W 22					6P	6P		1896	900
Green Valley	E3 3612-01	Solano	E. Marshall	38 17	122 10	414	5N 3W 31					8A			1893	414
Guadalupe Reservoir	E6 3681	Santa Clara	SCWCD	37 12	121 53	450	8S 1E 29 Q					8A			1936	414
Guerneville	F9 3683	Sonoma	J. Buttner	38 30	123 00	115	8N 10W 25					8A			1939	900
Half Moon Bay 2 NNW	E8 3714	San Mateo	Dept. of Agr.	37 29	122 27	60	5S 1W 19					7A	7A		1939	900
Hames Valley	F3 3722	Monterey	Mrs. H. Frudden	35 52 45	120 54 27	720	23S 10E 29					5P			1945	919
Hayward 6 ESE	E4 3863	Alameda	N. Drennan	37 39	121 58	925	3S 1W 18					C			1940	900
Healdsburg	F9 3873	Sonoma	Fire Dept.	38 37	122 50	101	9N 9W 19					6P	6P		1877	900
Healdsburg 2 E	F9 3878	Sonoma	W. Iverson	38 37	122 50	102	9N 9W 19					8A			1943	900
Herrnand 7 SE	D1 3928	San Benito	C. Akers	36 18	120 42	2765	19S 12E 6 C					C			1940	900
Hollister	01 4022	San Benito	Nollister	36 51	121 24	285	12S 5E					5P	5P		1874	900
Hollister Costa	01 4022-10	San Benito	DMR - LAMU	36 55 15	121 26 46	170	11S 5E 32					Var	Var		1962	806
Hollister No. 2	01 4025	San Benito	Hollister	36 51	121 24	284	12S 5E					C			1938	900
Hollister 10 ENE	01 4035	San Benito	E. Hubbell	36 55	121 14	3000	12S 7E 5					C			0	000
Hopland Largo Station	F9 4100	Mendocino	C. Crawford	39 01	123 07	550	3N 12W					8A			1948	900
Inverness-Mery	F9 4277	Marin	M. Mery	38 58 24	122 51 06	150	3N 9W					12A	5P		1951	900
Kellogg	F9 4480	Monterey	R. Rubinow	38 40	122 40	1800	9N 7W 9					8A			1936	900

TABLE A-1
CLIMATOLOGICAL STATION INDEX

STATION NAME	STA NUMBER	COUNTY	OBSERVER	LATITUDE		LONGITUDE		ELEV IN FEET	TOWNSHIP RANGE	SECTION	40 ACRES TRACT	TIME OF OBSERVATION			RECORD BEGAN	COOP NO
				° ' "	° ' "	P	T					Z				
Kentfield	E2 4500	Marin	H. Muller	37 57	122 33	30	90	1N 6W 8				9A 9A	1888	900		
Hent Lake	F9 4502	Marin		37 59 56	122 42 30		360	28N 8W 8				H	1894	413		
King City	E2 4555	Monterey	Div. of Forestry	36 12	121 08	320	205	8W 18				8E 5P	1887	900		
Lafayette 2 NNE	F4 4633	Contra Costa	R. Sanborn	37 55	122 06		540	1N 2W				C	1956	900		
Lagunitas Lake	F9 4652	Marin	MSD	37 56 48	122 35 42		785	1N 7W				C	1881	413		
La Honda	E8 4660	San Mateo	J. Allen	37 19	122 16		670	7S 4W 14				6P	1950	900		
Lake Curry	E3 4677	Solano	K. Lynch	38 21 18	122 07 18		396	6N 2W 19				8A	1926	418		
Leroy Anderson Dam	E6 4916	Santa Clara	SCVCD	37 09 48	121 37 48		700	9S 31 10 K				8A	1950	414		
Lexington Reserv. v. r	E6 4922	Santa Clara	SCVCD	37 10 35	121 59 18		700	9S 14 5 J				8A 8A 8A	1951	414		
Linn Ranch	E3 4963	San Luis Obispo	O. Linn	35 41 06	120 43 24	870	26S 12 7 F					5P 5P	1925	000		
Livermore Sewage Plant	E5 4996	Alameda	Livermore	37 41 28	121 48 20		405	3S 1E 12 A				7A 7A 7A	1961	000		
Livermore 2 SSW	E5 4997	Alameda	M. Quarterman	37 39	121 47		565	3S 2E 20				7A 7A	1871	900		
Lockwood 2 N	E3 5017	Monterey	A. Wefeling	35 58	121 05		1104	22S 8C 34				8A	1940	900		
Los Catos	E6 5123	Santa Clara	Los Catos	37 14	121 57		428	8S 1W 21 P				5P 5P	1885	900		
Los Catos-Old Orchard Rd.	E6 5123-04	Santa Clara	R. Roll	37 14	121 55		285	8S 1W 23				7A	1963	414		
Los Catos 4 SW	00 5125	Santa Clara	I. Miller	37 11	122 02		2215	9S 2W 1				9A	1957	900		
Lucia Willow Springs	E4 5184	Monterey	Div. of Highways	35 53	121 27		355	4S 5E 5				C	1847	900		
Mare Island	E3 5233	Solano	M. Cunningham	38 06 00	122 16 12		52	3N 3W				C	1867	900		
Martinez 3 S	E4 5371	Contra Costa	M. Plummer	37 58	122 08		225	2N 2W				8A	1941	900		
Martinez 3 SSE	E4 5372	Contra Costa	C. Weaver	37 58	122 06		280	2N 2W				8A	1956	900		
Martinez Fire Station	E4 5377	Contra Costa	Fire Dept.	38 01	122 08		26	2N 2W				9A 9A	1891	900		
Mill Valley	E2 5647	Marin	County Engr.	37 53 48	122 31 36		10	1N 6W 11				8A	1944	411		
Monterey	D4 5795	Monterey	R. Johnson	36 36	121 54		335	15S 1E				SS SS	1878	900		
Morgan Hill 2 E	E6 5844	Santa Clara	T. Downer	37 08	121 37		225	9S 3E				8A	1943	900		
Morgan Hill 6 WNW	E6 5846	Santa Clara	M. Rose	37 09	121 46		660	9S 1E				C	D	000		
Morgan Hill SCS	D1 5853	Santa Clara	Cons. Ser.	37 08	121 39		350	9S 3E 28				C	1945	900		
Morro Bay 3 N	D6 5869	San Luis Obispo	Std. Oil Co.	35 25	120 51	670	295	10E 12				C	1939	900		
Mt. Diablo North Gate	E4 5915	Contra Costa	Beh. & Parks	37 52	121 56		2100	1S 1W 12				7A 7A	1952	900		
Mt. Hamilton	E5 5933	Santa Clara	W.B. Observer	37 20	121 39		4206	7S 3E				11P 11P	1881	900		
Mount Madonna	D1 5973	Santa Cruz	J. Scheil	37 01	121 43		1800	10S 2E 35				C	1945	900		
Mt. Madonna Co. Park	D1 5973-11	Santa Clara	M. Foss	37 01	121 43		1880	11S 2E 1 8				8A	1937	909		
Mt. Tamalpais 2 SW	E2 5996	Marin	Beh. & Parks	37 54	122 36		1480	1N 7W				C	1959	900		
Muir Woods	E2 6027	Marin	Park Ser.	37 54	122 34		170	1N 6W				9A	1940	900		
Napa	E3 6085	Napa	E. Gilson	37 52	122 17		16	5N 4W 3				7A 7A	1905	900		
Napa-Haven	E3 6088	Napa	D. Haven	37 17 30	122 17 48		30	5N 4W 10				8A 8A	1931	000		
Napa State Hospital	E3 6074	Napa	J. Allemant	38 17	122 16		60	5N 4W 14 H				5P 5P	1877	900		
Novato 1 NW	F9 6105	Mendocino	Novato Co.	39 40	122 34		220	13N 15E 7				8P	1958	900		
Novato	E5 6144	Alameda	Leslie Salt	37 31	122 02		14	5S 2W				8A 8A 8A	1891	900		
Nicasio	F9 6187	Marin	MSD	38 04	122 42		240	3N 8W				M	413			
Novato 8 WNW	E2 6290	Marin	E. Thompson	38 08	122 43		350	4N 8W 24				C	1943	900		
Novato Fire House	E2 6290-02	Marin	E. Luders	38 06 30	122 33 42		18	3N 6W 7				D	1957	411		
Oakland WMAP	E4 6335	Alameda	WMAP	37 44	122 12		3	2S 3W				C	1939	900		
Oakville 1 WNW	E3 6351	Napa	A. Colkins	38 27	122 25		160	7N 5W 21				6P	1906	900		
Oakville 4 SW	E3 6356	Napa	R. Pleiner	38 23	122 28		1465	6N 5W 6				C	1940	900		
Oakville 4 SW No. 2	E3 6356	Napa	K. Muckfeldt	38 24	122 28		1685	6N 6W 1				C	1963	900		
Occidental	F9 6370	Sonoma	A. Blaney	38 25	122 59		1000	7N 10W 33				7A	1940	900		
Estimote Ohrwall Ranch	D1 6610	San Benito	J. Ohrwall	36 44	121 22		950	14S 5E 12				8A	1924	900		
Felo Alto City Hall	E7 6646	Santa Clara	Engr. Dept.	37 27	122 08		23	6S 3W 1				8A 8A	1953	900		
Paloma	D2 6650	Monterey	J. Bell	36 21	121 30		1835	18S 4E 23				5P	1940	900		
Parkfield	03 6703	Monterey	H. Durham	35 53	120 26		1482	3S 14E 35				7A	1938	900		
Parkfield 7 NNW	03 6706	Monterey	R. Morrison	36 00	120 28		3590	2S 14E				C	D	000		
Petaluma Rain Cage	E6 6791-43	Santa Clara	C. Dodson	37 24 00	121 49 54		260	6S 1E				7A	1962	414		
Petaluma F. S. No. 2	E2 6825	Sonoma	Fire Dept.	38 14	122 38		16	5N 7W 33				5P 5P	1871	900		
Petaluma-Burns	E2 6826-01	Sonoma	Burns	38 13 00	122 48		240	4N 8W 2				8A	1959	901		
Petaluma LN	E2 6829	Sonoma	V. Chaix	38 15	122 38		30	5N 7W				C	1943	900		
Phoenix Lake Dam	F9 6853	Marin	MSD	37 57 18	122 34 24	175						M	1937	413		
Pico Blanco S. S. Camp	D4 6856	Monterey	P. Harlan	36 20 18	121 47 42	900	8S 2E 30					8A	1944	900		
Pinnacles National Mon.	D2 6926	San Benito	Park Ser.	36 29	121 11		1310	7S 7E 2				4P 4P	1937	900		
Pleasanton Nursery	E5 6991-05	Alameda	J. P. Lopez	38 40	122 50		345	2S 1E 20				8A 430P	1940	900		
Point Arena	F8 7009	Mendocino	J. Houghtovan	38 55	123 42		122	12N 17E 12				8A 8A	1940	900		
Point Piedras Blancas	E5 7054	San Luis Obispo	Coast Guard	35 40	121 17		59	6S 6E 12				11P 11P	1938	900		
Port Chicago NAO	E4 7070	Contra Costa	Naval Mag.	38 01	122 01		50	2N 1E				8A 8A	1946	900		
Ravolta State Park	E8 7086	San Mateo	Park Ranger	37 14 42	122 12 42		422	8S 3W 8				8A	1953	901		
Potter Valley 3 NNW	F9 7107	Mendocino	W. Despain	39 22	123 08		1060	17N 11W 6				C	1953	900		
Potter Valley 3 SE	F9 7108	Mendocino	R. Near	39 18	123 04		1100	17N 11W 27				C	1952	900		
Potter Valley P. H.	F9 7109	Mendocino	P. C. & E.	39 22	123 08		1014	17N 11W 6				3P 3P	1911	900		
Priest Valley	D2 7150	Monterey	N. Palmer	36 11	120 42		2300	10S 12E 21				SS SS	1898	900		
Queen Sabe-Hay Camp	01 7190	Sao Benito	J. F. Berta	36 53 30	121 11 48		1630	12S 7E 27				7A 7A	1949	900		
Rancho Quisen Sabe	D1 7249	San Benito	R. Sonavilla	36 50 12	121 12 48		1800	13S 7E 4				D	0	000		
Redwood City	E7 7339	San Mateo	Fire Dept.	37 29	122 14		31	5S 3W				5P 5P	1899	900		
Richmond	E4 7414	Contra Costa	Richmond	37 56	122 21		55	1N 4W				8A 8A	1950	900		
Roseville Ranch	D4 7539-01	Monterey	N. Roosevelt	36 10 48	121 41 48		1100	0S 2E 24				8A 8A	1946	000		
Saint Helena	E3 7643	Napa	E. Peuleon	38 30	122 28		255	8N 5W 31 N				6P 6P	1907	900		
Saint Helena 4 WSW	E3 7646	Napa	E. Learned	38 30	122 32		1792	7N 6W 4				C	1939	900		
Saint Mary's College	E4 7661	Contra Costa	Fr. Benedict	37 50	122 06		625	1S 2W 17				5P 5P	1942	900		

TABLE A-1
CLIMATOLOGICAL STATION INDEX

STATION NAME	STA NUMBER	COUNTY	OBSERVER	LATITUDE	LONGITUDE	ELEV IN FEET	TOWNSHIP RANGE	SECTION 40 ACRES TO ACRE TRACT	TIME OF OBSERVATION			RECORD BEGAN	COOP. NO.
									P	T	E		
Salinas 2 E	D2 7668	Monterey	Fire Dept.	36 40	121 37	80	14S 3E 34		5P 5P			1958 900	
Salinas FAA Airport	D2 7669	Monterey	Fed. Av. Agency	36 40	121 36	80	14S 3E 8		5P 5P			1873 900	
Salinas Dam	D3 7672	San Luis Obispo	Dam Operator	35 20	120 30	1386	30S 14E 8		8A			1942 900	
San Anselmo	D2 7707-01	Marin	Marin Co. Engr.	37 38 36	122 33 42	100	2N 6W 7		5P			1957 411	
San Antonio Mission	03 7714	Monterey	San Antonio Man.	36 01	121 15	1060	22S 7E 18		5P 5P			1959 900	
San Ardo	D2 7716	Monterey	W. Rosenberg	36 00 48	120 54 06	440	22S 10E 16 X		8A			1894 900	
San Beolito	01 7719	San Benito	J. Shields	36 30 30	121 04 54	1355	16S 8E 27 B		C			1936 900	
San Clemente Dam	D4 7731	Monterey	W. & Tel. Co.	36 26 12	122 40 30	600	17S 2E 23		7A			1940 900	
San Felipe Highway Station	01 7755	Santa Clara	Div. of Highways	37 01	121 20	365	10S 6E		5P 5P			1943 900	
San Francisco Richmond Sunset	E8 7767	San Francisco	San Francisco	37 46	122 30	300	2S 6W		C 5P			1948 900	
San Francisco WAF	E7 7769	San Mateo	USWB	37 37	122 23	8	3S 5W		C C			1928 900	
San Francisco Fed. Office Bldg.	E7 7772	San Francisco	USWB	37 47	122 23	52	2S 6W		C ?			1931 900	
San Gregorio 3 SE	E8 7807	San Mateo	Pomponio Ranch	37 18	122 20	355	7S 4W 30		5P 5P			1954 900	
San Jose	E6 7821	Santa Clara	E. Billwiler	37 21	121 54	70	7E 1E		C C			1874 900	
San Jose Decid. P.F.S.	E6 7824	Santa Clara	A. Amstutz	37 19	121 57	90	7S 1W 15 3		C			1935 801	
San Juan Bautista Mission	D1 7835	San Benito	S. A. Farber	36 50 42	121 32 00	206	12S 4E		8A			1900 804	
San Lucas Guadici	D2 7845-10	Monterey	DWR - L&W	36 07 25	121 01 09	380	21S 9E 8 8		7A	Var		1962 806	
San Mateo	E7 7864	San Mateo	Fire Dept.	37 34	122 19	30	4S 4W 29		5P 5P			1874 900	
San Rafael	E2 7880	Marin	City Engr.	37 58	122 32	31	2N 6W		5P 5P			1948 900	
San Rafael Nat. Bank	E2 7880-08	Marin	Crocker Cit. Bank	37 58 24	122 31 30	25	2N 6W		8A			1876 413	
Santa Clara University	E5 7912	Santa Clara	Santa Clara Univ.	37 21	121 36	88	7S 1W		5P 5P			1881 900	
Santa Cruz	D0 7916	Santa Cruz	R. Burton	36 59	122 01	123	11S 1N		5P 5P			1866 900	
Santa Rita Huther	D2 7959-10	Monterey	DWR - L&W	36 45 00	121 41 24	80	14S 3E 12 H		8A	C Var		1962 806	
Santa Rosa Sewage Plant	F9 7964	Sonoma	M. McKinnie	38 26 24	122 45 12	20	7N 8W 21 P		8A 8A 8A			1956 000	
Santa Rosa	F9 7965	Sonoma	C. Newberry	38 27	122 42	167	7N 8W		7A 7A			1888 900	
Santa Rosa Pedrazini	F9 7965-03	Sonoma	DWR - L&W	38 21 38	122 44 31	90	6N 8W 16		7A	Var		1962 806	
Saratoga-Clarke	E6 7998-01	Santa Clara	J. Clarke	37 16 48	121 59 42	272	7S 1W 31		7A			1956 414	
Saratoga-Kriege	E6 7998-03	Santa Clara	D. Kriege	37 15	122 02	240	8S 2W 1		7A			1960 414	
Searsville Lake	E6 8058	San Mateo	A. Clapp	37 24	122 14	350	6S 3W 12		8A			1949 900	
Sebastopol 4 SSE	F9 8072	Sonoma	G. Naimos	38 21	122 49	150	6N 9W 6		C			1935 900	
Shoggs Spg. Las Lunas Ranch	F9 8272	Sonoma	L. Leitold	38 41	123 08	1830	10N 12W 36		8A			1933 900	
Slack Canyon	D2 8276	Monterey	Div. of Forestry	36 05	120 40	1730	21S 12E 22		C			1953 900	
Soledad CTF	D2 8338-01	Monterey	P. F. Boatadelli	36 28 26	121 22 34	230	17S 5E 12 8		9A 9A 9A			1961 000	
Soledad	D2 8338	Monterey	J. Francioni	36 26	121 19	204	17S 6E 8		8A			1874 900	
Sonoma	E2 8351	Sonoma	L. Mckey	38 17	122 27	20	5N 5W 7		5P 5P			1952 900	
Spreckels Nwy. Bridge	D2 8446	Monterey	S. Hennes	36 36	121 41	60	15S 3E		8A			1905 900	
Spreckels	D2 8446-01	Monterey	Spreckels Sugar	36 37	121 39	48	15S 3E		8A 8A			1905 000	
Spreckels Hill-Laguna Seca	E6 8447	Santa Clara	SCWPCD	37 12	121 44	384	9S 2E 8		8A			D 414	
Stevens Creek Reservoir	E6 8519	Santa Clara	SCWPCD	37 18	122 05	600	7S 2W 28 H		8A			1937 414	
Suey Ranch	D6 8627	San Luis Obispo	Suey Ranch	34 59 40	120 22 35	390	9N 33W		5P			1909 900	
Sunset Beach State Park	01 8680	Santa Cruz	Beh. & Parks	36 54	121 50	85	11S 1E		C			1956 900	
Telmege	P5 8776-01	Mendocino	L. G. Von Schilitz	39 08	123 11	413	15N 12W 10		8A			1953 000	
Tamalpais Valley	E2 8779	Marin	Glessner	37 52 42	122 32 36	250	1N 6W		8A			1959 901	
Tempton	D3 8849	San Luis Obispo	A. Willhoit	35 35 56	120 42 21	773	27S 12E 29		8A 8A			1886 000	
The Geysers	F9 8885	Sonoma	P. Devey	38 48	122 49	1600	11N 9W 23		5P 5P			1939 900	
Tiburon-Topham	E2 8920-21	Marin	H. Topham	37 52 24	122 27 12	400	1S 5W 4		9A			1960 000	
Travis Air Force Base	E3 9006	Solano	U.S.A.F.	38 16	121 56	30	5N 1W 24 E		9A			1943 902	
Ukiah	F9 9122	Mendocino	Fire Dept.	39 05	123 12	623	15N 12W 17		5P 5P			1877 900	
Ukiah 4 NSW	F9 9124	Mendocino	H. Dery	39 08	123 17	1900	13N 13W 27		8A			1951 900	
Upper Norco Creek	D6 9179	San Luis Obispo	E. Purser	35 27 18	120 45 12	1050	28S 11E 35 8		7A			1951 000	
Upper San Leandro Filters	D4 9185	Contra Costa	East Bay MUD	37 46	122 10	390	2S 3W 11 G		7A 7A			1844 900	
Upper Tresa Pinos	01 9189	San Benito	F. Francher	36 48	121 02	2050	15S 9E 7		C			1940 900	
Valleton	D3 9221	Monterey	A. Curtis	35 53	120 42	950	23S 12E 32		C			1940 900	
Vasona Reservoir	E6 9270	Santa Clara	SCWPCD	37 14 36	121 58 00	300	8S 1W 15		8A			1962 414	
Venado	F9 9273	Sonoma	J. Harper	38 37	123 01	1260	9N 10W 19		C			1939 900	
Veterans Home	E3 9305	Napa	B. Barboze	38 23	122 22	170	6N 5W 1		8A 8A			1912 000	
Walrus School	E4 9420	Contra Costa	M. Dennis	37 57	122 05	128	1N 2W		5P			1954 900	
Walnut Creek 2 ESE	E4 9423	Contra Costa	R. Whittemore	37 53	122 02	245	1N 2W 36		8A 8A			1887 900	
Walnut Creek 2 ENE	E4 9426	Contra Costa	T. Vanasek	37 54	122 01	220	1N 2W 30		C			1944 900	
Walnut Creek 4 E	E4 9427	Contra Costa	E. Irving	37 54	121 59	400	1N 1W		9A			1954 900	
Watsonville Water Works	D1 9473	Santa Cruz	L. Rechis	36 56	121 46	95	11S 2E 32		8A			1880 900	
Wilder Ranch	D0 9675	Santa Cruz	D. R. Wilder	36 57 36	122 05 24	50	11S 2W 22		5P			1924 000	
Wild Boree Valley	E3 9675-41	Solano	G. Stiltz	38 17 53	122 11 13	1240	5N 3W 10 D		8A 2P			D 418	
Woodacre	F9 9770	Marin	Div. of Forestry	38 00 24	122 38 30	430	2N 7W		2P 2P			1950 808	
Wrighte	E6 9814	Santa Clara	M. Were	37 08	121 37	1600	9S 1W 23		5P			1918 900	
Yorkville	F8 9851	Mendocino	L. Hulbert	38 55	123 16	1100	12N 13W 2		C			1939 900	
Yountville Gemble	E3 9861	Napa	DWR - L&W	38 26 05	122 22 45	120	7N 5W 24 P		Var	Var		1962 806	

TABLE A-2

INTERIM MONTHLY PRECIPITATION 1963
IN INCHES

STATION NUMBER	STATION NAME	JULY	AUG.	SEPT.	STATION NUMBER	STATION NAME	JULY	AUG.	SEP.
E6 0053	Alamitos Perc. Pond	0	T	.16	E2 4500	Kentfield	0	T	.13
E4 0064	Alamo 1 N	0	T	.27	F9 4502	Kent Lake	0	0	.08
E6 0125	Almaden Reservoir	0	0	.17E	D2 4555	King City	0	0	.23
F9 0135	Alpine Dam	0	0	.07	E4 4633	Lafayette 2 NNE	0	0	.37
E3 0212	Angwin Pacific Union College	0	0	T	F9 4652	Lagunitas Lake	0	0	M
D2 0322	Arroyo Seco	0	0	.20	E8 4660	La Honda	0	.03	.40
D3 0360-01	Atascadero HMS	0	.02	.19	E3 4677	Lake Curry	0	0	.38
E3 0372	Atlas Road	0	0	.17	E6 4916	Leroy Anderson Dam	0	0	.14
DO 0674	Ben Lomond	0	0	.24	E6 4922	Lexington Reservoir	0	T	.35
E4 0693	Berkeley	0	.06	.10	D3 4963	Linn Ranch	0	0	.20
E6 0706	Berrysessa 1 E (Toyon Ave.)	0	0	.10	E5 4996	Livermore Sewage Plant	0	.05	.36
D4 0790	Big Sur State Park	0	T	.03	E5 4997	Livermore 2 SSW	0	T	.33
E6 0850	Black Mountain 2 SW	0	.01	.18	D2 5017	Lockwood 2 N	0	0	.23
F9 0876	Blakes Landing	0	0	0	E6 5123	Los Gatos	0	0	.46
F9 0969	Bon Tempe Dum	0	0	0	E6 5123-04	Los Gatos-Old Orchard Road	0	.01	.21
F8 0973	Boonville HMS	0	0	.01	DO 5125	Los Gatos 4 SW	0	0	.17
F8 0973-02	Boonville Farrer	0	0	T	D4 5184	Lucia Willow Springs	0	0	.08
DK 0998-27	Bouchers Gap	0	0	.07	E3 5233	Mare Island	0	.05	.38
D3 1034	Bradley	0	0	.09	E4 5371	Martinez 3 S	0	0	.25
D1 1170	Buena Vista	0	0	.29E	E4 5372	Martinez 3 SSE	0	0	.52
E7 1206	Burlingame	0	0	.15	E4 5377	Martinez Fire Station	0	T	.25
E4 1216	Burton Ranch	0	.01	.21	D2 5647	Hill Valley	0	0	.06
D1 1247	Buzzard Lagoon	0	0	.32	D4 5795	Monterey	M	M	M
E5 1281	Calaveras Reservoir	0	0	.06	E6 5844	Morgan Hill 2 E	0	T	.17
E6 1285	Calavera Reservoir	0	0	.15	E6 5846	Morgan Hill 6 WNW	0	0	.22
E3 1312	Calistoga	0	0	T	D1 5853	Morgan Hill SCS	0	0	.13
E6 1341-10	Cambrian Park	0	.01	.21	D6 5869	Morro Bay 3 N	0	T	.14
E6 1377-01	Campbell Water Co.	0	0	.34	E4 5915	Mt. Diablo North Gate	0	0	.20
D4 1534	Carmel Valley	0	.02	.17	E5 5933	Mt. Hamilton	0	.15	.08
F9 1602	Cazadero	0	0	.10	D1 5973	Mt. Madonna	0	0	.13
D1 1739	Chittenden Pass	0	.03	.42	D1 5973-11	Mt. Madonna County Park	.02	.09	.29
D1 1739-01	Chittenden	0	T	.33	E2 5996	Mt. Tamalpais 2 SW	0	0	.27
D1 1766	Cienega	0	0	.25	E2 6027	Muir Woods	.01	.01	.26
F9 1838	Cloversdale 3 SSE	0	0	.15	E3 6065	Napa	0	0	.15
F9 1840	Cloversdale 11 W	0	0	0	E3 6068	Napa-Haven	0	T	.15
E4 1962	Concord 3 E	0	.02	.26	E3 6074	Napa State Hospital	0	T	.29
E3 1976	Conn	0	0	0	F9 6105	Nevadito 1 NW	0	0	0
F9 2105	Coyote Dam - Lake Mendocino	0	T	0	E5 6144	Nowak	0	.01	.09
E6 2109	Coyote Reservoir	0	.03	.19	F9 6187	Ricasio	0	0	0
DO 2159	Crest Ranch	0	0	.28	E2 6290	Novato 8 WNW	0	0	.05
E4 2177	Crockett	0	.02	.10	E2 6290-02	Novato Fire House	0	0	0
DO 2290	Davenport	.01	.07	.26	E4 6335	Oakland WMAP	0	.01	.28
D2 2362	Del Monte	0	0	.41	E3 6351	Oakville 1 WNW	M	M	M
E3 2580	Duttons Landing	0	T	.32	E3 6354	Oakville 4 SW	0	0	RE
E5 2919	Evergreen - Silver Creek Rd.	0	T	.13	E3 6356	Oakville 4 SW No. 2	NR	NR	NR
E3 2933	Fairfield	0	0	.33	F9 6370	Occidental	0	0	.16
E3 2934	Fairfield Police Station	0	T	.40	D1 6610	Falciennes Overhaul Ranch	0	0	.24
F8 3161	Fort Bragg	.01	.07	.19	E7 6646	Falo Alto City Hall	0	.05	.17
F8 3164	Fort Bragg Aviation	0	.05	.03	D2 6650	Faloma	0	.03	.25
F8 3191	Fort Ross	T	T	.15	O3 6703	Parkfield	0	T	.32
D1 3232	Freedom 8 NNW	0	.02	.28	D3 6706	Parkfield 7 NNW	0	0	.20
D1 3238	Freont Peak State Park	0	0	.60	E6 6791-43	Penitencia Rain Gage	0	0	.16
E3 3387	Gerber Ranch	0	.01	.24	E2 6826	Petaluma Fire Station No. 2	0	0	.05
D1 3417	Gilroy	0	T	.36	E2 6826-01	Petaluma - Burns	0	0	0
D1 3419	Gilroy 8 NE	0	0	.27	E2 6829	Petaluma 1 N	0	0	.09
D1 3422	Gilroy 14 ENE	0	0	.25	F9 6853	Phoenix Lake Dam	0	0	.08
D2 3502	Gonzales 9 ENE	0	0	.17	D4 6856	Pico Blanco B.S. Camp	RE	0	0
F9 3577	Graton	0	0	.04	D2 6926	Pinnacles National Monument	0	0	.13
F9 3578	Graton 1 W	0	0	.03	E5 6991-05	Pleasanton Nursery	0	T	.20
E3 3612-01	Green Valley	0	0	.36	F8 7009	Point Arena	0	0	.15
E5 3681	Candulape Reservoir	0	0	.18	D5 7024	Point Piedras Blancas	0	0	.18
F9 3683	Cuerneville	0	T	T	E4 7070	Port Chicago NAD	0	T	.16
E8 3714	Half Moon Bay 2 NNW	0	.03	.09	E8 7086	Portola State Park	0	0	.38
D3 3722	Hames Valley	M	M	M	F9 7107	Potter Valley 3 NNW	0	0	.20
E4 3863	Hayward 6 ESE	0	0	.07	F9 7108	Potter Valley 3 SE	0	0	.20
F9 3875	Healdsburg	0	T	.01	F9 7109	Potter Valley PH	0	0	.27
F9 3878	Healdsburg 2 E	0	.02	.01	D2 7150	Priest Valley	0	T	.25
D1 3928	Herandez 7 SE	0	.10	.91	D1 7190	Quien Sabe Hay Camp	0	T	.24
D1 4022	Hollister	0	T	.21	D1 7249	Rancho Quien Sabe	0	0	0
D1 4022-10	Hollister Costa	T	.02	.13	E7 7339	Redwood City	0	T	.29
D1 4025	Hollister No. 2	0	0	.30	E4 7414	Richmond	0	.03	.13
D1 4035	Hollister 10 ENE	0	0	.27	D4 7539-01	Roosevelt Ranch	0	.03	.04
F9 4100	Hopland Largo Station	0	T	.15	E3 7643	St. Helena	0	.02	.01
F9 4277	Inverness-Nery	0	0	0	E3 7646	St. Helena 4 WSW	0	0	0
F9 4480	Kellogg	0	.02	.09	E4 7661	St. Mary's College	0	T	.30

TABLE A-2

INTERIM MONTHLY PRECIPITATION 1963									
IN INCHES									
STATION NUMBER	STATION NAME	JULY	AUG.	SEPT.	STATION NUMBER	STATION NAME	JULY	AUG.	SEPT.
D2 7668	Salinas 2 E	0	.02	.36					
D2 7669	Salinas FAA Airport	T	T	.36					
E3 7672	Salinas Dam	0	.20	.38					
E2 7707-01	San Aselmo	0	0	.02					
D3 7714	San Antonio Mission	0	0	.09					
D2 7716	Sao Ardo	0	0	.09					
D1 7719	San Benito	0	0	.05					
D4 7731	San Clemente Dam	0	0	.09					
D1 7755	San Felipe Highway Station	0	0	.22E					
E8 7767	San Francisco Richmond Sunset	0	0	.36					
E7 7769	San Francisco WBAP	0	0	.07					
E7 7772	San Francisco Fed. Off. Bldg.	0	0	.06					
E8 7807	San Gregorio 3 SE	.02	.04	.35					
E6 7821	San Jose	0	T	.25					
E6 7824	Saa Jose Decid FFS	0	0	.29					
D1 7835	San Juan Bautista Mission	0	0	.20					
D2 7845-10	San Lucas Gaidici	0	0	.12					
E7 7864	San Mateo	0	T	.17					
E2 7880	San Rafael	0	0	0					
E2 7880-08	San Rafael National Bank	0	T	.03					
E6 7912	Santa Clara University	0	T	.25					
D0 7916	Santa Cruz	.02	.06	.16					
D2 7959-10	Santa Rita Muther	.01	.03	.41					
F9 7964	Santa Rosa Sewage Plant	0	T	.07					
F9 7965	Santa Rosa	0	.01	.09					
F9 7965-03	Santa Rosa Pedranzini	T	T	0					
E6 7998-01	Saratoga - Clarke	0	.01	.22					
E6 7998-03	Saratoga - Kriege	0	.01	.24					
E6 8068	Searoville Lake	0	T	.35					
F9 8072	Sebastopol 4 SSE	0	0	.09					
F9 8272	Skaggs Spgs. Las Lomas Ranch	0	0	.04					
D2 8276	Slack Canyon	0	0	.17					
D2 8338	Soledad	0	T	.29					
D2 8338-01	Soledad CTF	0	0	0					
E2 8351	Sonoma	0	T	.03					
D2 8446	Spreckels Highway Bridge	0	T	.29					
D2 8446-01	Spreckels	0	0	.36					
E6 8447	Spreckels Hill-Laguna Seca	0	0	.15					
E6 8519	Stevens Creek Reservoir	0	0	.36					
D6 8627	Suey Ranch	0	0	.40					
D1 8680	Sunset Beach State Park	0	0	.27					
F9 8776-01	Talmage	0	0	.03					
E2 8779	Tamslpais Valley	0	.03	.18					
D3 8849	Templeton	0	.03	.19					
F9 8885	The Geysers	0	0	.05					
E2 8920-21	Tiburon - Topham	0	0	.10					
E3 9006	Travis Air Force Base	0	0	.23					
F9 9122	Ukiah	0	0	T					
F9 9124	Ukiah 4 WSW	.01	.01	.09					
D6 9179	Upper Morro Creek	0	.02	.23					
E4 9185	Upper San Leandro Filters	0	.05	.23					
D1 9189	Upper Tres Pinos	0	0	.20					
D3 9221	Vallieton	0	0	.23E					
E6 9270	Vasona Reservoir	0	T	.32					
F9 9273	Venado	0	0	.09					
E3 9305	Veteran's Home	0	0	.05					
E4 9420	Walmar School	0	0	.05					
E4 9423	Walnut Creek 2 ESE	0	0	.23					
E4 9426	Walnut Creek 2 ENE	0	0	.21					
E4 9427	Walnut Creek 4 E	0	0	.20					
D1 9473	Watsonville Water Works	0	.04	.30					
D0 9675	Wilder Ranch	0	0	.25					
E3 9675-41	Wild Horse Valley	0	T	.38					
F9 9770	Woodacre	0	0	.03					
E6 9814	Wrights	0	0	.18					
F8 9851	Yorkville	0	0	0					
E3 9861	Yountville Gamble	T	0	.01					

TABLE A-3

SEASONAL PRECIPITATION 1963-64
IN INCHES

NUMBER	STATION NAME	TOTAL	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
E6 0053	Alamitos Perc. Pond	11.98	1.31	3.64	.17	4.57	.29	1.16	.24	.26	.21	0	.12	.01
E6 0064	Alamo 1 N	15.54	1.41	4.57	.46	5.38	.01	2.15	.68	.55	.50	T	.03	0
E6 0125	Almaden Reservoir	21.14	1.88	7.13	.22	7.50	.37	2.24	.38	.74	.57	0	.11	0
F9 0135	Alpine Dam	33.66	2.60	12.70	2.53	8.25	.20	4.42	.45	.76	1.75	0	0	0
E3 0212	Angwin Pac. Union College	25.71	2.87	10.16	.81	7.09	.22	3.03	.09	.55	.89	0	0	0
D2 0322	Arroyo Seco	12.95	1.05	4.87	.12	3.48	.16	2.27	.08	.69	.08	0	.15	0
D3 0360-01	Atascadero RMS	11.12	.95	3.47	.13	2.70	.11	1.45	1.51	.61	.19	0	0	0
E3 0372	Atlas Road	18.13	3.32	E7.95	E.96	0	0	3.20	0	.80	0	1.10	0	0
D0 0674	Ben Lomond	36.03	3.67	14.68	.46	8.69	.53	4.91	.23	1.46	1.25	0	.15	0
E4 0693	Berkeley	14.06	1.61	3.38	.60	4.96	.16	2.21	.05	.32	.76	T	.01	0
E6 0706	Berrysessa 1 E (Toyon Ave.)	M	2.55	4.80	.32	4.40	.40	2.25	.30	.82	.80	M	M	M
D4 0790	Big Sur State Park	29.40	3.38	10.22	.41	5.57	.40	4.63	.72	2.69	1.02	0	0	.36
E6 0850	Black Mountain 2 SW	23.45	2.24	7.58	.58	6.21	.31	3.02	.48	1.59	1.31	.04	.09	T
F9 0876	Blakes Landing	M	3.41	6.38	1.05	4.09	.24	2.17	.23	1.15	1.40	M	M	M
F9 0969	Bon Tempe Dam	25.60	2.64	9.24	1.48	5.83	.35	3.49	.60	.82	1.15	0	0	0
F8 0973	Boonville RMS	M	4.27	8.06	1.30	M	.34	3.34	.40	1.38	.44	T	.02	0
F8 0973-02	Boonville-Farrer	M	4.40	9.95	1.66	9.02	.35	4.26	.38	1.81	.47	M	.3	M
D4 0998-27	Bouchers Gap	M	4.15	10.87	.99	8.72	.65	5.52	1.54	2.86	RE	M		
D3 1034	Bradley	6.88	1.03	2.41	.06	1.78	.13	.64	.72	.11	0	0	0	0
U1 1170	Buena Vista	11.07	1.52	E2.32	.53	2.38	.31	2.74	0	.54	.49	0	.24	0
E7 1206	Burlingame	13.43	1.27	3.53	.48	4.92	.24	1.97	.13	.42	.45	0	.02	0
E4 1216	Burton Ranch	15.74	1.70	4.71	.55	5.20	.18	1.62	.61	.76	.40	T	.01	0
D1 1247	Buzzard Lagoon	M	3.60	8.09	.31	7.90	.20	4.61	.03	.61	.77	M	M	M
E5 1281	Calaveras Reservoir	13.37	2.09	E3.04	.36	3.82	.24	1.95	.37	.70	.71	0	.04	.05
E6 1285	Calero Reservoir	14.87	1.26	5.27	.22	4.88	.26	1.74	.28	.32	.54	0	.10	0
E3 1312	Calistoga	21.97	2.34	8.89	.60	5.49	.24	2.69	.16	.68	.88	T	0	T
E6 1341-10	Cambrian Park	12.14	1.31	3.76	.14	4.56	.30	.97	.35	.39	.19	0	.15	.02
E6 1377-01	Campbell Water Co.	10.50	.91	3.80	.04	3.61	.30	1.27	.36	.28	.17	T	.16	0
D4 1534	Carmel Valley	13.78	1.30	3.25	.35	3.47	.20	2.74	.46	1.36	.40	0	.25	T
F9 1602	Cazadero	44.02	6.86	18.50	.46	12.04	.72	3.07	.22	1.62	.51	.02	T	0
D1 1739	Chittendeo Pass	M	1.71	4.46	.19	4.32	.18	2.36	.20	.42	M	M	.05	M
D1 1739-01	Chittendeo	13.50	1.62	4.33	.22	4.12	.18	2.54	.08	.25	0	0	.16	0
D1 1766	Cienega	M	1.56	2.74	.74	4.21	.32	3.20	.12	.44	.34	M		
F9 1838	Cloverdale 3 SSE	30.65	4.71	11.52	1.68	6.06	.51	3.24	.66	1.17	1.05	.05	0	0
F9 1840	Cloverdale 11 W	43.22	6.71	16.75	1.94	10.67	.44	4.25	.29	1.45	.72	0	0	0
E4 1962	Concord 3 E	11.58	1.32	3.59	.47	3.88	.06	1.12	.49	.22	.40	0	.03	0
E3 1976	Conn	M	M	M	M	M	M	M	M	M	M	M	M	M
F9 2105	Coyote Dam-Lake Mendocino	24.06	4.10	7.05	1.64	5.91	.23	2.95	.78	.90	.32	.16	0	0
E6 2109	Coyote Reservoir	15.20	2.46	4.90	.15	4.43	.16	1.97	.18	.48	.34	T	.06	.07
D0 2159	Crest Ranch	M	4.00	14.85	.60	9.75	.35	4.66	.99	2.13	.10	M	M	M
E4 2177	Crockett	13.47	1.99	3.98	.47	3.77	.12	2.24	.28	.29	1.31	0	.02	0
D0 2290	Davenport	17.02	1.85	6.36	.27	4.05	.16	2.29	.48	.64	.77	.02	.09	.04
02 2362	Del Monte	9.33	.91	2.50	.31	2.09	.32	2.21	.06	.46	.17	.04	.26	0
E3 2580	Duttons Landing	13.67	2.19	3.91	.59	3.38	.58	2.02	.12	.14	.70	T	.04	0
E6 2919	Evergreen-Silver Ck. Road	10.58	1.49	2.46	.08	3.76	.24	1.48	.38	.26	.35	0	.08	0
E3 2933	Fairfield	13.53	1.68	3.99	.36	4.00	.06	1.86	.13	.23	.88	.04	.30	0
E3 2934	Fairfield Police Station	11.97	1.96	3.38	.60	1.06	.28	1.91	.04	1.03	1.48	0	.23	0
F8 3161	Fort Bragg	31.53	4.98	9.48	1.87	7.58	.79	3.99	.64	1.29	.63	.18	.07	.06
F8 3164	Fort Bragg Aviation	29.73	5.05	9.77	1.87	8.01	.51	2.93	.18	.87	.41	.13	0	0
F8 3191	Fort Ross	26.11	4.38	10.69	1.22	5.59	.33	2.39	.10	.70	.68	.03	T	0
D1 3232	Freedom 8 NW	M	3.46	9.33	.32	M	.25	3.67	.04	.89	.97	0	.14	0
D1 3238	Fremont Peak State Park	15.77	1.96	3.38	.60	4.06	.28	2.71	.04	1.03	1.48	0	.23	0
E5 3387	Gerber Ranch	11.52	.85	3.68	.25	4.36	.12	1.18	.25	.24	.36	0	.08	.15
D1 3417	Gilroy	14.64	1.37	5.54	.23	4.04	.12	1.75	.38	.58	.49	0	.05	.09
D1 3419	Gilroy 8 NE	14.01	1.86	4.81	.16	4.18	.11	2.00	0	.43	.31	0	.15	0
D1 3422	Gilroy 14 ENE	12.65	1.17	4.57	.11	3.85	.07	1.56	.41	.94	.32	0	T	.19
D2 3502	Gonzales 9 ENE	M	1.32	2.12	.53	2.57	.22	M	M	M	1.04	0	.31	0
F9 3577	Graton	23.81	2.09	9.76	1.21	5.84	.45	2.43	.44	.45	.94	.17	.03	0
F9 3578	Graton 1 W	25.18	2.20	10.48	1.28	5.88	.43	2.95	.30	.47	.97	.20	.02	0
E3 3612-01	Green Valley	20.93	1.94	7.31	.94	5.61	.28	2.70	.11	.49	1.36	.07	.11	0
E6 3681	Gundalupo Reservoir	18.96	1.92	6.63	.18	6.38	.32	1.61	.48	.88	.40	0	.15	.01
F9 3683	Guerneville	31.34	2.56	12.90	1.61	8.85	.64	3.00	.51	.63	.60	.04	T	0
E8 3714	Half Moon Bay 2 NW	17.10	2.48	4.00	1.04	5.32	.52	2.46	.23	.47	.58	0	T	T
D3 3722	Hames Valley	M	M	M	M	2.07	.11	1.48	.63	.34	0	0	.05	0
E4 3863	Hayward 6 ESE	18.43	2.10	5.38	.45	5.33	.19	3.12	.06	1.01	.64	.04	.11	0
F9 3875	Healdsburg	26.50	3.14	12.09	1.26	5.74	.22	2.68	.26	.62	.46	.03	0	T
F9 3878	Healdsburg 2 E	24.95	2.96	11.07	1.26	5.43	.23	2.23	.57	.67	.47	0	0	0
D1 3928	Hernandez 7 SE	12.25	1.21	4.67	.20	2.94	.03	2.25	.12	.51	.78	0	.13	0
D1 4022	Hollister	8.29	1.28	1.89	.18	2.38	.31	1.56	.03	.29	.24	0	.17	0
D1 4022-10	Hollister Costa	9.53	1.45	1.24	1.79	2.28	.07	1.56	.36	.47	.16	0	.15	0

TABLE A-3

SEASONAL PRECIPITATION 1963-64
IN INCHES

NUMBER	STATION NAME	TOTAL	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
D1 4025	Hollister No. 2	8.05	1.41	1.93	.13	2.14	.28	1.42	0	.32	.21	0	.21	0
D1 4035	Hollister 10 ENR	M	1.89	83.96	.49	3.72	.29	2.94	.48	M	1.05	0	.22	0
F9 4100	Hopland Largo Station	M	3.74	7.58	1.66	6.80	.30	2.53	.55	1.12	.48	M	0	0
F9 4277	Inverness-Mery	26.40	2.55	10.70	1.65	6.70	.40	2.95	0	.35	1.10	0	0	0
F9 4480	Kellogg	33.84	3.86	13.00	1.16	8.53	.32	3.47	.47	1.73	1.16	.05	T	.09
E2 4500	Kentfield	29.33	3.28	9.49	1.49	7.42	.27	4.26	.54	.67	1.88	T	.03	0
D2 4555	King City	M	.76	1.73	.06	1.40	0	M	.01	.28	0	0	.13	0
E4 4633	Lafayette 2 NNE	16.66	1.65	4.76	.55	5.33	.16	1.89	.95	.68	.67	0	.02	0
F9 4652	Lagunitas Lake	33.37	3.26	11.89	1.71	8.11	.45	4.48	.89	1.09	1.49	0	0	0
E8 4660	La Honda	23.41	2.46	6.36	.65	7.12	.40	3.32	.26	1.58	.86	.30	.10	0
E3 4677	Lake Curry	M	2.79	6.24	.74	4.57	.16	2.55	.14	.29	.89	.03	M	M
E6 4916	Leroy Anderson Dam	13.59	1.62	4.63	.14	4.19	.21	1.67	.43	.19	.35	0	.16	0
E6 4922	Lexington Reservoir	23.85	2.78	8.42	.37	6.93	.23	2.82	.41	.87	.79	0	.22	.01
D3 4963	Linn Ranch	9.12	1.08	2.93	0	2.24	.20	1.51	.86	.25	.01	0	.04	0
E5 4996	Livermore Sewage Plant	10.39	.91	3.38	.17	2.78	.10	1.83	.05	.50	.46	0	.21	0
E5 4997	Livermore 2 SSW	9.49	.93	3.18	.19	2.37	.08	1.57	.21	.48	.32	T	.12	.04
D3 5047	Lockwood 2 N	9.23	.89	2.96	0	1.98	.17	1.59	.95	.49	0	0	.20	0
E6 5123	Los Gatos	16.91	2.00	6.62	.13	5.68	.20	1.21	.23	.41	.15	0	.18	0
E6 5123-04	Los Gatos-Old Orchard Rd.	13.06	1.51	4.52	.16	4.72	.22	1.08	.32	.27	.16	0	.10	0
D0 5125	Los Gatos 4 SW	27.98	3.72	10.75	.92	6.91	.33	3.55	.30	.12	1.15	0	.23	0
D4 5184	Lucia Willow Springs	18.78	2.18	7.14	.20	3.82	.12	3.54	.28	.79	.60	0	.11	0
E3 5333	Mare Island	M	1.76	3.97	.51	3.71	.23	1.66	.11	.42	.82	0	.04	M
E4 5371	Martinez 3 S	14.97	1.69	4.09	.55	4.65	.13	1.86	.50	.27	1.23	0	0	0
E4 5372	Martinez 3 SSE	M	1.61	3.80	.60	4.53	.10	1.71	M	.33	1.07	0	.02	0
E4 5377	Martinez Fire Station	13.29	1.48	3.48	.43	3.97	.14	1.56	.71	.42	1.10	T	T	0
E2 5647	Mill Valley	M	2.12	6.07	1.23	4.43	.17	2.16	.53	.49	1.26	M	M	M
D4 5795	Monterey	13.66	1.46	3.77	.53	3.50	.42	2.23	.22	.86	.22	.09	.35	.01
E6 5844	Morgan Hill 2 E	M	1.40	4.82	.20	4.28	.24	1.62	.41	.19	M	0	.14	M
E6 5846	Morgan Hill 6 MNW	17.92	1.14	7.14	.21	5.70	.35	2.29	.97	.35	.57	0	.10	0
D1 5853	Morgan Hill SCS	14.05	1.30	5.25	.14	4.40	.25	1.92	.03	.14	.42	0	.20	0
D6 5869	Morro Bay 3 N	10.92	1.58	3.94	T	1.70	.13	2.65	.12	.65	.05	0	.10	0
E4 5915	Mt. Diablo North Gate	16.20	1.80	4.95	.48	5.17	0	1.85	.29	.59	.91	.02	.14	0
E3 5933	Mt. Hamilton	15.10	1.47	3.18	.81	3.61	.32	2.97	.66	1.30	.66	T	.12	0
D1 5973	Mount Madonna	25.37	3.00	7.73	.38	8.16	.25	3.86	.11	.94	.73	0	.21	0
D1 5973-11	Mt. Madonna Co. Park	24.49	2.80	7.57	.51	7.40	.33	3.01	.38	1.13	.86	.06	.23	.21
E2 5996	Mt. Tamalpais 2 SW	25.37	2.56	8.31	1.95	6.85	.23	3.14	* V	6.61	1.67	0	.05	0
E2 6027	Muir Woods	23.48	2.93	7.69	2.02	5.87	.13	2.21	.35	.59	1.66	0	.03	0
E3 6065	Napa	M	2.65	5.43	.73	3.52	.15	1.72	.12	.16	.60	.10	M	0
E3 6068	Napa Haven	NR	2.65	4.83	.76	3.66	.12	1.96	.18	.17	.74	0	RE	0
E3 6074	Napa State Hospital	16.07	2.83	5.71	.73	3.46	.19	2.09	.10	.15	.65	.10	.06	0
F9 6105	Navarro 1 NW	27.72	3.87	8.98	1.50	7.50	.60	3.65	.12	1.28	.22	0	0	0
E5 6144	Newark	10.25	1.21	2.93	.24	3.54	0	1.31	.07	.45	.41	0	.09	0
F9 6187	Nicasio	26.73	2.38	9.92	1.17	8.55	.22	3.02	.06	.25	1.16	0	0	0
E2 6290	Novato 8 MNW	M	E2.11	7.23	1.17	4.86	.16	M	M	M	1.20	0	M	0
E2 6290-02	Novato Fire House	M	2.01	5.81	.90	4.09	.15	2.01	.44	.31	1.95	M	M	M
E4 6335	Oakland W&AP	11.88	1.44	3.19	.42	3.90	.23	1.94	.03	.24	.43	.03	.03	0
E3 6351	Oakville 1 MNW	M	1.84	5.61	.70	6.04	.32	M	0	M	.32	M	M	M
E3 6356	Oakville 4 SW No. 2	M	3.02	9.88	.98	6.90	M	M	.11	.57	.80	.10	.02	0
F9 6370	Occidental	32.40	2.86	14.01	1.68	7.96	.48	3.05	.37	.89	1.04	.02	.04	0
D1 6610	Paicines Ohrwall Ranch	10.38	1.07	2.27	.34	3.21	.20	2.38	.08	.39	.20	0	0	.24
F7 6646	Palo Alto City Hall	9.42	.88	2.95	.14	3.17	.21	4.30	0	.53	.45	0	.12	0
D2 6650	Palo Alto	19.96	1.16	6.30	.88	3.28	.72	4.30	.86	2.10	.21	T	.15	0
D3 6703	Parkfield	M	1.00	2.87	T	2.21	.05	1.12	.67	.56	M	0	0	.28
D3 6706	Parkfield 7 NNW	M	E1.20	3.72	.10	1.22	.09	.57	.09	.49	0	0	M	0
E6 6791-43	Penetencia Rain Gage	12.15	2.01	3.46	.29	3.40	.33	1.34	.32	.44	.56	0	0	0
E2 6826	Petaluma F.S. No. 2	15.97	1.52	5.60	.92	4.63	.26	1.81	.08	.21	.84	.10	T	0
E2 6826-01	Petaluma-Burns	M	1.75	7.25	1.05	5.30	.20	2.20	.20	.25	1.30	M	M	M
E2 6829	Petaluma 1 N	M	.37	4.07	.16	2.77	.38	2.83	.52	M	.12	0	.11	0
F9 6853	Phoenix Lake Dam	31.50	3.42	11.95	1.30	7.35	.30	4.25	.60	.85	1.40	0	0	.08
D2 6928	Pinnacles National Mon.	11.42	1.28	1.91	.26	3.01	.08	3.06	.43	.73	.40	0	.26	0
E5 6991-05	Pleasanton Nursery	13.71	1.06	4.63	.30	4.10	.11	2.33	.11	.74	.27	0	.06	0
F8 7009	Point Arena	29.38	5.55	10.69	1.46	5.63	.48	3.19	.37	1.14	.79	.08	0	0
D5 7024	Point Piedras Blancas	M	.37	4.07	.16	2.77	.38	2.83	.52	M	.12	0	.11	0
E4 7070	Port Chicago MAD	10.03	E1.57	5.05	.72	3.21	.23	1.98	.12	.25	.70	0	.02	0
EB 7086	Portola State Park	M	2.61	8.90	.80	7.15	.42	3.65	1.00	1.84	.91	M	M	M
F9 7107	Potter Valley 3 NNW	M	4.89	9.46	1.77	8.07	.43	3.82	* V	11.20	.20	M	0	M
F9 7108	Potter Valley 3 SE	20.29	3.85	5.71	1.45	5.72	.33	2.14	.20	.30	.54	.05	0	0
F9 7109	Potter Valley PH	32.22	5.63	10.10	1.96	8.18	.49	3.82	.52	1.13	.34	.05	0	0
D2 7150	Priest Valley	13.07	1.53	5.11	.20	2.98	.07	1.95	.53	.43	.09	T	.13	.05
D1 7190	Queen Sabe Hay Camp	13.14	1.39	2.59	.61	3.38	.30	2.58	.38	.92	.70	T	0	.29

TABLE A-3

SEASONAL PRECIPITATION 1963-64

IN INCHES

NUMBER	STATION NAME	TOTAL	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
D1 7249	Rancho Quien Sabe	M	1.39	2.72	.51	3.96	.14	3.41	.22	.88	.87	M	M	M
F7 7339	Redwood City	12.25	.95	3.98	.26	3.60	.27	1.67	.13	.56	.75	T	.08	0
E4 7414	Richmond	13.04	1.82	3.81	.49	3.90	.23	1.40	.37	.22	.79	T	.01	0
D4 7539-01	Roosevelt Ranch	21.81	3.30	7.14	.40	4.10	.31	3.58	.41	1.65	.70	T	0	.22
E3 7643	St. Helena	20.12	1.84	8.00	.74	5.32	.15	2.69	.11	.48	.75	.04	T	0
E3 7646	St. Helena 4 WSW	27.98	2.47	10.27	.75	7.68	.32	3.62	.19	.96	1.10	.02	0	0
E4 7661	St. Mary's College	19.32	1.94	5.43	.66	6.36	.38	2.85	.35	.88	.39	.08	T	0
D2 7668	Salinas 2 E	10.61	1.46	2.42	.26	2.29	.10	2.46	.31	.75	.36	0	.20	T
D2 7669	Salinas FAA Airport	10.26	1.53	2.39	.34	1.97	.11	2.45	.21	.66	.40	T	.20	T
D3 7672	Salinas Dam	12.66	1.21	3.62	.10	3.30	.18	1.96	1.26	.71	.16	T	0	.16
E2 7707-01	San Anselmo	M	2.89	9.92	.93	5.65	.15	3.16	.66	.65	1.55	M	M	M
D3 7714	San Antonio Mission	9.39	.74	3.56	0	3.14	.06	1.50	0	.39	0	T	0	0
D2 7716	San Ardo	6.64	.92	2.66	0	1.48	.10	.70	.50	.15	0	0	0	.13
D1 7719	San Benito	M	1.14	1.93	.14	2.09	.29	2.36	.02	1.14	.37	0	M	0
D4 7731	San Clemente Dam	15.87	1.30	4.33	.46	4.00	.46	2.70	.77	1.38	.17	0	0	.30
D1 7755	San Felipe Highway Sta.	M	1.56	3.62	E.25	3.34	.08	M	.03	.50	M	0	.17	0
E8 7767	San Fran. Richmond Sunset	12.08	1.78	3.12	.86	3.45	.29	1.79	.02	1.18	.52	.06	.01	0
F7 7769	San Francisco WBAP	12.72	1.34	3.29	.55	4.38	.27	1.95	.01	.32	.60	0	.01	T
F7 7772	San Fran. Fed. Off. Bldg.	12.27	1.39	3.52	.87	3.37	.19	2.12	.01	.22	.57	0	.01	T
E8 7807	San Gregorio 3 SE	20.33	2.95	6.32	.79	5.22	.42	2.59	.11	.92	.77	.15	.09	T
E6 7821	San Jose	10.01	1.17	3.00	.12	3.20	.23	1.14	.21	.38	.56	T	T	0
E6 7824	San Jose Decid FFS	11.08	1.42	3.53	.16	3.57	.20	1.08	.43	.34	.22	0	.13	0
D1 7835	San Juan Bautista Miss.	11.76	1.44	4.01	.25	3.38	.18	1.60	.07	.40	.24	0	0	.19
D2 7845-10	San Lucas Guidici	5.48	.84	.68	1.16	1.20	.06	1.36	.09	.09	0	0	T	0
E7 7864	San Mateo	13.44	1.16	4.72	.41	4.18	.27	1.85	.11	.30	.36	0	.08	0
E2 7880	San Rafael	23.10	2.52	7.87	.95	4.73	.20	3.28	.56	.68	2.28	T	.03	0
E2 7880-08	San Rafael Nat. Bank	20.54	2.72	7.37	.77	3.48	.13	2.59	.65	.60	2.20	T	.03	0
E6 7912	Santa Clara University	10.29	1.24	2.97	.20	3.41	.19	1.23	.29	.31	.27	T	.18	0
D0 7916	Santa Cruz	19.03	1.85	6.72	.33	5.33	.20	3.26	.16	.44	.37	0	.17	.20
D2 7959-10	Santa Rita Muther	9.77	1.69	1.02	1.95	2.06	.06	1.79	.22	.39	.34	.01	.24	T
F9 7964	Santa Rosa Sewage Plant	19.08	2.18	7.53	.89	4.24	.32	2.24	.19	.34	1.14	0	.01	0
F9 7965	Santa Rosa	20.29	2.61	7.53	.81	5.19	.33	1.97	.33	.40	1.10	T	.02	0
F9 7965-03	Santa Rosa Pedrazini	17.32	1.75	4.97	2.66	3.99	.09	2.09	.24	.32	1.15	.04	.02	0
E6 7998-01	Saratoga Clarke	12.33	1.27	4.55	.10	3.73	.18	1.34	.35	.44	.20	0	.17	0
E6 7998-03	Saratoga Kriege	14.28	1.46	5.13	.10	4.36	.21	1.67	.36	.51	.28	0	.20	0
E6 8068	Searsville Lake	19.07	1.34	5.92	.74	6.15	.26	2.55	.37	.90	.79	T	.05	0
F9 8072	Sebastopol 4 SSE	15.47	1.51	7.36	1.03	5.10	.27	2.17	.31	.27	1.25	.10	0	0
F9 8272	Skaggs Spgs., Las Lomas Ranch	41.16	6.34	14.69	1.74	11.11	.33	3.64	.48	1.96	.87	0	0	0
D2 8276	Slack Canyon	10.10	1.59	3.80	.08	2.15	.13	1.81	.13	.28	0	0	.13	0
D2 8338	Soledad	7.28	1.14	1.30	.17	1.64	.09	1.54	.38	.61	.21	T	.20	0
D2 8338-01	Soledad CTF	7.02	1.00	1.29	.15	1.48	.06	1.45	.32	.60	.27	0	.20	.20
E2 8351	Sonoma	19.53	2.30	6.99	.96	5.62	.20	2.18	.21	.25	.75	.04	.03	0
D2 8446	Spreckels Hwy. Br.	10.60	1.35	2.38	.42	2.24	.18	2.31	.39	.67	.42	T	.24	0
D2 8446-01	Spreckels	10.52	1.36	2.54	.31	1.98	.12	2.62	.38	.56	.45	0	.30	0
E6 8447	Spreckels Hill-Laguna Seca	11.04	.99	4.01	.15	3.87	.28	1.06	.14	0	.44	0	.10	0
E6 8519	Stevens Creek Reservoir	18.32	1.92	5.58	.23	5.75	.22	2.67	.24	.95	.60	0	.14	.02
D6 8627	Suey Ranch	10.17	1.83	2.87	.21	1.10	.14	2.20	1.01	.38	.33	T	.10	0
D1 8680	Sunset Beach State Park	12.62	2.38	3.73	.33	3.31	.26	2.03	.11	.27	.10	0	.10	0
F9 8776-01	Talmage	20.96	3.60	7.18	1.36	5.11	.23	2.26	.65	.48	0	0	0	0
E2 8779	Tamapais Valley	M	2.49	6.95	1.60	4.85	.18	2.47	.51	.73	1.62	M	M	M
D3 8849	Templeton	M	1.16	3.90	.04	2.59	.12	1.48	M	.92	.14	0	.09	0
F9 8885	The Geysers	34.96	5.15	12.16	.98	9.86	.30	4.17	.30	1.34	.58	0	0	.12
E2 8920-21	Tiburon-Topham	M	.90	6.87	.74	4.25	.05	1.34	.49	.43	1.34	M	M	M
E3 9006	Travis Air Force Base	M	1.03	3.67	.44	3.09	.03	M	M	M	M	M	M	M
F9 9122	Ukiah	25.10	3.68	7.75	1.68	6.77	.34	3.17	.46	.92	1.19	.14	0	0
F9 9124	Ukiah 4 WSW	33.66	4.32	9.52	2.36	9.60	.56	4.05	.67	1.99	.50	.04	.05	0
D6 9179	Upper Morro Creek	M	1.91	6.77	.25	3.18	.09	5.12	.06	1.09	.71	M	M	M
E4 9185	Upper San Leandro Filters	15.97	1.81	4.12	.58	5.26	.19	2.35	.32	.50	.75	.04	.09	0
D1 9189	Upper Tres Pinos	M	.76	1.59	.36	2.45	.22	M	.30	.36	M	0	.23	0
D3 9221	Vallerton	7.10	1.42	2.63	0	1.62	0	1.08	.26	.05	0	0	.18	0
E6 9270	Vasona Reservoir	13.08	1.31	4.96	.12	4.28	.18	1.37	.26	.23	.19	0	.18	0
F9 9273	Venado	36.25	4.86	15.38	1.45	8.95	.32	3.36	.32	1.16	.43	.02	0	0
E3 9305	Veterans Home	19.15	2.63	6.66	.76	4.76	.23	2.90	.26	1.16	.56	.20	.03	0
E4 9420	Walmar School	13.65	1.25	4.56	.21	4.28	.10	1.64	.27	.62	.72	0	0	0
E4 9423	Walnut Creek 2 ESE	13.57	1.34	3.82	.40	4.85	.10	1.73	.50	.40	.40	0	.03	0
E4 9426	Walnut Creek 4 E	11.94	1.24	3.64	.36	4.16	.13	1.53	.27	.33	.27	T	.01	0
E4 9427	Walnut Creek 2 NE	11.49	1.27	3.23	.43	4.16	.12	2.13	.29	.48	.27	T	.01	0
D1 9473	Watsonville Water Works	14.47	2.59	4.48	.26	4.68	.18	1.89	0	.23	0	0	.05	.11
D0 9675	Wilder Ranch	M	1.48	5.58	.33	4.82	.23	3.28	.41	.47	.70	M	M	M
E3 9675-41	Wild Horse Valley	28.04	2.83	10.05	1.11	6.51	.39	4.14	.38	1.00	1.57	.06	0	0

TABLE A-3

SEASONAL PRECIPITATION 1963-64
IN INCHES

NUMBER	STATION NAME	TOTAL	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
F9 9770	Woodacre	28.37	3.55	10.24	1.19	6.40	.31	3.81	.43	.82	1.58	T	.04	0
E6 9814	Wrights	27.67	3.83	9.85	.22	7.21	.30	3.13	.30	1.23	1.32	0	.28	0
F8 9851	Yorkville	30.20	5.13	10.13	1.57	7.61	.33	3.04	.28	1.39	.70	.02	0	0
E3 9861	Yountville Gamble	17.28	2.32	6.44	.82	4.27	.18	2.23	.14	.21	.61	.03	.03	0

TABLE A-4

INTERIM MONTHLY TEMPERATURE 1963
IN DEGREES FAHRENHEIT

STATION NUMBER	STATION NAME				STATION NUMBER	STATION NAME					
		JULY	AUG.	SEPT.			JULY	AUG.	SEPT.		
E6 0053	Alamitos Perc Pond	Max	96	94	98	F9 3578	Craton LW	Max	97	97	96
		Min	46	46	50			Min	42	43	44
		Avg Max	81.4	82.1	81.9			Avg Max	82.2	85.3	82.0
		Avg Min	51.6	52.2	55.6			Avg Min	48.0	47.7	49.4
		Avg	86.5	87.2	88.6			Avg	65.1	66.5	65.7
E4 0064	Alamo LN	Max	97	99	100	E8 3714	Half Moon Bay ZNW	Max	69	73	73
		Min	34	43	47			Min	46	46	48
		Avg Max	84.0	86.9	84.6			Avg Max	65.0	64.1	67.0M
		Avg Min	51.3	52.4	56.3			Avg Min	51.5	51.0	52.3M
		Avg	67.6	69.6	69.4			Avg	58.3	57.6	59.7M
E3 0212	Angwin Pac. Union Col.	Max	96	98	99	E2 3734	Hamilton AFB	Max	95	92	96
		Min	40	45	47			Min	45	48	48
		Avg Max	85.4	86.2M	83.0			Avg Max	76.1	80.8	80.1
		Avg Min	50.5	54.8M	56.3			Avg Min	51.5	53.1	54.1
		Avg	68.0	70.5M	69.7			Avg	63.8	67.0	67.1
D3 0360-01	Atascadero BMS	Max	102	102	105	F9 3875	Nealdsburg	Max	102	104	105
		Min	44	44	50			Min	41	47	48
		Avg Max	91.2	91.0	89.6			Avg Max	88.5	90.6	89.5
		Avg Min	53.4	53.6	55.5			Avg Min	50.6	52.9	54.0
		Avg	72.3	72.3	72.6			Avg	69.6	71.8	71.8
D0 0674	Ben Lomond	Max	93	95	98	D1 4022	Nollister	Max	94	96	103
		Min	41	44	42			Min	44	42	47
		Avg Max	80.6	81.5	83.6			Avg Max	79.1	79.8M	84.5
		Avg Min	46.9	47.8	47.5			Avg Min	49.5	50.2M	51.8
		Avg	63.8	64.7	65.6			Avg	64.3	65.0M	68.2
E4 0693	Berkeley	Max	88	82	87	F9 4277	Inverness-Hery	Max	NR	NR	NR
		Min	51	51	53			Min	NR	NR	NR
		Avg Max	70.7	70.8	73.6			Avg Max	NR	NR	NR
		Avg Min	54.5	53.8	56.4			Avg Min	NR	NR	NR
		Avg	62.6	62.3	65.0			Avg	NR	NR	NR
E7 1206	Surlingame	Max	92	95	89	E2 4500	Kentfield	Max	97	96	98
		Min	44	44	47			Min	44	46	47
		Avg Max	75.8	75.9	78.4			Avg Max	80.2	82.8M	83.4M
		Avg Min	50.6	49.8	53.5			Avg Min	50.8	50.6M	53.6M
		Avg	63.2	62.9	66.0			Avg	65.5	66.7M	68.5M
D4 1534	Carmel Valley	Max	93	93	96	D2 4555	King City	Max	97	98	97
		Min	41	39	44			Min	35	44	43
		Avg Max	76.2	77.1	81.4			Avg Max	82.7	83.5	87.0
		Avg Min	45.6	47.6	50.8			Avg Min	48.9	49.6	51.6
		Avg	60.9	62.4	66.1			Avg	65.8	66.6	69.3
F9 1838	Cloverdale 3SSE	Max	93	93	96	E6 4922	Lexington Reservoir	Max	97	98	97
		Min	46	46	48			Min	41	41	46
		Avg Max	87.4	89.2	86.8			Avg Max	84.2	85.4	84.7
		Avg Min	52.7	53.3	53.8			Avg Min	48.7	50.0	51.9
		Avg	70.1	71.3	70.3			Avg	66.7	67.1	68.3
F9 2105	Coyote Dam (Lake Mendocino)	Max	102	104	106	D3 4963	Linn Ranch	Max	99	100	100
		Min	41	42	46			Min	47	46	49
		Avg Max	86.9	91.0	90.0			Avg Max	90.3	89.0	88.0
		Avg Min	49.0	50.6	49.2			Avg Min	53.1	53.5	54.8
		Avg	68.0	70.8	69.6			Avg	71.7	71.3	71.4
E6 2109	Coyote Reservoir	Max	96	98	100	E5 4996	Livermore Sewage Plant	Max	99	100	100
		Min	44	40	45			Min	42	39	44
		Avg Max	84.7	85.4	86.5			Avg Max	83.3		85.3
		Avg Min	49.2	49.6	51.7			Avg Min	47.2	48.0	52.7
		Avg	67.0	67.5	69.1			Avg	65.2		68.8
E4 2177	Crockett	Max	98	96	102	E5 4997	Livermore 2SSW	Max	99	102	105
		Min	51	51	53			Min	43	43	45
		Avg Max	82.2	84.1	83.6			Avg Max	85.8	88.1	86.1
		Avg Min	54.3	55.2	57.7			Avg Min	49.8	50.3	52.0
		Avg	68.3	69.7	70.7			Avg	67.8	69.2	69.1
D0 2290	Davenport	Max	73	73	77	E6 5123	Los Gatos	Max	95	92	101
		Min	45	48	50			Min	40.0	41	44
		Avg Max	63.7	64.0	68.9			Avg Max	81.4	83.6	82.9
		Avg Min	50.3	53.0	53.3			Avg Min	48.0	48.0	51.6
		Avg	57.0	58.5	61.1			Avg	64.7	65.8	67.3
E3 2580	Duttons Landing	Max	95	94	102	E3 5333	Harc Island Naval ST	Max	97	93	99
		Min	45	48	49			Min	56	56	59
		Avg Max	79.2M	79.8	83.2			Avg Max	82.2	81.6	83.0
		Avg Min	51.7M	52.6	53.8			Avg Min	60.2	60.2	62.3
		Avg	65.5M	66.2	68.5			Avg	71.2	70.9	72.6
E3 2934	Fairfield Police Sta.	Max	101	102	104	E4 5377	Martinez Fire Sta.	Max	102	100	98
		Min	45	52	50			Min	68	68	50
		Avg Max	86.7	88.7	89.5			Avg Max	85.2	86.0	84.4
		Avg Min	54.2	56.8	56.9			Avg Min	54.1	54.5	56.4
		Avg	70.5	72.8	73.2			Avg	69.7	70.3	70.4
D1 3238	Fremont Peak State Pk.	Max	94	94	102	D4 5795	Monterey	Max	M	M	M
		Min	43	43	45			Min	M	M	M
		Avg Max	83.3	82.0	79.8			Avg Max	M	M	M
		Avg Min	59.4	61.9	60.2			Avg Min	M	M	M
		Avg	71.4	72.0	70.0			Avg	M	M	M
D1 3417	Gilroy	Max	98	99	100	E4 5915	Mt. Diablo North Gate	Max	97	99	105
		Min	46	42	44			Min	45	47	49
		Avg Max	85.9	87.4	87.9			Avg Max	83.8	86.3	83.8
		Avg Min	50.4	51.2	53.6			Avg Min	55.5	60.0	58.5
		Avg	68.2	69.3	70.8			Avg	69.7	73.2	71.2
F9 3557	Craton	Max	97	95	96	E5 5933	Mt. Hamilton	Max	84	86	90
		Min	42	44	46			Min	42	43	42
		Avg Max	81.2	83.5	83.3			Avg Max	75.1M	76.5	76.0M
		Avg Min	50.2	49.2	51.7			Avg Min	58.0M	60.5	58.7M
		Avg	65.7	66.4	67.5			Avg	66.6M	68.5	67.4M

TABLE A-4

INTERIM MONTHLY TEMPERATURE 1963												
IN DEGREES FAHRENHEIT												
STATION NUMBER	STATION NAME		JULY	AUG.	SEPT.	STATION NUMBER	STATION NAME		JULY	AUG.	SEPT.	
E3 6068	Napa - Heven	Max	98	100	102	E4 7661	Saint Mary's College	Max	97	99	99	
		Min	43	46	46			Min	47	44	43	
		Avg Max	82.9	86.1	83.6			Avg Max	81.3	83.9	83.2	
		Avg Min	49.7	51.1	51.8			Avg Min	57.0	52.3	53.0	
		Avg	66.3	67.6	68.7			Avg	66.7	68.1	68.1	
E3 6074	Napa State Hospital	Max	99	100	105	D2 7668	Salinas 2E	Max	90	84	93	
		Min	44	41	46			Min	48	42	48	
		Avg Max	82.4	83.8	86.3			Avg Max	72.2	72.9	77.9	
		Avg Min	51.5	51.8	53.3			Avg Min	51.6	51.9	52.9	
		Avg	67.0	67.8	69.8			Avg	61.9	63.4	63.4	
E5 6144	Newark	Max	M	M	96	02 7669	Salinas FAA Airport	Max	M	83	95	
		Min	M	M	51			Min	M	48	49	
		Avg Max	M	M	79.3			Avg Max	M	72.3	77.2	
		Avg Min	M	M	56.0			Avg Min	M	53.2	53.3	
		Avg	M	M	67.7			Avg	M	62.8	63.3	
E4 6335	Oakland WBAF	Max	94	88	87	D3 7714	San Antonio Mission	Max	103	103	106	
		Min	50	53	55			Min	38	40	43	
		Avg Max	71.7	72.5	74.3			Avg Max	94.6	95.7	96.1M	
		Avg Min	55.5	55.3	56.8			Avg Min	46.4	49.6	50.1M	
		Avg	63.6	63.9	66.6			Avg	70.5	72.7	72.1M	
E7 6646	Palo Alto City Hall	Max	96	89	95	E8 7767	San Fran. Richmond Sunset	Max	75	68	79	
		Min	45	45	48			Min	50	48	52	
		Avg Max	77.6	77.7	79.0			Avg Max	64.3	63.5	69.1	
		Avg Min	52.9	52.8	54.9			Avg Min	53.0	52.4	52.2	
		Avg	65.3	65.3	67.0			Avg	58.7	58.0	62.2	
E2 6826	Petaluma F.S. No. 2	Max	99	98	102	E7 7769	San Francisco WRAP	Max	94	86	93	
		Min	45	41	46			Min	50	50	53	
		Avg Max	80.2	84.0	85.8			Avg Max	70.9	73.0	76.2	
		Avg Min	50.5	49.7	52.2			Avg Min	53.5	53.9	56.4	
		Avg	65.4	66.9	69.0			Avg	62.2	63.5	66.3	
D2 6926	Pinnacles National Mon.	Max	102	102	105	E7 7772	San Francisco Federal Office Building	Max	88	79	88	
		Min	41	42	45			Min	52	51	54	
		Avg Max	92.6	93.9	93.1			Avg Max	65.3	65.9	72.0	
		Avg Min	47.7	50.2	51.8			Avg Min	54.1	53.6	57.4	
		Avg	70.2	72.1	72.5			Avg	59.7	59.8	64.7	
E5 6991-05	Pleasanton Nursery	Max	99	102	102	E8 7807	San Gregorio 3SE	Max	89	78	88	
		Min	43	42	46			Min	41	41	44	
		Avg Max	86.2	88.4	86.1			Avg Max	68.8	68.8	73.8	
		Avg Min	50.6	50.9	53.1			Avg Min	48.8	47.8	49.9	
		Avg	68.4	69.6	69.6			Avg	58.8	58.3	61.9	
F8 7009	Point Arena	Max	92	70	80	E6 7821	San Jose	Max	97	93	98	
		Min	39	47	45			Min	49	50	53	
		Avg Max	65.6	64.0	69.2			Avg Max	79.3	88.2	80.0	
		Avg Min	48.7	50.1	51.4			Avg Min	54.8	55.6	57.8	
		Avg	57.2	57.1	60.3			Avg	66.9	67.2	69.3	
D5 7024	Point Piedras Blancas	Max	69	70	75	E6 7824	San Jose Decid FFS	Max	67	63	100	
		Min	46	50	51			Min	47	50	52	
		Avg Max	64.9	65.9M	67.6			Avg Max	82.4	83.5	83.2	
		Avg Min	50.1	52.0	53.7			Avg Min	53.8	55.1	57.1	
		Avg	57.5	59.0M	60.7			Avg	68.1	69.3	70.2	
E4 7070	Port Chicago RAD	Max	99	99	100	E7 7864	San Mateo	Max	97	91	96	
		Min	43	45	47			Min	51	51	50	
		Avg Max	85.3	87.5	84.7			Avg Max	76.1	77.5	79.7	
		Avg Min	52.4	52.5	53.9			Avg Min	54.5	54.1	56.3	
		Avg	68.9	70.0	69.3			Avg	65.3	65.8	68.0	
F9 7109	Potter Valley F.H.	Max	100	103	102	E2 7880	San Rafael	Max	98	98	99	
		Min	38	42	40			Min	47	47	50	
		Avg Max	M	91.9M	91.3M			Avg Max	79.6M	81.6M	84.5M	
		Avg Min	M	49.1M	47.9M			Avg Min	53.5M	53.1M	56.1M	
		Avg	M	70.5M	69.6M			Avg	66.6M	67.4M	70.3M	
D2 7150	Priest Valley	Max	100	102	106	E6 7912	Santa Clara University	Max	97	NR	96	
		Min	35	35	38			Min	46	NR	50	
		Avg Max	91.3	91.5	89.0			Avg Max	80.2m	NR	81.1M	
		Avg Min	45.0	45.2	46.3			Avg Min	52.7m	NR	54.7M	
		Avg	68.2	68.4	67.7			Avg	66.5m	NR	67.9M	
D1 7190	Queen Sabe Hay Camp	Max	91	93	101	D0 7916	Santa Cruz	Max	95	91	96	
		Min	34	32	38			Min	63	62	63	
		Avg Max	81.3	75.3	81.8			Avg Max	77.0	76.4	81.0	
		Avg Min	42.7	44.0	46.6			Avg Min	48.7	49.3	51.0	
		Avg	62.0	59.6	64.2			Avg	62.9	62.9	66.0	
E7 7339	Redwood City	Max	98	98	99	D2 7959-10	Santa Rita Muther	Max	M	M	81	
		Min	46	46	50			Min	M	M	46	
		Avg Max	83.0	83.9	85.1			Avg Max	M	M	68.9	
		Avg Min	52.6	52.5	54.6			Avg Min	M	M	49.8	
		Avg	67.8	68.2	69.9			Avg	M	M	59.4	
E4 7414	Richmond	Max	88	84	95	F9 7964	Santa Rosa Sewage Plt.	Max	96	93	98	
		Min	53	52	56			Min	52	44	45	
		Avg Max	71.1	70.7	76.6			Avg Max	77.7	80.4	82.1	
		Avg Min	56.1	55.7	58.7			Avg Min	48.4	49.4	50.9	
		Avg	63.6	63.2	67.7			Avg	63.0	64.9	66.3	
D4 7539-01	Roosevelt Ranch	Max	86	92	90	F9 7965	Santa Rosa	Max	99	99	103	
		Min	51	51	56			Min	53	44	45	
		Avg Max	73.2	74.2	77.9			Avg Max	82.8	86.0	85.9	
		Avg Min	57.4	58.8	64.1			Avg Min	49.2	49.5	50.8	
		Avg	65.3	66.3	71.0			Avg	66.4	67.8	68.4	
E3 7643	Saint Helena	Max	102	103	103	D2 8338-01	Soledad CTF	Max	91	86	103	
		Min	42	44	46			Min	45	42	46	
		Avg Max	86.9	89.1	88.6			Avg Max	74.7	74.5	80.7	
		Avg Min	50.9	52.3	52.0			Avg Min	49.8	49.7	51.3	
		Avg	68.9	70.7	70.3			Avg	62.3	62.1	66.0	

TABLE A-5

MONTHLY TEMPERATURES 1963-64														
IN DEGREES FAHRENHEIT														
NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
E6-0053	Alamitos Perc. Pond	Max	87	70	72	64	75	79	87	82	99	95	101	99
		Min	39	36	29	30	30	26	35	34	41	45	48	44
		Avg Max	73.4	62.6	55.5	57.0	63.9	63.8	69.1	69.9	76.3	82.9	81.5	81.4
		Avg Min	51.0	42.9	35.1	37.6	38.0	39.0	42.8	45.1	50.2	53.9	54.1	51.8
		Avg	62.2	52.8	45.3	47.3	51.0	51.4	56.0	57.5	63.2	68.4	67.8	66.6
E4-0064	Alamo 1 N	Max	92	71	59	61	72	76	87	86	101	101	99	96
		Min	39	35	30	29	29	29	34	37	42	46	42	43
		Avg Max	73.2	60.5	48.6	54.3	60.7	63.0	70.3	71.6	79.0	87.5	89.7	81.0
		Avg Min	48.6	41.4	34.8	35.4	35.4	37.1	40.8	44.3	50.4	52.1	54.3	49.5
		Avg	60.9	51.0	41.7	44.9	48.1	50.0	55.6	58.0	64.7	69.8	72.0	65.2
E3-0212	Angwin Pacific Union College	Max	92	66	62	61	71	74	83	82	99	99	99	98
		Min	40	36	33	29	26	29	28	27	37	43	44	38
		Avg Max	68.1	56.6	54.9	50.5	60.3	57.6	66.5	70.6	78.3	87.8	88.0	81M
		Avg Min	50.9	44.7	40.3	36.7	39.9	38.3	39.9	41.6	48.8	53.2	53.1	49M
		Avg	59.5	50.7	47.6	43.6	50.1	48.0	53.2	56.1	63.6	70.5	70.6	65M
D3-0360-01	Atascadero HMS	Max	96	80	73	76	76	80	94	88	106	105	104	100
		Min	38	32	24	24	25	24	31	34	42	46	46	40
		Avg Max	79.3	65.9	67.6	62.8	66.5	65.5	70.8	74.8	85.8	93.9	94.7	83.2
		Avg Min	48.9	39.3	30.2	31.0	29.9	34.4	39.3	41.7	50.9	55.1	56.2	47.4
		Avg	64.1	52.6	48.9	46.9	48.2	50.0	55.0	58.2	68.4	74.5	75.4	65.3
D0-0674	Ben Lomond	Max	92	71	67	63	72	72	84	82	88	93	93	98
		Min	36	32	28	29	30	29	33	33	42	41	45	40
		Avg Max	75.2	60.9	61.0	57.0	63.7	64.4	67.2	68.8	76.4	83.1	82.4	79.5
		Avg Min	45.9	40.5	34.2	35.3	33.4	35.8	39.7	42.9	49.9	49.4	48.0	47.2
		Avg	60.6	50.7	47.6	46.2	48.6	50.1	53.5	55.9	63.2	66.3	65.2	63.4
E4-0693	Berkeley	Max	75	68	63	62	75	75	85	72	83	82	82	91
		Min	45	41	34	37	39	36	40	43	49	51	53	51
		Avg Max	68.3	61.0	54.6	54.7	61.5	59.7	62.6	61.9	68.3	69.9	69.5	71.0
		Avg Min	52.9	48.0	39.7	41.7	43.5	43.5	46.3	48.1	52.4	53.8	55.4	55.0
		Avg	60.6	54.5	47.2	48.2	52.5	51.6	54.5	55.0	60.4	61.9	62.5	63.0
E7-1206	Burlingame	Max	81	70	62	61	75	76	85	78	89	95	94	95
		Min	41	37	29	31	31	33	34	37	45	46	47	44
		Avg Max	72.0	62.7	53.7	57.2	63.8	63.9	67.1	67.8	73.9	78.0	78.8	78.4
		Avg Min	50.5	44.3	37.1	38.8	37.8	41.5	42.4	45.4	50.6	52.3	51.9	49.3
		Avg	61.3	53.5	45.4	48.0	50.8	52.7	54.8	56.6	62.3	65.2	65.4	63.9
D4-1534	Carmel Valley	Max	81	80	78	69	82	80	92	76	85	88	91	98
		Min	38	32	29	30	28	29	32	33	37	39	39	36
		Avg Max	74.9	67.3	67.3	61.6	66.6	63.2	65.7	66.1	72.6	75.3	77.5	77.3
		Avg Min	47.8	43.1	38.6	36.8	35.0	36.4	39.2	40.5	46.0	47.6	47.0	47.0
		Avg	61.4	55.2	53.0	49.2	50.8	49.8	52.5	53.3	59.3	61.5	62.3	62.2
F9-1838	Cloverdale 3 SSE	Max	90	74	64	68	81	82	92	87	104	105	104	107
		Min	42	34	29	30	29	33	34	38	44	47	48	42
		Avg Max	71.9	61.7	52.9	55.1	66.3	64.3	69.6	73.3	81.9	91.9	91.9	85.6
		Avg Min	48.4	41.3	34.3	36.2	36.1	39.2	41.8	44.4	51.7	52.2	53.5	49.7
		Avg	60.2	51.5	43.6	45.7	51.2	51.8	55.7	58.9	66.8	72.1	72.7	67.2
F9-2105	Coyote Dam (Lake Mendo.)	Max	101	75	72	69	81	81	91	82	102	106	103	104
		Min	34	32	25	26	24	27	32	32	42	44	47	38
		Avg Max	77.7	62.5	65.2	55.1	68.2	64.3	71.5	70.4	80.7	89.0	92.0	87.0
		Avg Min	45.5	38.8	32.1	34.5	29.8	33.5	36.5	40.9	48.9	50.8	51.4	44.6
		Avg	61.6	50.6	48.6	44.8	49	48.9	54.0	55.7	64.9	69.9	72.7	65.8

TABLE A-5

MONTHLY TEMPERATURES 1963-64														
IN DEGREES FAHRENHEIT														
NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
E6-2109	Coyote Reservoir	Max	93	74	68	63	72	78	90	88	104	103	100	102
		Min	32	27	24	23	25	28	28	33	40	39	41	36
		Avg Max	74.1	61.5	57.6	55.1	62.3	62.2	67.9	71.8	80.2	88.0	86.8	82.1
		Avg Min	45.5	38.2	31.3	32.4	31.1	34.0	36.7	40	46.7	48.4	48.1	44.8
		Avg	59.8	49.8	44.4	43.8	46.7	48.1	52.3	55.9	63.5	68.2	67.4	63.4
E4-2177	Crockett	Max	83	71	56	63	77	78	85	80	99	100	97	99
		Min	44	38	31	31	33	34	37	42	50	50	53	48
		Avg Max	74.0	60.5	46.5	54.6	64.0	63.1	68.1	70.1	77.6	84.5	84.1	80.4
		Avg Min	52.8	45.4	36.6	37.9	38.3	41.5	44.2	47.0	53.2	54.4	56.2	54.4
		Avg	63.4	53.0	41.6	46.3	51.2	52.3	56.2	58.6	65.4	69.5	70.2	67.4
D0-2290	Davenport	Max	72	73	77	72	72	70	74	62	69	72	68	81
		Min	46	42	39	37	38	38	39	41	45	46	48	45
		Avg Max	65.9	61.1	60.2	56.3	59.4	56.2	57.0	56.0	61.2	77.7	63.5	66.2
		Avg Min	52.4	48.7	45.6	42.8	43.3	42.5	43.3	44.8	49.3	50.1	51.7	50.4
		Avg	59.2	54.9	52.9	49.6	51.4	49.4	50.2	50.4	55.2	63.9	57.6	58.3
E3-2580	Duttons Landing	Max	82	71	57	64	74	80	88	81	94	93	91	99
		Min	38	36	30	29	30	32	34	35	43	43	49	42
		Avg Max	72.3	61.8	50.4	55.5	65.2	64.3	69.0	68.7	75.3	78.6	78.8	80.0
		Avg Min	48.7	42.0	35.1	35.6	35.4	40.0	41.1	43.2	50.2	52.0	53.5	49.9
		Avg	60.5	51.9	48.7	45.6	50.0	52.2	55.1	56	62.8	65.0	66.2	65.0
E3-2934	Fairfield Police Sta.	Max	96	73	57	65	NR	80	89	88	102	103	103	102
		Min	39	34	25	29	31	32	33	40	47	51	50	48
		Avg Max	76.8	62.0	48.1	55.9	M	66.8	72.7	73.8	81.6	86.7	89.3	86.4
		Avg Min	50.3	42.7	35.5	35.6	M	40.9	44.0	47.5	53.7	55.8	56.3	53.4
		Avg	63.6	52.4	41.8	45.8	M	53.9	58.4	60.7	67.7	72.3	72.8	69.9
D1-3238	Fremont Peak State Park	Max	90	80	83	71	82	82	86	92	102	97	94	89
		Min	42	27	24	26	26	26	28	32	35	42	36	31
		Avg Max	71.4	58.9	64.1	55.6	62.8	57.2	62.0	63.5	73.3	83.5	79.4	72.8
		Avg Min	52.4	45.8	43.5	37.2	37.3	37.7	42.7	44.9	51.8	60.8	57.6	48.2
		Avg	61.9	52.4	53.8	46.4	50.0	47.4	52.4	54.2	62.6	72.2	68.5	60.5
D1-3417	Gilroy	Max	90	75	71	66	76	80	93	92	103	103	103	105
		Min	36	30	27	24	27	28	34	31	40	42	39	42
		Avg Max	76.6	64.1	58.3	58.8	65.5	65.2	70.7	73.7	81.9	88.4	88.3	83.2
		Avg Min	49.4	41.5	31.6	32.3	30.7	36.5	39.6	43.0	47.9	50.4	51.0	47.6
		Avg	63.0	52.8	45.0	45.6	48.1	50.9	55.2	58.4	64.9	69.4	69.7	65.4
F9-3557	Graton	Max	88	72	59	65	78	79	92	84	98	104	102	106
		Min	38	35	28	31	31	32	30	33	39	41	43	38
		Avg Max	72.9	61.4	50.0	54.7	65.2	63.6	70.5	71.3	79.8	85.2	86.7	84.7
		Avg Min	49.9	43.7	38.7	38.3	36.1	38.5	37.9	42.1	48.0	49.5	50.0	47.0
		Avg	61.4	52.6	44.4	46.5	50.7	51.0	54.2	56.7	63.9	67.4	68.4	65.0
F9-3578	Graton 1 W	Max	86	69	57	63	78	78	87	81	99	99	99	101
		Min	36	33	25	28	27	27	30	33	40	40	42	38
		Avg Max	69.9	59.1	48.6	53.7	64M	63.0	69.3	70.7	79.3	85.4	85.9	82.9
		Avg Min	48.4	42.4	35.6	35.4	33M	34.7	37.6	40.9	47.2	48.1	48.7	46.7
		Avg	59.2	50.8	42.1	44.6	49M	48.9	53.5	55.8	63.3	66.8	67.3	64.8
E8-3714	Half Moon Bay 2 NNW	Max	75	68	70	69	72	73	77	64	68	72	69	84
		Min	43	41	35	35	36	33	38	37	42	46	48	46
		Avg Max	67.5	62.0	62.0	59.0	64.4	59.6	57.7	57.9	62.2	64.4	66M	66.2
		Avg Min	51.5	48.8	41.4	39.8	40.3	40.9	44.3	45.7	49.8	51.8	52M	50.9
		Avg	59.5	55.4	51.7	49.4	52.4	50.3	51.0	51.8	56.0	58.1	59M	58.6

TABLE A-5

MONTHLY TEMPERATURES 1963-64
IN DEGREES FAHRENHEIT

NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
F9-3875	Healdsburg	Max	97	77	60	67	82	85	93	89	105	106	105	108
		Min	42	35	29	31	31	34	34	37	44	46	47	42
		Avg Max	76.0	63.3	51.0	56.4	68.0	66.8	73.8	75.5	83.5	91.1	90.9	87.7
		Avg Min	50.8	44.4	37.0	36.8	35.6	39.8	42.8	45.0	51.2	52.1	52.9	51.4
		Avg	63.4	53.9	44.0	46.6	51.8	53.3	58.3	60.3	67.4	71.6	71.9	69.6
D1-4022	Hollister	Max	82	75	69	68	79	80	93	84	90	92	95	103
		Min	34	28	25	24	26	27	31	M	41	43	43	40
		Avg Max	75.2	64.4	60.5	59.7	66.6	65.5	69.9	70.0	74.9	80.5	82M	81.0
		Avg Min	48.1	39.4	30.5	34.4	31.2	35.1	39.8	42M	46.9	49.1	49M	M
		Avg	61.7	51.9	45.5	47.1	48.9	50.3	54.9	56M	60.9	64.8	65M	M
F9-4277	Inverness Mery	Max	NR	NR	NR	68	80	76	82	74	90	82	92	92
		Min	NR	NR	NR	32	33	32	34	38	40	40	42	40
		Avg Max	NR	NR	NR	60.0	65.6	61.2	64.7	63.8	70.8	74.4	74.8	74.6
		Avg Min	NR	NR	NR	41.0	38.3	40.4	42.1	45.4	48.8	50.9	51.2	49.8
		Avg	NR	NR	NR	50.5	52.0	50.8	53.4	54.6	59.8	62.6	63.0	62.2
E2-4500	Kentfield	Max	85	70	59	64	78	79	87	84	95	98	99	100
		Min	40	37	30	31	33	33	34	37	44	45	47	42
		Avg Max	72.1	61.4	49.7	55.3	64.6	64M	68M	69.4	76.6	83.3	83M	79.8
		Avg Min	50.2	44.6	37.5	37.7	37.3	39M	41M	44.5	50.1	51.1	52M	49.5
		Avg	61.2	53.0	43.6	46.5	51.0	52M	54M	57.0	63.4	67.2	67M	64.6
D2-4555	King City	Max	87	82	77	74	79	83	95	87	M	101	95	104
		Min	34	29	25	23	25	26	32	32	N	46	M	40
		Avg Max	78.5	68M	67M	62M	69M	68.3	73M	73.0	M	M	86.6M	84M
		Avg Min	48.7	41M	32M	35M	32M	35.7	40M	42.5	48.7	M	M	46M
		Avg	63.6	54M	50M	48M	51M	52.0	57M	57.8	M	M	M	65M
E6-4922	Lexington Reservoir	Max	90	74	68	65	71	79	86	85	102	101	100	101
		Min	36	31	27	27	29	29	31	33	39	40	40	38
		Avg Max	73.5	61.3	56.4	56.0	62.9	61.8	67.8	70.7	78.8	86.7	84.8	81.6
		Avg Min	47.0	40.9	33.3	35.5	34.4	36.1	39.1	40.7	45.8	48.9	48.7	47.3
		Avg	60.2	51.1	44.8	45.8	48.7	49.0	53.4	55.7	62.3	67.8	66.8	64.4
D3-4963	Linn Ranch	Max	93	72	72	70	71	80	89	89	105	M	M	M
		Min	37	30	24	24	26	25	32	33	44	M	M	M
		Avg Max	74.4	61.9	59.8	56.8	63.6	63.4	70.2	74.4	85.2	M	M	M
		Avg Min	49.4	40.7	29.9	32.4	31.1	33.8	39.2	43.0	50.7	M	M	M
		Avg	61.9	51.3	44.9	44.6	47.4	48.6	54.7	58.7	68.0	M	M	M
E5-4996	Livermore Sewage Treatment Plant	Max	98	74	66	63	74	80	86	86	102	102	101	100
		Min	22	30	22	22	24	26	30	34	42	45	44	36
		Avg Max	75.9	64.9	54.0	57.2	63.3	60.1	69.8	70.7	79.1	86.5	86.7	83.4
		Avg Min	44.6	38.0	31.6	32.7	30.8	36.9	37.6	42.5	49.5	52.6	51.7	47.5
		Avg	60.0	51.4	42.8	45.0	47.0	48.5	53.7	56.6	64.3	69.6	69.2	65.5
E5-4997	Livermore 2 SSW	Max	98	72	61	64	73	79	90	90	105	105	104	100
		Min	35	28	20	22	26	25	29	34	41	42	43	44
		Avg Max	75.9	62.5	50.4	55.7	62.4	63.1	70.0	72.9	79.2	88.9	88.6	83.0
		Avg Min	45.6	37.5	29.2	31.5	31.0	34.9	37.5	40.1	47.2	50.4	52.1	49.9
		Avg	60.8	50.0	39.8	43.6	46.7	49.0	53.8	56.5	63.2	69.7	70.4	66.5
E6-5123	Los Gatos	Max	85	69	69	63	71	81	89	84	100	99	98	98
		Min	40	31	30	31	31	31	35	37	45	46	47	44
		Avg Max	73.5	61.5	55.1	57.6	62.8	64.5	69.6	70.2	78.5	83.5	83.7	81.2
		Avg Min	47.8	41.2	35.0	36.2	35.0	39.5	42.1	44.9	49.9	53.6	53.4	50.3
		Avg	60.7	51.4	45.1	46.9	48.9	52.0	55.9	57.6	64.2	68.6	68.6	65.8

TABLE A-5

MONTHLY TEMPERATURES 1963-64

IN DEGREES FAHRENHEIT

NUMBER	STATION NAME		MONTHS											
			OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
E3-5333	Mare Island	Max	84	72	55	62	76	80	90	87	95	95	M	M
		Min	48	42	33	37	40	38	41	43	51	55	M	M
		Avg Max	72.9	60.6	47.0	54.4	63.8	65.8	70.7	73.5	78.9	82.0	M	M
		Avg Min	57.1	49.4	39.8	42.6	44.2	46.7	49.1	51.8	57.3	59.6	M	M
		Avg	65.0	55.0	43.4	48.5	54.0	56.2	59.9	62.6	68.1	70.8	M	M
E4-5377	Martinez Fire Sta.	Max	88	72	58	62	80	80	90	86	102	102	100	102
		Min	40	36	28	30	33	33	35	40	47	49	52	48
		Avg Max	73.8	61.0	47.3	54.2	64.0	64.2	69.8	72.9	79.6	86.6	86.7	82.2
		Avg Min	50.5	43.4	35.9	35.7	37.0	40.7	43.6	47.6	53.3	55.0	55.7	52.8
		Avg	62.2	52.2	41.6	45.0	50.5	52.5	56.7	60.3	66.5	70.8	71.2	67.5
D4-5795	Monterey	Max	80	76	75	64	73	75	84	69	76	84	81	95
		Min	46	42	34	36	38	37	39	42	47	48	48	48
		Avg Max	68.5	63.7	61.3	57.7	62.1	58.4	59.1	59.1	64.7	66.3	66.3	69.3
		Avg Min	53.1	48.8	44.6	42.5	43.1	42.8	44.2	46.1	50.1	51.6	52.2	51.7
		Avg	60.8	56.3	53.0	50.1	52.6	50.6	51.7	52.6	57.4	59.0	59.3	60.5
E4-5915	Mt. Diablo North Gate	Max	90	72	74	73	68	77	85	84	101	104	100	100
		Min	39	34	32	31	33	31	31	32	40	45	46	44
		Avg Max	70.8	58.7	60.2	54.4	60.3	58.8	66.3	68.3	76.4	87.9	88.9	81.5
		Avg Min	51.6	45.1	42.3	37.6	40.8	39.3	41.8	43.9	50.4	58.8	59.0	54.6
		Avg	61.2	51.9	51.3	46.0	50.6	49.1	54.1	56.1	63.4	73.4	74.0	68.1
E5-5933	Mt. Hamilton	Max	87	69	68	58	63	65	75	75	89	89	88	89
		Min	34	28	26	25	24	22	25	27	34	38	38	38
		Avg Max	64M	52M	55M	45M	52M	47M	56M	58M	67M	78M	78M	72M
		Avg Min	M	40M	42M	33M	36M	33M	38M	43M	49M	61M	62M	54M
		Avg	M	46M	49M	39M	44M	40M	47M	51M	58M	70M	70M	63M
E3-6068	Napa - Haven	Max	90	80	60	64	80	80	89	88	100	100	RE	RE
		Min	35	30	24	26	28	26	31	34	40	44	RE	RE
		Avg Max	74.5	62.8	52.7	55.4	65.1	64.7	71.7	72.2	77.1	84.6	RE	RE
		Avg Min	47.1	40.2	33.3	34.6	32.7	36.5	39.0	46.6	47.5	50.4	RE	RE
		Avg	60.8	51.5	43.0	45.0	48.9	50.6	55.4	59.4	62.3	67.5	RE	RE
E3-6074	Napa State Hospital	Max	89	72	62	66	80	85	90	85	98	101	98	104
		Min	36	33	28	28	30	29	31	33	42	46	49	42
		Avg Max	75.5	63.7	53.8	56.8	66.4	66.6	70.9	72.3	78.4	83.6	83.2	83.0
		Avg Min	49.1	42.6	34.2	36.0	35.9	36.8	40.9	43.5	49.7	52.9	53.4	49.7
		Avg	62.3	53.2	44.0	46.4	51.2	51.7	55.9	57.9	64.1	68.3	68.3	66.4
E5-6144	Newark	Max	81	70	62	61	78	76	85	76	94	92	92	94
		Min	41	39	30	30	30	29	37	40	49	52	54	50
		Avg Max	71.7	62.3	54.0	56.7	62.7	61.2	66.0	65.0	72.8	75.5	76M	76.0
		Avg Min	52.3	45.4	36.5	38.6	36.9	40.4	44.3	47.3	52.8	57.0	58M	55.8
		Avg	62.0	53.9	45.3	47.7	49.8	50.8	55.2	56.2	62.8	66.3	67M	65.9
E4-6335	Oakland WBAP	Max	76	67	61	62	72	74	78	65	83	84	83	89
		Min	46	44	35	36	41	43	39	44	51	53	55	53
		Avg Max	67.8	59.2	50.4	53.4	59.6	58.2	61.3	60.0	65.6	68.3	70.1	71.6
		Avg Min	56.1	48.8	40.3	43.3	45.0	47.4	48.7	50.4	54.6	56.1	57.8	56.6
		Avg	62.0	54.0	45.4	48.4	52.3	52.8	55.0	55.2	60.1	62.2	64.0	64.1
E7-6646	Palo Alto City Hall	Max	81	71	62	64	75	76	85	77	93	93	93	95
		Min	37	33	27	29	30	33	31	37	43	45	47	44
		Avg Max	71.1	61.9	53.2	55.9	62.9	62.3	66.8	66.7	72.9	77M	77.6	77.2
		Avg Min	48.7	42.8	34.8	36.2	35.0	40.2	41.8	45.0	50.5	55M	54.4	49.2
		Avg	59.9	52.4	44.0	46.1	49.0	51.3	54.3	55.9	61.7	66M	66.0	63.2

TABLE A-5

MONTHLY TEMPERATURES 1963-64
IN DEGREES FAHRENHEIT

NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
E2-6826	Petaluma F. S. No. 2	Max	90	73	60	65	80	79	88	80	99	99	100	104
		Min	36	31	25	25	28	29	29	35	41	42	42	42
		Avg Max	74.6	63.0	50.9	56.5	65.9	63.9	68.1	68.7	76.2	82.4	83.6	83.0
		Avg Min	48.8	42.5	35.9	35.0	34.4	37.1	39.9	43.5	48.2	50.1	50.4	49.0
		Avg	61.7	52.8	43.4	45.8	50.2	50.5	54.0	56.1	62.2	66.3	67.0	66.0
D2-6926	Pinnacles Nat'l Mon.	Max	101	82	78	77	79	82	92	89	107	105	102	104
		Min	32	26	24	24	25	26	29	31	40	42	42	38
		Avg Max	80.7	66.0	67.6	60.4	67.8	65.4	72.8	75.3	85.6	95.5	95.1	89.2
		Avg Min	44.7	38.3	32.0	32.2	30.3	35M	37.7	40.5	46M	50.8	50.2	44.4
		Avg	62.7	52.2	49.8	46.3	49.1	50M	55.3	57.9	66M	73.2	72.7	66.8
E5-6991-05	Pleasanton Nursery	Max	96	78	61	60	74	86	90	90	106	104	103	101
		Min	33	30	25	24	26	28	32	35	40	44	47	43
		Avg Max	74.6	60.7	51.5	55.8	63.9	63.8	71	73	79.7	88.9	88.7	83.9
		Avg Min	47.5	40.5	34.2	34.7	32.0	37.2	39.9	43.6	48.9	51.5	51.6	48.3
		Avg	61	50.6	42.8	45.2	48.0	50.5	55.4	58.3	64.3	70.2	70.2	66.1
F8-7009	Point Arena	Max	72	67	73	71	72	65	60	64	82	72	76	91
		Min	37	36	33	31	30	31	33	34	45	43	44	39
		Avg Max	65.9	59.9	57.8	54.5	58.6	54.9	56.2	57.9	63.3	64.4	66.0	65.9
		Avg Min	48.6	45.0	41.7	38.7	37.7	38.2	39.9	42.7	48.0	48.9	50M	46.3
		Avg	57.3	52.5	49.8	46.6	48.2	46.6	48.1	50.3	55.7	56.7	58M	56.1
D5-7024	Point Piedras Blancas	Max	72	72	72	64	70	70	71		68	70	74	76
		Min	50	43	41	40	40	38	36	M	43	42	44	41
		Avg Max	67M	63.5	63.0	60.1	62.2	59.0	59.7	M	63.2	64.3	65.8	66.0
		Avg Min	53.9	50.2	46.5	45.5	45.4	43.7	41.8	M	45.3	45.4	48.5	47.9
		Avg	60M	56.9	54.8	52.8	53.8	51.4	50.8	M	54.3	54.9	57.2	57.0
E4-7070	Port Chicago NAD	Max	91	71	57	62	77	80	87	87	102	104	100	99
		Min	37	33	28	M	28	28	30	35	47	49	48	45
		Avg Max	74.7	61.4	47.3	55M	64.1	64.2	70.8	72.7	80.0	87.5	87.2	82.7
		Avg Min	48.4	40.8	34.7	36M	33.2	35.8	39.5	44M	51.0	53.5	53.8	50.5
		Avg	61.6	51.1	41.0	46M	48.7	50.0	55.2	58M	65.5	70.5	70.5	66.6
F9-7109	Potter Valley P.H.	Max	99	71	M	71	81	80	89	88	104	108	104	105
		Min	30	27	21	23	24	22	28	28	40	44	39	38
		Avg Max	76M	61M	M	54M	68M	M	72M	77M	M	95M	95.4	M
		Avg Min	43M	37M	M	30M	28M	M	33M	40M	M	51M	50.3	M
		Avg	60M	49M	M	42M	48M	M	53M	58M	M	73M	72.9	M
D2-7150	Priest Valley	Max	97	73	72	76	69	76	86	87	104	103	101	99
		Min	25	23	19	15	16	18	24	22	32	36	40	30
		Avg Max	74.3	61.1	61.9	55.2	61.6	60.9	68.0	73M	83.8	93.7	93.1	86.2
		Avg Min	40.1	33.1	24.5	25.4	23.8	28.1	32.0	36M	42.9	49.0	49.0	38.7
		Avg	57.3	47.1	43.2	40.3	42.7	44.5	50.0	56M	63.4	71.4	71.1	62.5
D1-7190	Quien Sabe Hay Camp	Max	93	76	74	71	71	75	88	85	101	101	95	101
		Min	24	23	18	15	14	21	20	27	32	35	39	32
		Avg Max	71.1	61.5	63.4	58.4	60.4	59.4	66.6	68.7	76.5	85.6	83.1	79.9
		Avg Min	40.8	35.5	27.2	28.8	23.8	29.8	32.6	35.8	43.7	47.3	47.3	40.8
		Avg	56.0	48.5	45.3	44.1	42.1	44.6	49.6	52.2	60.1	66.5	65.2	60.4
E7-7339	Redwood City	Max	83	71	65	65	76	79	89	86	97	98	98	99
		Min	40	35	29	31	30	32	36	39	45	45	48	45
		Avg Max	74.3	63.9	55.5	58.2	65.1	65.0	70.4	71.9	78.5	83.6	84.3	82.8
		Avg Min	50.6	44.2	36.3	38.7	36.8	40.5	42.3	45.4	50.4	52.4	53.6	49.9
		Avg	62.3	54.1	45.9	48.5	51.0	52.8	56.4	58.7	64.5	68.0	69.0	66.4

TABLE A-5

MONTHLY TEMPERATURES 1963-64

IN DEGREES FAHRENHEIT

NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
E4-7414	Richmond	Max	78	71	63	64	78	78	87	72	83	85	84	95
		Min	44	40	33	35	37	37	38	44	50	51	54	52
		Avg Max	70.7	63.1	54.3	56.6	64.0	61.8	64.7	63.5	68.7	68.8	69.9	73.0
		Avg Min	53.9	47.5	38.9	41.1	42.2	44.1	47.5	50.3	54.2	54.7	56.8	55.8
		Avg	62.3	55.3	46.6	48.9	53.1	53.0	56.1	56.9	61.5	61.8	63.4	64.4
D4-7539-01	Roosevelt Ranch	Max	79	72	71	73	72	75	85	78	85	84	86	90
		Min	51	48	48	44	43	41	42	43	49	50	52	50
		Avg Max	69.2	62.3	63.3	60.7	63.2	59.8	63.2	63.5	69.2	73.5	73.9	70.5
		Avg Min	57.1	53.9	54.0	50.9	49.7	47.7	50.1	49.4	54.5	57.9	58.1	56.1
		Avg	63.2	58.1	58.6	55.8	56.4	53.8	56.6	56.4	61.8	65.7	66.0	63.3
E3-7643	Saint Helena	Max	97	74	65	68	80	82	91	88	104	105	105	106
		Min	37	32	26	26	27	29	30	33	42	44	45	40
		Avg Max	74.6	62.2	53.8	55.3	67.1	65.0	73.2	74.6	81.6	90.3	90.2	86.3
		Avg Min	48.8	41.3	34.2	34.4	34.0	36.4	39.2	43.2	50.0	51.8	51.9	48.9
		Avg	61.7	51.8	44.0	44.9	50.6	50.7	56.2	58.9	65.8	71.1	71.1	67.6
E4-7661	Saint Mary's College	Max	91	67	59	61	74	77	87	86	102	101	99	96
		Min	36	30	24	25	25	27	29	34	45	45	44	41
		Avg Max	71.5	58.5	48.8	53.7	63.0	61.8	68.1	68.1	77.4	83.2	82.8	79.0
		Avg Min	47.0	39.9	33.8	33.5	31.6	35.0	38.3	43.2	50.2	54.0	53.6	49.5
		Avg	59.3	49.2	41.3	43.6	47.3	48.4	53.2	55.7	63.8	68.6	68.2	64.3
D2-7668	Salinas 2 E	Max	82	79	78	71	80	78	90	71	82	86	84	97
		Min	38	34	28	27	29	30	30	40	45	47	45	37
		Avg Max	74.1	66.6	65.6	61.0	67.4	63.4	65M	64.7	70.0	71.8	72.7	74.3
		Avg Min	50.3	43.1	37.5	36.5	35.2	38.6	42M	45.6	50.3	52.0	53.1	49.4
		Avg	62.2	54.9	51.6	48.8	51.3	51.0	53M	55.2	60.2	61.9	62.9	61.9
D2-7669	Salinas FAA Airport	Max	83	78	77	67	80	80	91	72	83	87	85	98
		Min	39	36	30	28	31	32	36	40	47	50	47	46
		Avg Max	73M	65.5	64.8	59.9	66.8	63.8	64.8	65.2	70.9	71.4	72.2	73.7
		Avg Min	52M	44.4	38.1	37.8	37.4	40.3	42.9	46.9	52.5	53.8	53.9	51.5
		Avg	62M	55.0	51.5	48.9	52.1	52.1	53.9	56.1	61.7	62.6	63.1	62.6
D3-7714	San Antonio Mission	Max	97	80	75	76	75	82	90	92	108	106	105	104
		Min	31	26	22	21	23	22	28	25	38	39	39	37
		Avg Max	80.1	66.5	66M	60M	67.3	67M	73.7	78.5	88.4	98.0	97.5	91.1
		Avg Min	43.5	36.4	29M	29M	28.0	31M	34.3	36.6	44.9	49.6	47.9	43.0
		Avg	61.8	51.5	48M	44M	47.7	49M	54.0	57.6	66.7	73.8	72.7	67.1
E8-7767	San Fran. Richmond Sunset	Max	75	69	60	69	72	72	77	63	69	68	69	90
		Min	44	42	36	35	36	34	38	42	47	46	49	47
		Avg Max	M	62.8	54.2	57.1	61.5	57.8	59.3	58.3	61.9	62.1	64.8	67.3
		Avg Min	52.9	47.7	40.7	41.7	42.2	42.6	45.6	47.9	50.8	52.3	55.0	55.3
		Avg	M	55.3	47.5	49.4	51.9	50.2	52.5	53.1	56.4	57.2	59.9	61.3
E7-7769	San Francisco WBAP	Max	82	68	64	61	72	74	85	70	91	91	89	92
		Min	45	39	33	33	36	36	40	43	49	51	52	48
		Avg Max	70.4	61.9	53.3	56.3	61.6	60.6	63.4	63.7	69.7	71.6	73.1	73.2
		Avg Min	54.0	46.9	39.2	40.0	40.0	43.1	45.0	47.9	52.8	54.5	55.4	53.7
		Avg	62.2	54.4	46.3	48.2	50.8	51.9	54.2	55.8	61.3	63.1	64.3	63.5
E7-7772	San Fran. Fed. Off. Bldg.	Max	78	69	61	66	75	75	82	66	81	81	80	92
		Min	52	45	37	42	44	43	44	44	49	50	52	50
		Avg Max	68.7	61.6	53.1	56.1	62.4	58.9	59.7	58.3	63.6	64.6	65.5	69.0
		Avg Min	57.1	51.7	43.4	45.8	47.6	47.4	47.8	48.4	52.0	53.1	54.5	55.8
		Avg	62.9	56.6	48.3	51.0	55.0	53.2	53.8	53.4	57.8	58.9	60.0	62.4

TABLE A-5

MONTHLY TEMPERATURES 1963-64
IN DEGREES FAHRENHEIT

NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
E8-7807	San Gregorio 3 SE	Max	78	M	77	68	74	74	83	65	80	83	83	89
		Min	36	M	30	29	27	28	33	32	40	40	41	39
		Avg Max	69.4	M	63.3	58.4	62.8	58.5	60.4	59.8	66.0	68.2	69.6	71M
		Avg Min	48.0	M	38.7	38.0	34.8	37.6	39.9	42.8	47.7	49.6	49.4	48M
		Avg	58.7	M	51.0	48.2	48.8	48.1	50.2	51.3	56.9	58.9	59.5	60M
E6-7821	San Jose	Max	M	M	M	65	76	80	87	80	95	94	94	98
		Min	M	M	M	34	36	35	39	41	48	48	48	46
		Avg Max	M	M	M	58.6	64.9	63.9	68.4	68.7	75.7	79.9	79.4	80M
		Avg Min	M	M	M	41.2	40.6	43.3	45.3	47.8	52.8	55.1	55.1	54M
		Avg	M	M	M	49.9	52.8	53.6	56.8	58.3	64.3	67.5	67.3	67M
E6-7824	San Jose Decid. FFS	Max	88	72	67	64	77	82	93	84	99	96	100	101
		Min	42	37	31	32	34	34	38	41	47	48	49	48
		Avg Max	75.6	64.7	57.6	59.1	66.0	66.2	72.2	70.3	79.0	82.6	83.9	83.0
		Avg Min	53.4	45.6	37.2	40.2	38.5	42.0	44.8	47.6	52.7	55.3	55.8	53.1
		Avg	64.5	55.2	47.4	49.6	52.2	54.0	58.5	59.0	65.8	69.0	69.9	68.1
E7-7864	San Mateo	Max	81	71	65	63	72	76	85	73	92	94	91	96
		Min	45	41	31	35	37	36	38	42	49	50	52	44
		Avg Max	72.2	63.7	55.9	57.6	64.1	62M	64.8	65.0	72.4	76M	76M	76.2
		Avg Min	54.4	48.1	39.9	42M	41.4	43M	45.3	48.4	56.6	57.9	58M	54.6
		Avg	63.3	55.9	47.9	50M	52.8	52M	55.1	56.7	64.5	67M	67M	65.4
E2-7880	San Rafael	Max	82	71	60	64	80	81	89	85	97	97	97	101
		Min	44	41	32	33	36	36	36	40	46	47	48	42
		Avg Max	74M	63M	52M	57M	66M	66M	70M	71.2	78M	83.4	83.4	82.5
		Avg Min	51M	48M	38M	39M	40M	41M	43M	45.7	52M	52.5	52.7	51.4
		Avg	62M	55M	45M	48M	53M	54M	56M	58.5	65M	68.0	68.1	67.0
E6-7912	Santa Clara University	Max	85	71	68	65	76	80	88	86	92	96	92	96
		Min	38	36	31	32	35	35	38	40	46	48	50	47
		Avg Max	74M	62M	56M	58.6	65.4	66M	71M	71M	77M	82M	84.5	81M
		Avg Min	50M	45M	37M	40.3	39.3	41M	43M	47M	52M	54M	57.3	53M
		Avg	62M	54M	46M	49.5	52.4	54M	57M	59M	65M	68M	70.9	67M
D0-7916	Santa Cruz	Max	83	79	80	65	77	78	91	77	81	89	85	96
		Min	37	33	28	29	30	28	34	34	41	41	42	40
		Avg Max	73.5	65.2	63.0	59.0	65.5	63.9	67.4	69.2	74.4	78.2	76.3	77.2
		Avg Min	48.3	41.7	36.0	36.4	35.3	37.0	40.4	42.7	47.3	49.1	49.7	47.1
		Avg	60.9	53.5	49.5	47.7	50.4	50.5	53.9	56.0	60.9	63.7	63.0	62.2
D2-7959-10	Santa Rita Muther	Max	78	68	75	M	M	M	M	M	M	M	M	M
		Min	40	33	31	M	M	M	M	M	M	M	M	M
		Avg Max	67.5	60.2	60.9	56.4	M	57.7	59.3	59.7	62.9	63.0	63.0	66.5
		Avg Min	48.3	40.5	36.2	34.7	M	36.8	41.9	46.4	50.2	50.7	50.9	49.5
		Avg	57.9	50.4	48.6	45.6	M	47.3	50.6	53.1	56.6	56.9	57.0	58.0
F9-7964	Santa Rosa Sewage Plant	Max	90	71	67	65	81	80	86	78	97	96	95	96
		Min	32	32	25	27	28	29	30	34	41	44	45	42
		Avg Max	71.7	61.0	51.5	55.1	64.7	62.1	68.9	68.2	76.5	78.9	78.4	76.8
		Avg Min	47.1	44.2	34.6	33.8	33.8	33.9	38.5	42.5	49.0	49.7	51.2	49.2
		Avg	59.4	52.4	43.0	44.4	49.2	48.0	53.7	55.4	62.8	64.3	64.8	63.0
F9-7965	Santa Rosa	Max	92	74	61	66	83	83	90	81	99	99	102	104
		Min	35	32	26	28	29	28	30	36	41	45	45	42
		Avg Max	74.9	63.4	51.6	55.8	66.7	65.2	70.9	71.0	78.9	84.5	86.0	83.4
		Avg Min	46.3	39.3	34.0	33.0	32.3	34.6	38.9	43.3	48.3	49.9	50.5	49.0
		Avg	60.6	51.1	42.8	44.4	49.5	49.9	54.9	57.2	63.6	67.2	68.3	66.2

TABLE A-5

MONTHLY TEMPERATURES 1963-64
IN DEGREES FAHRENHEIT

NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
D2-8338-01	Soledad CTF	Max	84	79	77	M	M	M	M	M	M	M	M	M
		Min	42	36	28	M	M	M	M	M	M	M	M	M
		Avg Max	73.1	65.4	65.2	59.7	65.6	63.1	66.2	65.7	72.2	74.5	75.0	76.0
		Avg Min	48.8	42.4	35.1	35.1	33.5	31.4	40.2	43.4	48.8	51.0	52.5	56.6
		Avg	61.0	53.9	50.2	47.8	49.6	47.3	53.2	54.6	60.5	62.8	63.8	66.3
E2-8351	Sonoma	Max	96	73	60	65	81	82	90	88	103	104	100	102
		Min	34	32	25	28	28	28	30	39	42	43	39	
		Avg Max	76.0	62.0	51.1	55.8	66.9	67.0	73.0	74.4	81.5	88.6	88.5	86M
		Avg Min	46.5	41.5	35.3	35.4	33.9	36.2	37.9	41.0	47.1	48.6	49.1	46.5
		Avg	61.3	51.8	43.2	45.6	50.4	51.6	55.5	57.7	64.3	68.6	68.8	66M
D2-8446-01	Spreckels	Max	80	77	80	78	76	76	M	70	M	80	102	M
		Min	36	33	29	28	30	31	M	39	M	44	44	M
		Avg Max	72.0	65.3	63.5	62.9	66.9	60.4	M	63.3	M	71.8	77.6	M
		Avg Min	48.6	43.4	33.7	34.7	33.7	38.2	M	44.7	M	52.9	50.1	M
		Avg	60.3	54.4	48.6	48.8	50.3	49.3	M	54.0	M	62.4	63.8	M
D3-8849	Templeton	Max	94	77	73	75	74	M	M	90	107	106	104	101
		Min	35	29	23	22	24	M	M	32	40	39	42	36
		Avg Max	75.9	64.6	64.8	59.3	64.9	M	M	73.4	84.5	93.1	91.1	84.3
		Avg Min	48.2	38.9	29.7	31.8	30.4	M	M	41.6	48.1	50.7	51.2	44.5
		Avg	62.0	51.8	47.2	45.6	47.6	M	M	57.5	66.3	71.9	71.2	64.4
F9-9122	Ukiah	Max	101	73	69	65	82	81	92	88	105	110	106	108
		Min	35	31	27	27	27	32	34	43	46	48	42	
		Avg Max	74.5	61.9	59.5	55.1	67.7	64.4	71.6	73.8	82.0	90.9	92.5	88.1
		Avg Min	47.6	41.4	35.6	34.2	32.0	35.5	38.7	43.1	49.8	53.9	53.7	47.2
		Avg	61.1	51.7	47.6	44.7	49.9	50.0	55.2	58.5	65.9	72.4	73.1	67.7
E4-9185	Upper San Leandro Filters	Max	80	71	62	62	76	78	86	75	90	90	90	96
		Min	43	40	32	35	36	33	37	40	46	50	51	45
		Avg Max	70.2	62.2	55.1	55.5	62.8	60.9	64.8	63.6	69.2	73.3	74.3	73.9
		Avg Min	52.2	45.9	37.6	39.7	41.1	40.3	44.0	45.5	50.6	52.5	53.9	53.0
		Avg	61.2	54.1	46.4	47.6	52.0	50.6	54.4	54.6	59.9	62.9	64.1	63.5
E3-9305	Veterans Home	Max	88	69	63	64	76	78	90	91	104	105	100	100
		Min	38	36	30	30	31	30	32	34	42	46	48	42
		Avg Max	72.7	63.0	55.0	56.1	62.5	64.3	72.6	77.5	84.8	90.2	88.0	83.4
		Avg Min	48.0	44.5	38.2	38.7	36.7	41.0	42.7	44.6	50.4	53.6	54.4	50.3
		Avg	60.4	53.8	46.6	47.4	49.6	52.6	57.6	61.1	67.6	71.9	71.2	66.8
E4-9423	Walnut Creek 2 ESE	Max	93	71	59	64	77	80	90	88	103	103	101	99
		Min	34	31	24	25	25	27	31	34	42	45	45	40
		Avg Max	74.8	61.6	49.6	55.0	64.8	65.1	70.9	72.5	79.2	87.5	88.1	82.6
		Avg Min	46.8	39.7	34.0	32.9	31.3	34.9	38.7	42.9	49.4	52.4	52.6	47.6
		Avg	60.8	50.7	41.8	44.0	48.1	50.0	54.8	57.7	64.3	70.0	70.4	65.1
D1-9473	Watsonville Water Works	Max	82	80	73	72	77	75	89	71	76	83	80	91
		Min	40	31	29	30	31	30	34	36	41	45	43	40
		Avg Max	71.5	64.0	61.6	59.4	64.8	61.7	64.2	63.3	68.2	70.0	70.3	71.6
		Avg Min	48.5	41.5	35.6	37.1	36.0	38.0	41.8	44.7	49.0	50.3	50.5	47.3
		Avg	60.0	52.8	48.6	48.3	50.4	49.9	53.0	54.0	58.6	60.2	60.4	59.5
E3-9675-41	Wild Horse Valley	Max	M	M	M	M	M	M	M	M	M	M	M	M
		Min	M	M	M	M	M	M	M	M	M	M	M	M
		Avg Max	M	M	M	M	M	M	M	M	M	M	M	M
		Avg Min	M	M	M	M	M	M	M	M	M	M	M	M
		Avg	M	M	M	M	M	M	M	M	M	M	M	M

TABLE A-5

MONTHLY TEMPERATURES 1963-64
IN DEGREES FAHRENHEIT

NUMBER	STATION NAME		OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
F9-9770	Woodacre	Max	92	70	60	61	78	79	87	80	98	97	99	100
		Min	32	30	23	25	23	25	28	34	41	42	42	38
		Avg Max	71.8	60.1	48.8	53.5	63.7	62.2	69.6	65.9	75.1	81.6	82.4	80.7
		Avg Min	47.2	41.7	35.6	34.9	32.2	34.8	37.1	41.9	47.7	49.9	49.1	45.6
		Avg	59.5	50.9	42.2	44.2	48.0	48.5	53.4	53.9	61.4	65.8	65.8	63.2
E3-9861	Yountville Gamble	Max	91	N	66	M	M	M	M	M	M	M	M	M
		Min	41	M	23	M	M	M	M	M	M	M	M	M
		Avg Max	75.3	M	52.2	54.2	63.1	61.3	68.2	69.7	79.5	83.9	83.5	81.7
		Avg Min	48.9	M	31.8	33.8	29.7	31.4	33.2	37.3	42.6	47.0	46.1	43.0
		Avg	62.1	M	42.0	44.0	46.4	46.4	50.7	53.5	61.1	65.5	64.8	62.4
		Max												
		Min												
		Avg Max												
		Avg Min												
		Avg												
		Max												
		Min												
		Avg Max												
		Avg Min												
		Avg												
		Max												
		Min												
		Avg Max												
		Avg Min												
		Avg												
		Max												
		Min												
		Avg Max												
		Avg Min												
		Avg												
		Max												
		Min												
		Avg Max												
		Avg Min												
		Avg												

TABLE A-6

INTERIM MONTHLY EVAPORATION 1963

NUMBER	STATION NAME		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
E6 0053	Alamitos Perc. Pond	Evap.										9.37	8.40	6.38
		Wind Movement										1,861	1,658	963
		Water Temp Avg. Max.										NR	NR	NR
		Water Temp Avg. Min.										NR	NR	NR
E7 1206	Burlingame	Evap.										NR	6.84	4.86
		Wind Movement										1,347	1,123	700
		Water Temp Avg. Max.										86.5	85.0	84.2
		Water Temp Avg. Min.										57.3	58.0	60.9
F9 2105	Coyote Dam (Lake Mendocino)	Evap.										11.10	10.56	7.45
		Wind Movement										1,878	1,586	1,306
		Water Temp Avg. Max.										84	84	80
		Water Temp Avg. Min.										53	53	52
E6 2109	Coyote Reservoir	Evap.										8.42	7.13	5.36
		Wind Movement										458	397	468
		Water Temp Avg. Max.										NR	NR	NR
		Water Temp Avg. Min.										NR	NR	NR
E3 2580	Duttons Landing	Evap.										9.32	8.36	6.36
		Wind Movement										3,859	3,110	2,383
		Water Temp Avg. Max.										84.2	83.5	NR
		Water Temp Avg. Min.										53.9	54.2	NR
D1 4022-10	Hollister Costa	Evap.										7.50	7.04	6.02
		Wind Movement										NR	NR	NR
		Water Temp Avg. Max.										NR	NR	NR
		Water Temp Avg. Min.										NR	NR	NR
E6 4922	Lexington Reservoir	Evap.										8.67	7.95	6.22
		Wind Movement										694	932	605
		Water Temp Avg. Max.										NR	NR	NR
		Water Temp Avg. Min.										NR	NR	NR
E5 4996	Livermore Sewage Plant	Evap.										11.48	10.64	7.68
		Wind Movement										2,650	2,390	1,810
		Water Temp Avg. Max.										NR	NR	NR
		Water Temp Avg. Min.										NR	NR	NR
E5 6144	Newark	Evap.										NR	NR	6.55
		Wind Movement										NR	NR	1,662
		Water Temp Avg. Max.										NR	NR	NR
		Water Temp Avg. Min.										NR	NR	NR
D2 7845-10	San Lucas Guidici	Evap.										9.72	7.58	4.50
		Wind Movement										NR	NR	NR
		Water Temp Avg. Max.										NR	NR	NR
		Water Temp Avg. Min.										NR	NR	NR

TABLE A-6

INTERIM MONTHLY EVAPORATION 1963

NUMBER	STATION NAME		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
D2 7959-10	Santa Rita Muther	Evap.										6.10	5.17	4.17
		Wind Movement										NR	NR	NR
		Water Temp Avg. Max.										NR	NR	NR
		Water Temp Avg. Min.										NR	NR	NR
F9 7964	Santa Rosa Sewage Plant	Evap.										10.09	8.59	6.71
		Wind Movement										2,937	2,367	2,059
		Water Temp Avg. Max.										NR	NR	NR
		Water Temp Avg. Min.										NR	NR	NR
F9 7965-03	Santa Rosa Pedranzini	Evap.										6.90	4.79	3.74
		Wind Movement										NR	NR	NR
		Water Temp Avg. Max.										NR	NR	NR
		Water Temp Avg. Min.										NR	NR	NR
D2 8338-01	Soledad C.T.F.	Evap.										8.96	8.26	6.99
		Wind Movement										5,027	4,109	3,506
		Water Temp Avg. Max.										78.0	77.7	77.7
		Water Temp Avg. Min.										49.9	49.6	51.7
E3 9861	Yountville Gamble	Evap.										8.43	5.72	4.29
		Wind Movement										1,686	1,522	1,077
		Water Temp Avg. Max.												
		Water Temp Avg. Min.												
		Evap.												
		Wind Movement												
		Water Temp Avg. Max.												
		Water Temp Avg. Min.												
		Evap.												
		Wind Movement												
		Water Temp Avg. Max.												
		Water Temp Avg. Min.												
		Evap.												
		Wind Movement												
		Water Temp Avg. Max.												
		Water Temp Avg. Min.												

TABLE A-7

MONTHLY EVAPORATION 1963-64

NUMBER	STATION NAME		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
E6 0053	Alamitos Perc. Pond	Evap.	3.85	1.90	1.09	1.71	3.36	4.59	6.68	7.24	9.11	9.81	9.18	7.20	
		Wind Movement	965	1,087	619	1,070	662	1,069	1,674	1,721	1,558	1,182	1,538	1,707	
		Water Temp Avg. Max.	NR	NR											
		Water Temp Avg. Max.	NR	NR											
		Water Temp Avg. Min.	NR	NR											
E7 1206	Burlingame	Evap.	3.29	1.04	0.93B	0.83B	2.68	3.76	5.58	6.13	6.86	8.04	7.47	6.08	
		Wind Movement	509	472	269	438	612	870	1,086	958B	898	950	932	639	
		Water Temp Avg. Max.	78.5	63.2	54.4	56.8	66.5	73.1	78.3	83.5	86.2	88.6	88.5	85.2	
		Water Temp Avg. Max.	56.0	48.3	41.1	42.6	43.1	46.6	49.3	53.0	55.6	57.7	57.5	54.6	
		Water Temp Avg. Min.													
F9 2105	Coyote Dam (Lake Mendocino)	Evap.	3.85	1.75	0.84	0.97	2.07	3.74	5.81	6.13	9.84	11.44	11.03	8.19	
		Wind Movement	971	853	787	953	980	1,524	1,627	1,542	2,000	1,901	1,871	1,654	
		Water Temp Avg. Max.	69	55	57	48	55	62	70.5	73.1	79.0	84.9	85.0	77.3	
		Water Temp Avg. Max.	48	40	34	34	30	36	40.7	44.0	50.1	54.0	54.0	47.4	
		Water Temp Avg. Min.													
E6 2109	Coyote Reservoir	Evap.	3.19	1.24	0.65	1.09	2.06	2.74	4.32	5.76	7.00	8.88	7.84	5.35	
		Wind Movement	396	238	89	335	393	560	585	517	412	261	646	543	
		Water Temp Avg. Max.	NR												
		Water Temp Avg. Max.	NR												
		Water Temp Avg. Min.	NR												
E3 2580	Duttons Landing	Evap.	3.55	1.50	0.82	1.20	3.36	4.53	6.34	8.22B	8.43	9.73	9.37	7.56	
		Wind Movement	1,995	1,719	2,022	1,618	1,766	2,483	3,071	4,202	3,950	4,001	3,853	2,907	
		Water Temp Avg. Max.	73.6	NR	NR	53.6	63.7	68.5	73.6	NR	79.7	84.0	83.1	80.4	
		Water Temp Avg. Max.	51.6	NR	NR	37.0	37.1	41.6	44.1	NR	51.9	54.6	55.0	52.6	
		Water Temp Avg. Min.													
D1 4022-10	Hollister Costa	Evap.	5.20	2.27	2.16	2.45	3.25	4.05	5.82	5.29	7.30	8.80	7.82	7.47	
		Wind Movement	NR												
		Water Temp Avg. Max.	NR												
		Water Temp Avg. Max.	NR												
		Water Temp Avg. Min.	NR												
E6 4922	Lexington Reservoir	Evap.	3.64	1.48	1.24	1.41	2.56	3.77	5.33	6.07	7.01	9.25	8.58	6.60	
		Wind Movement	826	1,225	568	1,143	1,003	1,166	1,051	907	679	841	1,235	1,371	
		Water Temp Avg. Max.	NR												
		Water Temp Avg. Max.	NR												
		Water Temp Avg. Min.	NR												
E5 4996	Livermore Sewage Plant	Evap.	5.28	1.76	1.27	1.60	3.66	3.90	5.79	7.47	7.76	12.48	10.33	7.36	
		Wind Movement	1,560	1,890	2,550	2,040	2,220	2,240	2,590	2,960	2,550	2,610	2,530	1,710	
		Water Temp Avg. Max.	NR												
		Water Temp Avg. Max.	NR												
		Water Temp Avg. Min.	NR												
E5 6144	Newark	Evap.	3.88	1.77B	1.04	1.41B	2.68	4.09	5.94	6.70	7.30	10.29	9.64	8.24	
		Wind Movement	1,564	1,374	1,270	1,221	1,206	2,047	2,006	2,946	2,696	3,803	3,457	3,087	
		Water Temp Avg. Max.	NR												
		Water Temp Avg. Max.	NR												
		Water Temp Avg. Min.	NR												
D2 7845-10	San Lucas Guidici	Evap.	4.19	2.09	1.79	1.76	3.58	4.87	7.17	7.04	8.06	10.37	7.23	6.04	
		Wind Movement	NR												
		Water Temp Avg. Max.	NR												
		Water Temp Avg. Max.	NR												
		Water Temp Avg. Min.	NR												

APPENDIX B

SURFACE WATER FLOW



ACKNOWLEDGMENTS

The Department of Water Resources gratefully acknowledges the assistance and contributions of the many public agencies, private organizations, and individuals whose cooperation greatly facilitated the preparation of this appendix. Special mention is made of the following agencies:

Federal

United States Geological Survey

United States Bureau of Reclamation

Local

East Bay Municipal Utility District

San Francisco Water Department

City of Vallejo

INTRODUCTION

This appendix presents surface water measurement data collected and assembled by the Department of Water Resources. It contains information collected in the Central Coastal Area during the 1964 water year covering the period from October 1, 1963 through September 30, 1964.

Maximum and Minimum Tides

Along the Pacific Coast, there are usually two high and two low tides in a day. Because tides follow the moon more closely than they do the sun, the lunar or tidal day is about 50 minutes longer than the solar day. When a tide has occurred near the end of a calendar day, the corresponding tide may skip the next day and occur in the early morning of the third day. The two high and two low tides which are usually unequal are commonly designated as higher high, lower high, higher low, and lower low waters.

Table B-1 lists maximum and minimum tides at the Sacramento River at Collinsville and Suisun Bay at Benicia Arsenal, respectively. These data are obtained from graphical charts plotted by continuous water stage recorders. The values are in feet above -13.05 feet USC&GS mean sea level datum of 1929 at Collinsville and above -10.00 feet at Benicia Arsenal. The values in most cases represent higher high water and lower low water. During a calendar day in which three instead of four tides occurred, the high value represents lower high water in the case where higher high tide did not occur and the low value represents higher low water in the case where lower low tide did not occur. The maximum and minimum values at the bottom of each monthly column represent the extremes observed during that month.

At the bottom of each table the maximum gage height of record shown is measured from the same datum as the daily high and low values.

Daily Mean Discharge

Table B-2 presents mean daily discharges in Arroyo de los Coches near Milpitas and in Butano Creek near Pescadero. Each of these stream gaging stations is equipped with a continuous water stage recorder. Each has a stage discharge relationship or rating developed. The rating gives the flow or discharge in cubic feet per second (c.f.s.) for each water stage or gage height at a station. Given the rating and continuous water stage record, mean daily discharges are determined by electronic data processing methods.

The rating is developed by making streamflow measurements with a current meter at various water stages ranging from near minimum to near maximum. Normally, the rating is fairly permanent where there is a fixed channel and a fixed flow regimen at the station. The rating varies, however, where the bed of the channel is of loose shifting sand and gravel or where vegetative growth builds up in the channel changing the flow regime. Where the rating is not permanent and varies periodically, more frequent measurements of discharge are necessary to accurately determine the discharge.

The daily values listed in Table B-2 represent daily mean discharge in cubic feet per second. These values are estimated when the flow is in excess of 140 percent of the highest measurement and when the previous and following flows are reasonably representative of conditions during a short period of missing record. The mean, maximum and minimum values at the bottom of each monthly column are representative of that month and year only. The acre-feet value for each month is a total of the daily values which are converted to acre-feet for the computation. The mean discharge under "Water Year

Summary" is an average of the monthly means. The maximum and minimum discharges are absolute instantaneous extremes that occurred during the year. The total acre-feet is the sum of the monthly acre-feet values.

The streamflow data reported herein are derived through the use of mechanical, arithmetical, and empirical operations and methods. The results are affected by inherent inaccuracies in procedures and equipment. It is, therefore, necessary to establish limits of accuracy for the reported data. The following is a listing of significant figures used in reporting streamflow data:

1. Daily flows - cubic feet per second

0.0 - 9.9 Tenths

10 - 99 2 significant figures

100 - up 3 significant figures

2. Means - cubic feet per second

0.0 - 99.9 Tenths

100 - 999 3 significant figures

1000 - above 4 significant figures

Water year totals are reported to a maximum of four significant figures.

Daily Mean Gage Height

Table B-3 presents the daily mean gage height for Rector Reservoir near Yountville. These gage heights are to USC&GS datum and are indicative of the amount of water in storage.

Imports

Table B-4 presents monthly deliveries of water into the Central Coastal Area. This table indicates the water user and the source of the supply

Monthly and water year total deliveries in acre-feet, average delivery in cubic feet per second, and monthly use in percent of annual are presented herein.

Numbering System of Recording Stations

To facilitate station identification, each gaging station was assigned a six-digit code. The method used in assigning these code numbers is as follows: The State was first divided into major hydrographic areas and each of these areas was assigned an alphabetic letter which is the first symbol of the six-part code. The second symbol was obtained by dividing the major hydrographic areas into stream basins of primary importance and assigning a digit from 0-9 with 0 generally being the valley floor. The symbol indicates the stream and/or branch on which the station is located. Where a stream crosses a valley floor the third symbol indicates the river basin from which the stream originates, and the fourth symbol now designates the stream. The last three symbols designate the relative number of the station on the stream system, except in the valley floor, where the last two symbols indicate the relative number. Station numbers increase numerically proceeding upstream. When a minor tributary enters the stream system the station numbers progress up the minor tributary and then up the main stem.

The major hydrographic areas and the stream basins which are reported in this volume are as follows:

Hydrographic Area D

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

Hydrographic Area E

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

Hydrographic Area F

F8 - Mendocino Coast
F9 - Russian River

On Plate 2 the first two symbols of the identification code are shown in each sub-area or basin with the last four symbols of the code shown at the recording station locations. All six symbols are indicated on the hydrographic area index, and on the alphabetic index to the streamflow and stage tables, and in the upper right-hand box of the table for each individual gaging station.

Table B-1

DAILY MAXIMUM AND MINIMUM TIDES *

SACRAMENTO RIVER AT COLLINSVILLE

in feet

STATION NO	WATER YEAR
E31110	1964

DATE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DATE
1	15.42 NR	NR	16.91 NR	15.90 12.08	15.67 11.97	15.66 12.41	15.98 12.38	15.88 11.81	15.55 11.60	15.31 11.31	15.90 12.29	16.50 12.40	1
2	16.42 12.72	NR	16.80 NR	16.39 13.50	15.63 13.09	15.61 12.40	15.65 11.81E	15.60 11.70E	15.20 11.57	15.41 11.69	16.48 12.29	16.48 11.85	2
3	16.91 12.91	NR	16.80 NR	15.80 11.80	15.60 12.08	15.25 12.02	15.92 11.52	15.63 11.83E	15.28 11.50	15.82 12.01	16.76 12.19	16.50 11.80	3
4	16.78 12.63	NR	16.40 NR	15.35 11.70	15.79 12.57	15.18 11.93	15.25 11.65E	15.20 11.62E	15.39 11.61	15.87 12.20	16.00 12.06	16.55 12.00	4
5	16.71 13.11	NR	15.95 NR	15.58 11.83	15.82 12.64	15.35 11.90	15.43 11.67E	15.18 11.55E	15.76 12.01	16.32 11.86	16.82 11.94	16.65 12.29	5
6	16.59 12.47	NR	NR	15.76 NR	15.73 NR	15.30 NR	14.89 NR	14.68 NR	14.78 NR	14.66 NR	16.91 NR	16.66 NR	6
7	16.63 12.23	16.10 12.37	NR	16.02 12.65	15.80 11.98	15.25 11.66E	14.96 11.42E	15.10 11.69E	16.10 12.08	14.65 11.85	16.92 12.02	16.41 12.53	7
8	16.72 12.27	15.73 12.10	NR	15.86 12.23	NR	15.22 11.50E	15.95 11.50E	15.32 11.82	16.30 11.95	16.85 11.72	16.90 12.13	16.05 12.61	8
9	16.40 12.37	16.70 12.05	NR	15.95 NR	NR	15.25 NR	15.27 NR	15.51 NR	16.59 NR	16.80 NR	16.65 NR	15.81 NR	9
10	16.67 12.22	15.79 12.13	NR	16.20 NR	NR	15.75 NR	15.70 NR	15.74 NR	16.70 NR	16.72 NR	16.39 NR	15.88 NR	10
11	16.10 12.60	15.82 12.59	16.25 12.48	16.32 11.94	NR	16.08 NR	15.36 NR	15.99 NR	16.79 NR	16.60 NR	16.05 NR	15.99 NR	11
12	NR	NR	16.07 NR	15.18 NR	16.46 NR	NR	16.16 NR	15.49 NR	16.33 NR	16.75 NR	16.50 NR	15.78 NR	12
13	NR	NR	16.33 NR	16.15 NR	16.66 NR	NR	15.87 NR	15.69 NR	16.60 NR	16.56 NR	16.29 NR	16.02 NR	13
14	NR	NR	16.81 NR	16.24 NR	16.60 NR	NR	15.55 NR	15.94 NR	16.53 NR	16.28 NR	15.89 NR	16.27 NR	14
15	NR	NR	16.58 NR	16.39 NR	16.41 NR	NR	15.34 NR	16.23 NR	16.46 NR	15.99 NR	15.63 NR	16.07 NR	15
16	NR	NR	16.30 NR	16.39 NR	16.43 NR	NR	15.40 NR	16.49 NR	16.46 NR	15.69 NR	15.74 NR	16.10 NR	16
17	NR	NR	16.45 NR	16.30 NR	16.60 NR	NR	15.80 NR	16.52 NR	15.71 NR	15.80 NR	16.00 NR	16.29 NR	17
18	NR	NR	16.59 NR	16.36 NR	16.49 NR	NR	16.15 NR	16.28 NR	15.40 NR	15.91 NR	16.06 NR	16.29 NR	18
19	NR	NR	16.24 NR	16.02 NR	16.85 NR	NR	11.96 NR	11.76E NR	11.82 NR	12.34 NR	12.00 NR	12.26 NR	19
20	NR	NR	17.19 NR	16.21 NR	16.18 NR	NR	15.65 NR	16.15 NR	16.11 NR	15.42 NR	15.93 NR	16.21 NR	20
21	NR	NR	16.80 NR	16.71 NR	16.80 NR	NR	16.28 NR	15.42 NR	14.75 NR	14.60 NR	14.71 NR	16.33 NR	21
22	NR	NR	16.70 NR	16.82 NR	16.80 NR	NR	16.01 NR	15.85 NR	15.99 NR	16.32 NR	16.59 NR	16.49 NR	22
23	NR	NR	16.92 NR	15.91 NR	16.80 NR	NR	16.30 NR	15.33 NR	15.39 NR	16.15 NR	16.31 NR	16.70 NR	23
24	NR	NR	16.69 NR	15.91 NR	16.80 NR	NR	16.01 NR	11.85 NR	11.92 NR	16.36 NR	16.09 NR	16.50 NR	24
25	NR	NR	15.44 NR	15.26 NR	17.10 NR	NR	16.40 NR	15.56 NR	15.58 NR	16.13 NR	16.31 NR	16.61 NR	25
26	NR	NR	11.98 NR	11.80 NR	13.54 NR	NR	12.33 NR	12.56 NR	12.17 NR	11.81 NR	11.90 NR	12.31 NR	26
27	NR	NR	15.70 NR	15.26 NR	16.90 NR	NR	16.33 NR	15.95 NR	15.99 NR	16.32 NR	16.59 NR	16.49 NR	27
28	NR	NR	11.90 NR	11.69 NR	12.79 NR	NR	12.01 NR	12.09 NR	12.23 NR	11.84 NR	11.86 NR	12.29 NR	28
29	NR	NR	15.67 NR	15.75 NR	16.73 NR	NR	15.68 NR	16.23 NR	15.53 NR	16.02 NR	16.51 NR	16.37 NR	29
30	NR	NR	12.13 NR	11.92 NR	12.30 NR	NR	12.08 NR	12.09 NR	11.96 NR	11.85 NR	11.99 NR	12.37 NR	30
31	NR	NR	15.70 NR	15.26 NR	16.90 NR	NR	16.33 NR	15.95 NR	15.99 NR	16.32 NR	16.59 NR	16.49 NR	31
MAXIMUM	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	MAXIMUM
MINIMUM	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	MINIMUM

E - Estimated
NR - No Record

In order to machine process the data in this table, it was necessary to avoid negative gage heights. Subtract 10.00 feet to obtain recorder gage height.

LOCATION			MAXIMUM	PERIOD OF RECORD			DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T.B.R. M.D.B.M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		REF DATUM
			C.F.S.	GAGE HT.	DATE			FROM	TO	
38°04'25"	121°51'18"	5427 3N 1E		9.2	4/6/58		June 29-Data	1929	0.00	USED USCS
								1929	-3.05	

Station located 0.4 mi. SW of Collinsville, 3.3 mi. NE of Pittsburg.
Maximum gage height does not indicate maximum discharge.

Table B-1
DAILY MAXIMUM AND MINIMUM TIDES *

SUISUN BAY AT BENICIA ARSENAL

in feet

STATION NO	WATER YEAR
E03300	1964

DATE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	DATE
1	NR	NR	NR	NR	12.56	12.56	12.85	12.75	12.51	12.16	13.15	13.35	1
	NR	NR	NR	NR	7.62	7.62	7.98	7.72	7.59	7.34	8.75	8.76	
2	NR	NR	NR	NR	12.68	12.44	12.27	12.12	12.03	12.36	13.40	13.43	2
	NR	NR	NR	NR	7.81	7.98	7.40	7.04	7.30	7.57	7.22	7.22	
3	NR	NR	NR	NR	12.58	12.13	11.81	12.22	12.14	12.73	13.67	13.55	3
	NR	NR	NR	NR	8.63	7.71	7.21	7.36	7.39	8.03	7.77	7.25	
4	NR	NR	NR	NR	12.67	12.01	11.98	11.67	12.43	12.94	13.85	12.34	4
	NR	NR	NR	NR	8.76	7.69	7.17	7.17	7.52	8.30	7.45	7.33	
5	NR	NR	NR	NR	12.66	11.95	12.03	11.90	12.82	13.38	13.98	13.61	5
	NR	NR	NR	NR	8.62	7.59	7.30	7.30	8.02	7.61	7.15	7.53	
6	NR	NR	NR	NR	12.57	11.93	11.60	12.05	11.63	13.68	12.20	13.61	6
	NR	NR	NR	NR	8.13	7.69	7.04	7.19	8.05	7.32	7.10	7.83	
7	NR	NR	NR	NR	12.56	11.98	11.71	12.30	13.13	13.07	14.00	13.36	7
	NR	NR	NR	NR	7.79	7.48	6.87	7.45	7.69	7.07	7.15	7.97	
8	NR	NR	NR	NR	12.81	11.99	11.79	11.65	13.33	11.85	13.96	12.90	8
	NR	NR	NR	NR	7.56	7.00	6.61	7.50	7.25	6.76	7.32	8.08	
9	NR	NR	NR	NR	12.96	12.24	12.07	12.48	13.79	13.90	13.62	12.75	9
	NR	NR	NR	NR	7.28	7.39	6.82	6.98	6.94	6.45	7.37	8.28	
10	NR	NR	NR	NR	13.38	12.54	12.11	12.79	13.86	13.83	13.30	12.75	10
	NR	NR	NR	NR	7.56	7.06	7.10	7.30	6.55	6.40	7.60	8.68	
11	NR	NR	NR	NR	13.32	12.94	12.94	12.25	13.10	13.74	12.89	12.64	11
	NR	NR	NR	NR	7.53	6.98	7.69	7.39	6.93	6.44	6.66	8.20	
12	NR	NR	NR	NR	13.45	13.22	13.09	12.38	13.42	13.80	13.49	12.81	12
	NR	NR	NR	NR	7.31	6.95	7.43	7.10	6.57	6.01	7.01	8.11	
13	NR	NR	NR	NR	13.62	12.66	12.66	12.66	13.65	13.48	13.11	12.47	13
	NR	NR	NR	NR	7.53	6.76	7.17	6.89	6.70	6.66	7.41	8.66	
14	NR	NR	NR	NR	13.51	13.11	12.55	12.97	13.53	13.16	12.68	13.07	14
	NR	NR	NR	NR	7.21	7.00	7.18	6.71	6.50	6.98	7.59	9.01	
15	NR	NR	NR	NR	13.44	13.03	12.35	13.22	13.40	12.76	12.52	12.88	15
	NR	NR	NR	NR	7.17	7.30	7.39	6.82	6.58	7.28	7.89	8.78	
16	NR	NR	NR	NR	13.45	12.57	12.46	13.37	13.27	12.60	12.75	12.93	16
	NR	NR	NR	NR	7.33	7.20	7.42	6.90	7.02	7.46	8.82	8.39	
17	NR	NR	NR	NR	13.55	12.32	12.89	13.32	12.59	NR	12.99	13.11	17
	NR	NR	NR	NR	8.17	7.40	7.62	7.15	6.66	NR	8.62	7.84	
18	NR	NR	NR	NR	13.39	12.42	13.19	13.05	12.26	NR	12.92	13.14	18
	NR	NR	NR	NR	7.97	7.80	7.51	7.21	6.97	NR	8.31	7.79	
19	NR	NR	NR	NR	13.07	12.59	13.15	12.70	12.34	12.93	13.10	13.25	19
	NR	NR	NR	NR	8.27	7.75	7.45	7.29	7.24	8.30	8.05	7.69	
20	NR	12.70	NR	NR	13.89	12.81	13.10	12.09	12.36	13.12	13.21	12.26	20
	NR	7.40	NR	NR	10.30	7.45	7.50	6.82	7.39	7.93	7.80	7.74	
21	NR	12.17	12.34	NR	13.79	13.00	13.10	12.31	12.57	13.12	13.25	13.63	21
	NR	10.75	7.29	NR	9.31	7.28	7.49	7.12	7.73	7.70	7.93	7.10	
22	NR	12.50	12.09	13.93	13.16	13.29	12.25	11.71	11.73	11.73	13.38	13.39	NR
	NR	7.44	7.25	7.95	8.19	7.16	8.02	7.81	8.46	7.45	7.42	7.67	NR
23	NR	12.39	12.39E	13.76E	13.30	13.25	12.68	12.91	13.30	11.80	13.36	NR	23
	NR	7.77	9.26	8.16	7.01	7.41	7.55	7.87	7.43	7.38	7.66	NR	
24	NR	12.51	12.89	13.63	13.57	13.12	12.47	12.87	13.40	13.42	13.24	NR	24
	NR	7.65	7.95	7.45	7.27	7.20	7.20	7.07	7.48	7.45	7.76	NR	
25	NR	12.81	13.05	13.78E	13.40	12.67	12.53	12.87	13.53	13.51	12.92	NR	25
	NR	8.80	8.29	7.30	6.80	6.96	7.45	7.26	7.53	7.59	7.78	NR	
26	NR	13.20	13.63	13.93E	13.30	12.46	12.56	13.19	13.19	13.47	12.67	NR	26
	NR	8.00	7.99	7.43	6.89	7.18	7.27	7.34	7.48	7.62	7.99	NR	
27	NR	13.25	13.56	14.08E	13.16	12.53	12.59	13.12	13.18	13.23	12.85	NR	27
	NR	7.47	7.26	7.05	7.12	7.49	7.25	7.12	7.12	7.60	8.40	NR	
28	NR	13.65	13.66	14.28	13.11	12.81	12.90	12.83	13.02	12.99	13.04	NR	28
	NR	6.89	6.71	6.96	7.50	7.78	7.78	6.95	7.38	7.71	8.74	NR	
29	NR	13.80	NR	13.95	12.46	12.68	12.90	12.82	12.80	12.51	13.18	NR	29
	NR	6.89	NR	6.80	7.35	7.87	7.35	7.08	7.41	7.62	8.31	NR	
30	NR	13.99	NR	13.55	NR	12.76	12.66	12.63	12.23	12.77	13.68	NR	30
	NR	6.79	NR	6.87	NR	7.78	7.10	7.11	7.51	8.08	8.28	NR	
31	NR	NR	NR	13.12	12.93	12.76	12.50	12.50	13.03	13.03	13.67	NR	31
	NR	NR	NR	7.09	6.95	7.89	7.13	7.13	8.50	8.50	8.38	NR	
MAXIMUM	NR	NR	NR	NR	13.57	13.29	13.37	13.65	NR	13.51	14.00	NR	MAXIMUM
MINIMUM	NR	NR	NR	NR	6.76	6.96	6.71	6.50	NR	6.40	7.10	NR	MINIMUM

E - Estimated
NR - No Record

* In order to machine process the data in this table, it was necessary to avoid negative gage heights. Subtract 10.00 feet to obtain recorder gage height.

LOCATION			MAXIMUM		PERIOD OF RECORD		DATUM OF GAGE				
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.B.W.	OF RECORD		DISCHARGE	GAUGE HEIGHT ONLY	PERIOD		ZERO IN GAUGE	REF DATUM	
			C.F.S.	GAUGE HT.			FROM	TO			
38°02'26"	122°08'44"	SW6 2N 2W		6.72	3/5/62		Jun 29-Apr 40 Apr 40-Date	1929 1940 1942	1940 1942	-2.21 -5.00 0.00	USCGS USCGS USCGS

Station located on inshore side of wharf, immediately SE of Benicia.
Maximum gage height listed does not indicate maximum discharge.
Period of record intermittent from 1929-1940.

Table B-2

DAILY MEAN DISCHARGE
ARROYO DE LOS COCHES NEAR MILPITAS

STATION NO	WATER YEAR
E64050	1964

DAY	IN SECOND FEET												DAY	
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT		
1	0.0	0.0	0.2	0.1	0.1	0.0	0.1*	0.1	0.0	0.0	0.0	0.0	0.0	1
2	0.0	0.0	0.2	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	2
3	0.0	0.0	0.2	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	3
4	0.0	0.0	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	4
5	0.0	0.0	0.2	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	5
6	0.0	0.1*	0.2	0.1	0.2	0.0	0.1	0.1*	0.0	0.0	0.0	0.0	0.0	6
7	0.0	0.1	0.2	0.1	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	7
8	0.0	0.1	0.2	0.1	0.2	0.0	0.1	0.1	0.1	0.1	0.0*	0.0	0.0	8
9	0.0	0.1	0.2	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	9
10	0.0*	0.1	0.2*	0.0	0.2	0.0	0.1	0.0	0.0*	0.0	0.0	0.0	0.0	10
11	0.0	0.1	0.1	0.0	0.2	0.0*	0.1	0.0	0.0	0.0	0.0	0.0	0.0	11
12	0.0	0.0	0.1	0.0	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	12
13	0.0	0.0	0.1	0.0	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	13
14	0.0	0.1	0.1	0.0	0.1*	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	14
15	0.0	0.2	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	15
16	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	16
17	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0*	0.0*	17
18	0.0	0.1*	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	18
19	0.0	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	19
20	0.0	0.5	0.1*	1.5	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	20
21	0.0	0.2	0.1	2.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	21
22	0.0	0.2	0.1	1.9	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22
23	0.0	0.3	0.1	0.8	0.1	0.1*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23
24	0.0	0.4	0.1	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	24
25	0.0	0.3	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	25
26	0.0	0.3	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	26
27	0.0	0.3	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0*	0.0	0.0	27
28	0.0	0.2	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0*	0.0	0.0	28
29	0.0	0.2	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29
30	0.0	0.2	0.1	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30
31	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31
MEAN	0.0	0.2	0.1	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	MEAN
MAX.	0.0	0.5	0.3	2.0	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	MAX
MIN.	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	MIN
CFT.		9	8	18	7	4	5	1						ACFT.

E - Estimated

NR - No Record

* - Discharge measurement or observation
of no flow made on this day.

† - E and *

WATER YEAR SUMMARY

MEAN DISCHARGE	MAXIMUM				MINIMUM				TOTAL ACRE- FEET
	DISCHARGE	GAGE HT	MO	DAY TIME	DISCHARGE	GAGE HT	MO	DAY TIME	
0.1	27	2.85	1	20 2140	0.0	1.42	10	1 0000	53

LOCATION		MAXIMUM DISCHARGE			PERIOD OF RECORD			DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.B.M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF DATUM
			C.F.S.	GAGE HT.	DATE			FROM	TO		
37°26'38"	121°51'45"	NW4 6S 1E	3.5E	2.71	2/14/62	3-16-59-Date	Sep 59-Date	195		0.00	Local

Station located 200 ft. above Calaveras Road Bridge. 2.6 miles NE of Milpitas. Tributary to Coyote Creek via Penitencia Creek. Recorder installed Sep. 16, 1959.

Table B-2

DAILY MEAN DISCHARGE

Butano Creek at Pescadero

STATION NO.	WATER YEAR
EB 5200	1964

DAY	IN SECOND FEET												DAY
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	
1	2.4	2.8	9.5	5.9	8.4	4.5	5.8	2.5	1.2	0.9	0.0	0.6	1
2	2.5	3.0	9.0	5.9	8.0	6.2	4.9*	2.4	1.4	1.1	0.2	0.6	2
3	2.3	3.2	8.7	5.9	7.6	4.4	4.4	3.4	1.2	1.6	0.1	0.6	3
4	2.5	5.7	8.4	5.9	7.5	4.3	4.3	3.2	1.2	2.2	0.1	0.6	4
5	3.0	15	8.1	5.9	7.5	4.2	4.3	2.7	1.0	2.2	0.1	0.7	5
6	3.4	27*	8.1	5.9	7.4	4.1	4.2	2.8*	1.0	1.9	0.1	0.8	6
7	2.6	17	7.9	7.6	7.2	4.0	4.1	2.3	1.2	1.7	0.1	0.8	7
8	2.2*	15	7.9	6.6	7.2	3.6	4.0	2.5	2.5	1.7	0.3	0.7	8
9	2.9	14	9.5	5.9	7.1	3.6	3.8	2.3	5.5	1.5*	0.3	1.0	9
10	2.9	13	8.4	5.9	7.0	3.6	3.5	2.0	2.9*	1.1	0.4	1.0	10
11	16	13	7.9	5.9	7.0	3.8	3.5	1.9	1.9	1.2	0.2	0.8	11
12	5.7	13	7.6	5.7	7.0	8.4*	3.5	1.5	1.6	1.4	0.1	0.8	12
13	4.1	13	7.4	5.9	7.1*	5.0	3.5	1.6	1.5	1.1	0.2	0.6	13
14	3.5	28	7.1	6.1	7.0	4.3	3.4	1.6	1.4	0.9	0.3	0.9	14
15	5.7	38	6.9	5.9	7.8	4.0	3.3	1.4	1.4	0.8	0.5	1.1	15
16	7.9	21	6.9	5.7	6.9	3.7	3.1	1.8	1.2	0.8	0.7	0.9	16
17	5.0	19	6.9	6.1	6.4	3.5	2.9	2.6	1.7	0.7	0.3	0.9*	17
18	4.1	18	6.9	11	5.9	3.6	2.9	1.7	1.3	0.6	0.3	0.9	18
19	3.7	65	7.1	12	5.7	3.4	2.9	1.9	1.3	0.9	0.2	0.7	19
20	3.5	94	7.4	57	5.3	3.4	2.8	1.3	1.4	0.8	0.3	0.6	20
21	3.4	24	7.1	242*	5.1	3.5	2.6	1.3	1.5	0.9	0.4	0.4	21
22	3.4	17	6.9	65*	5.0	9.1	2.6	1.6	1.0	1.1	0.5	0.6	22
23	3.7	19	6.9	34	6.9	11	2.6	1.5	1.0	0.8	0.5	0.4	23
24	3.5	18	6.9	23	4.8	9.4*	2.8	1.3	0.9	0.8	0.5	0.4	24
25	3.2	15	6.9	17	4.8	8.1	2.7	1.3	0.9	0.9	0.7	0.4	25
26	3.2	13	6.9	14	4.8	7.1	2.5	1.1	0.9	1.3	0.7	0.6	26
27	3.2	12	6.6	12	4.8	6.6	2.5	2.5	0.9	1.2	0.7*	0.6	27
28	3.0	11	6.4	11	4.3	6.1	2.5	1.8	1.5	0.6	0.5	0.8	28
29	3.0	11	6.4	9.9	4.3	5.4	2.4	1.2	1.2	0.0*	0.4	1.0	29
30	3.0	10	6.4	9.4	5.1	5.1	2.3	1.1	1.4	0.0	0.5	0.9	30
31	2.8		6.1	8.8		4.9		1.3		0.0	0.6		31
MEAN	3.9	18.3	7.5	20.3	6.3	5.2	3.4	1.9	1.5	1.1	0.4	0.7	MEAN
MAX	16.0	65.0	9.5	242.0	8.4	11.0	9.8	3.4	5.5	2.2	0.7	1.1	MAX
MIN	2.2	2.8	6.1	5.7	4.3	3.4	2.3	1.1	0.9	0.0	0.0	0.4	MIN
AC.FT.	241	1090	458	1250	365	321	200	118	89	65	21	43	AC.FT.

E - Estimated

NR - No Record

* - Discharge measurement or observation

- of no flow mod: on this day

† - E and #

WATER YEAR SUMMARY

MEAN	MAXIMUM				MINIMUM				TOTAL ACRE- FEET
	DISCHARGE	DISCHARGE	GAGE HT.	MO DAY TIME	DISCHARGE	GAGE HT.	MO DAY TIME		
5.9	705	12.00	1 21	0300	0.0		6 27	0830	4260

LOCATION				MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE		
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M. D. & B. M.	C. F. S.	OF RECORD		DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
				GAGE HT.	DATE			FROM	TO		
37° 13' 49"	122° 21' 51"	SW14 85 4W	1340	16.21	1/31/63	June 62-Date	June 62-Date	1962		0.00	Local

Station located 1.7 mi. SW intersection Pescadero Road and Old Stage Road in Pescadero.
Tributary to Pescadero Creek. Recorder installed June 22, 1962.

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1		358.13	361.88	361.78	370.21	370.04	369.81	368.35	365.15	361.94	357.60	352.98	1
2		358.13	361.94	361.75	370.19	370.05	369.75	368.35	365.10	361.89	357.42	352.76	2
3		358.15	361.96	361.74	370.12	370.05	369.64	368.35	365.04	361.81	357.25	352.61	3
4		358.33	361.97	361.69	370.13	370.05	369.56	368.32	364.97	361.75	357.08	352.47	4
5		358.44	361.98	361.66	370.13	370.05	369.46	368.30	364.93	361.67	356.95	352.33	5
6		358.81	361.99	361.62	370.06	370.05	369.37	368.18	364.88	361.60	356.79	352.19	6
7		358.90	362.03	361.58	370.07	370.04	369.27	368.00	364.82	361.44	356.68	352.05	7
8		358.94	362.08	361.53	370.10	370.03	369.17	367.91	364.79	361.28	356.59	351.90	8
9		358.98	362.12	361.48	370.10	370.03	369.10	367.78	364.80	361.13	356.50	351.76	9
10		359.01	362.12	361.46	370.09	370.03	369.04	367.68	364.80	360.98	356.44	351.62	10
11		359.02	362.12	361.44	370.08	370.02	369.02	367.55	364.78	360.81	356.28	351.48	11
12		359.02	362.12	361.38	370.08	370.09	369.02	367.47	364.65	360.68	356.10	351.34	12
13		359.02	362.09	361.35	370.08	370.09	369.00	367.35	364.51	360.53	355.94	351.19	13
14		359.11	362.08	361.32	370.09	370.09	368.97	367.25	364.39	360.35	355.77	351.05	14
15		359.43	362.08	361.31	370.08	370.10	368.95	367.10	364.25	360.20	355.61	350.87	15
16		359.54	362.08	361.30	370.07	370.05	368.93	366.97	364.11	360.05	355.47	350.71	16
17		359.61	362.08	361.30	370.07	370.03	368.90	366.83	364.11	360.05	355.47	350.71	17
18		359.63	362.05	361.30	370.08	369.99	368.86	366.71	363.83	359.73	355.15	350.42	18
19		359.82	362.04	361.35	370.06	369.97	368.86	366.58	363.70	359.55	354.96	350.24	19
20		360.24	362.03	362.26	370.00	369.89	368.86	366.43	363.55	359.40	354.78	350.09	20
21		360.42	362.02	366.30	369.98	369.79	368.81	366.30	363.40	359.28	354.64	349.88	21
22		360.41	362.00	369.69	370.00	369.75	368.79	366.19	363.25	359.19	354.47	349.71	22
23		360.73	361.97	370.38	369.98	369.75	368.75	366.07	363.10	359.01	354.30	349.56	23
24		361.17	361.95	370.30	369.98	369.69	368.72	365.92	362.96	358.85	354.18	349.41	24
25		361.37	361.95	370.26	369.98	369.65	368.69	365.78	362.82	358.70	354.03	349.26	25
26		361.47	361.93	370.26	369.96	369.65	368.67	365.63	362.67	358.55	353.76	349.15	26
27		361.55	362.90	370.22	369.97	369.66	368.63	365.52	362.51	358.37	353.70	349.00	27
28		361.75	362.89	370.23	369.98	369.67	368.53	365.52	362.35	358.23	353.47	348.85	28
29		361.75	362.85	370.22	369.98	369.69	368.48	365.42	362.21	358.01	353.42	348.72	29
30		361.83	362.81	370.22	369.98	369.71	368.42	365.36	362.07	357.81	353.26	348.58	30
31		361.78	361.78	370.22	369.98	369.72	368.42	365.30	362.07	357.73	353.14	348.58	31

Order out of Order

September 31 - November

Range: September

CREST STAGES			
DATE	TIME	STAGE	STAGE
1-23-64	0000	370.39	

E - Estimated
NR - No Record
NF - No Flow

TABLE B-4
SURFACE WATER IMPORTS TO THE CENTRAL COASTAL AREA

IMPORT	1964 WATER YEAR												TOTAL
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
<u>CITY OF VALLEJO FROM CACHE SLOUGH</u>	988	833	753	844	601	619	448	778	1,200	1,530	1,460	1,120	11,174
Total acre-feet	16	14	12	14	11	10	7	13	20	25	24	19	15
Average cubic feet per second	7.9	7.5	6.7	7.6	5.4	5.5	4.0	7.0	10.7	13.7	13.1	10.7	
Monthly quantities in percent of seasonal													
<u>CONTRA COSTA CANAL</u>	5,108	3,455	3,172	3,231	2,902	3,293	3,516	4,042	6,799	8,811	10,247	8,047	62,623
Total acre-feet	82	58	51	52	52	53	59	65	113	142	165	134	86
Average cubic feet per second	8.2	5.5	5.1	5.2	4.6	5.3	5.6	6.5	10.9	14.1	16.4	12.8	
Monthly quantities in percent of seasonal													
<u>HETCH HETCH AQUEDUCT</u>	10,255	7,476	3,457	12,319	13,961	15,981	15,324	16,121	15,560	16,185	16,236	15,713	158,588
Total acre-feet	165	125	56	199	249	258	255	260	259	261	262	262	217
Average cubic feet per second	6.5	4.7	2.2	7.8	8.8	10.1	9.7	10.2	9.8	10.2	10.2	10.2	9.9
Monthly quantities in percent of seasonal													
<u>MOSELUNE RIVER AQUEDUCT</u>	16,737	14,865	15,994	16,292	14,833	16,269	15,800	17,985	17,614	18,125	18,043	17,402	199,959
Total acre-feet	270	248	258	263	265	262	263	290	294	292	291	290	274
Average cubic feet per second	8.3	7.1	7.9	8.0	8.0	8.0	8.0	8.8	8.9	8.9	8.9	8.8	
Monthly quantities in percent of seasonal													
<u>POTTER VALLEY POWERHOUSE FROM EEL RIVER</u>	17,540	18,480	18,530	18,480	16,820	16,170	17,900	18,190	13,020	12,560	13,300	12,360	193,350
Total acre-feet	283	308	299	298	300	261	298	293	217	202	215	206	265
Average cubic feet per second	9.1	9.6	9.6	9.6	8.7	8.4	9.3	9.4	6.7	6.5	6.9	6.4	
Monthly quantities in percent of seasonal													
<u>PUTAH SOUTH CANAL *</u>	3,973	173	119	228	254	3,453	13,162	25,801	21,777	29,702	25,224	17,330	141,196
Total acre-feet	65	3	2	4	4	56	221	420	366	483	410	291	194
Average cubic feet per second	2.8	0.1	0.1	0.2	0.2	2.4	9.3	18.3	15.4	21.0	17.9	12.3	
Monthly quantities in percent of seasonal													
<u>SOUTH BAY AQUEDUCT</u>	2,301	487	382	1,277	1,040	1,315	621	2,808	2,986	2,754	2,348	2,537	20,856
Total acre-feet	37	8	6	21	19	21	10	45	50	44	38	42	29
Average cubic feet per second	9.6	2.3	1.8	6.1	5.0	6.3	3.0	13.5	14.3	13.2	11.3	12.2	
Monthly quantities in percent of seasonal													

* A portion of this water is delivered to the Central Coastal Area by the Solano Irrigation District.

APPENDIX C

GROUND WATER MEASUREMENTS



ACKNOWLEDGMENTS

The Department of Water Resources gratefully acknowledges the assistance and contributions of the many public agencies, private organizations, and individuals whose cooperation greatly facilitated the preparation of this appendix. Special mention is made of the following agencies:

Federal

United States Geological Survey

Local

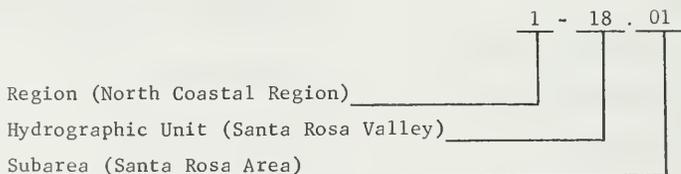
Alameda County Flood Control and Water Conservation District	San Benito County
Alameda County Water District	San Jose Water Works
Campbell Water Company	San Luis Obispo County Flood Control and Water Conservation District
Cupertino, City of	Santa Clara, City of
Gilroy, City of	Santa Clara Valley Water Conservation District
Monterey County Flood Control and Water Conservation District	Santa Cruz County
Mountain View, City of	Solano County
Napa County	South Santa Clara Valley Water Conservation District
North Los Altos Water Company	Stanford University
Pacheco Pass Water District	Sunnyvale, City of
Palo Alto, City of	Watsonville, City of

INTRODUCTION

This appendix includes a figure and three tables. Figure C-1, "Fluctuations of Water Levels in Wells", presents hydrographs of 21 selected wells in 19 selected basins or areas. Table C-1, "Ground Water Level Conditions in the Central Coastal Area, Spring 1964", presents average depths to ground waters and average changes by basin and region from the spring of 1963 to the spring of 1964. Table C-2, "Description of Selected Wells", provides a description of 204 wells for which ground water level data are presented in Table C-3, "Ground Water Levels at Wells". A description of the items in Tables C-2 and C-3 follows.

DESCRIPTION OF SELECTED WELLS

Table C-2, "Description of Selected Wells", is arranged in region, basin, and well number order. The water pollution control board regions used in this report and shown on Plate 3, "Ground Water Basins or Units in the Central Coastal Area", are geographic areas defined in Section 13040 of the Water Code. Regions, ground water basins or units and subareas are listed by a numbering system as follows:



State Well Number

The state well numbering system used in this report is based on the township, range, and section subdivision of the Public Land Survey. It is the

system used in all ground water investigations made by the Department of Water Resources. In this report, the number of a well, assigned in accordance with this system, is referred to as the State Well Number. Under the system each section is divided into 40-acre tracts lettered as follows:

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

Wells are numbered within each 40-acre tract according to the chronological sequence in which they have been assigned State Well Numbers. For example, a well which has the number 16N/12W-17K1,M would be in Township 16 North, Range 12 West, Section 17, Mount Diablo Base and Meridian and would be further designated as the first well assigned a State Well Number in Tract K.

Agency Well Number

The agency well number is the number assigned to a well by any agency other than the Department of Water Resources in accordance with the numbering system used by that agency. Agencies that use the state well numbering system normally coordinate assignment of well numbers with the Department. These numbers, when common, are not shown in the "Agency Well Number" column; when different, the last five digits are shown in the "Agency Well Number" column.

Agency Supplying Data

Each number in this column is the code number for a cooperating agency. The agency code consists of a five digit number, the first of which

is a region number. Thus, 32100 refers to Agency 2100 in Region 3. Because of the limitations of punch-card space, the agency code has been shown as a four-digit number without the region number. Therefore, the four-digit agency code should always be referred to the region in which the well is located.

The first digit of the four-digit agency code, as listed below, designates the type of well numbering system used by the agency.

<u>Code</u>	<u>Well Numbering System</u>
1	Location numbers
2	Monterey County Flood Control and Water Conservation District or Santa Clara Valley Water Conservation District
3	Serial numbers
4	Local numbers
5	State or U. S. Geological Survey
6	U. S. Bureau of Reclamation
7	South San Joaquin Irrigation District

The last three digits of the agency code, as listed below, are numbers that designate, within specified serial limits, the type of agency from which the data were obtained.

<u>Code</u>	<u>Type of Agency</u>
000-049	Federal
050-099	State
100-199	County
200-399	Municipal
400-699	District - Water, Irrigation, Conservation, etc.
700-999	Private

The agencies and code numbers assigned to them in each of the regions are listed in the following tabulation:

Agency Code	Agency
<u>North Coastal Region</u>	
5000	U. S. Geological Survey
5050	Department of Water Resources
<u>San Francisco Bay Region</u>	
2400	Santa Clara Valley Water Conservation District
5000	U. S. Geological Survey
5050	Department of Water Resources
5100	Alameda County Flood Control and Water Conservation District
5101	Napa County
5109	Solano County
5401	Alameda County Water District
<u>Central Coastal Region</u>	
2100 and 5100 <u>1/</u>	Monterey County Flood Control and Water Conservation District
2400	Santa Clara Valley Water Conservation District
5050	Department of Water Resources
5101	San Benito County
5102	Santa Cruz County
5400	South Santa Clara Valley Water Conservation District

1/ In the Paso Robles subbasin of Salinas Valley (3-4.06), this agency number refers to the San Luis Obispo County Flood Control and Water Conservation District.

Well Use

The well use is indicated as follows:

<u>Code</u>	<u>Well Use</u>
1	Domestic
2	Irrigation
3	Municipal
4	Industrial
5	Injection
6	Drainage
7	Domestic and Irrigation
8	Test
9	Stock
0	Unused

Well Depth in Feet

Well depths shown were reported by the owner, obtained from a driller's log, or measured at the time of the well canvass.

Data Available

Under this heading, code numbers, as listed below, indicate the type of data that are available with respect to well logs, water analyses, and production records.

<u>Data</u>	<u>Code</u>
Log record	
Log	1
Confidential log (Sec. 7076, Water Code)	2
Water Analyses	
Mineral	1

<u>Data</u>	<u>Code</u>
Water Analyses	
Sanitary	2
Heavy Metals	3
Mineral and Sanitary	4
Production record	
Available	1
Pump test available	2

Record Begins and Record Ends

The last two digits of the year the record began or ended are shown.

GROUND WATER LEVELS AT WELLS

Table C-3, "Ground Water Levels at Wells", is arranged in region, basin, well number and date order. It includes measurements of depths to water in wells made from July 1, 1963, through June 30, 1964. Table headings discussed below are only those that were not discussed under "Description of Selected Wells".

Ground Surface Elevation in Feet

The numbers in this column give the elevation in feet of the ground surface from which depth to the water surface in the well is reported. The datum used is mean sea level, USC&GS datum, 1929. Elevations of ground surface are usually taken from topographic maps and the accuracy is controlled by topographic standards.

Date

The date shown in the column is the date on which the depth measurement, shown in the next column, was made. If the day of the month is unknown, it is indicated by 00.

Ground Surface to Water Surface in Feet

This is the measured depth in feet from the ground surface to the water surface in the well. Certain of the depth measurements in the column may be followed with an asterisk superscript to indicate a questionable measurement. Depth to ground water measurements may be questionable for such reasons as (a) well being pumped while undergoing measurement, (b) nearby pump operating, (c) casing leaking or wet, (d) well pumped recently, (e) air gauge measurement, or (f) recharge operation at well or nearby. The specific reason for any asterisk or any given measurement may be obtained from the Department of Water Resources.

Other symbols used are:

Measurement discontinued	#
Well destroyed	@
No measurement for other reasons	□

Water Surface Elevation in Feet

This is the elevation in feet of the water surface in the well based on mean sea level, USC&GS datum, 1929. It was derived by subtraction of the depth measurement from the ground surface elevation. Negative values indicate elevations below datum.

The words FLOW and DRY are shown in this column to indicate a flowing or dry well respectively.

Agency Supplying Data

Each number in this column is the code number for the agency from which the water level data were obtained.

TABLE C-1
GROUND WATER LEVEL CONDITIONS
IN THE CENTRAL COASTAL AREA
SPRING 1964

Ground Water Basin or Unit	Basin Number	Average Change in Ground Water Level $\frac{1}{}$: Spring 1963 to Spring 1964 (in feet)	Average Depth to Ground Water : Spring 1964 (in feet)
Region 1			
Potter Valley	1-14.00	-0.7	7.3
Ukiah Valley	1-15.00	-1.5	7.2
Sanel Valley	1-16.00	-3.0	8.3
Alexander Valley	1-17.00	-4.4	8.9
Santa Rosa Valley	1-18.00		
Santa Rosa Area	1-18.01	-1.0	14.0
Healdsburg Area	1-18.02	-3.5	16.0
Lower Russian River Valley	1-98.00	-4.2	13.6
Region 1 Averages: $\frac{2}{}$		-2.0	11.6
Region 2			
Petaluma Valley	2-1.00	-0.2	23.4
Napa-Sonoma Valley	2-2.00		
Napa Valley	2-2.01	+0.6	11.4
Sonoma Valley	2-2.02	-2.3	18.8
Suisun-Fairfield Valley	2-3.00	-2.1	8.9
Ygnacio Valley	2-6.00	-2.3	17.4
Santa Clara Valley	2-9.00		
East Bay Area	2-9.01	-0.7	60.0
South Bay Area	2-9.02	+6.9	116.3
Livermore Valley	2-10.00	-2.5	66.0
Half Moon Bay Terrace	2-22.00	-2.2	20.9
San Gregorio Valley	2-24.00	-1.3	10.4
Pescadero Valley	2-26.00	-2.1	8.2
Region 2 Averages: $\frac{2}{}$		+0.9	52.4
Region 3			
Soquel Valley	3-1.00	+1.5	64.1
Pajaro Valley	3-2.00	-4.1	64.8
Cilroy-Hollister Valley	3-3.00		
South Santa Clara County	3-3.01	+8.0	39.3
San Benito County	3-3.02	-3.4	80.3
Salinas Valley	3-4.00	-4.4	59.6
Carmel Valley	3-7.00	-2.3	18.6
West Santa Cruz Terrace	3-26.00	No measurements in 1963	30.8
Region 3 Averages: $\frac{2}{}$		-3.7	60.5
Central Coastal Area Averages: $\frac{3}{}$		-1.9	52.5

$\frac{1}{}$ + indicates rise in water level.
- indicates decline in water level.

$\frac{2}{}$ Region Averages - $\frac{\sum (\text{basin average} \times \text{basin area})}{\sum \text{basin areas}}$

$\frac{3}{}$ Central Coastal Area Averages - $\frac{\sum (\text{region average} \times \text{region area})}{\sum \text{region areas}}$

TABLE C-2
DESCRIPTION OF SELECTED WELLS

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE		RECORD REC.	RECORDS ENOS
					LOG	WATER ANAL.		
NORTH COASTAL REGION								
POTTER VALLEY								
			1-14.00					
17N/11W-18J01 M		5000 1	35	51				
17N/11W-32J01 M		5000 1	12	51				
UKIAH VALLEY								
			1-15.00					
15N/12W-08L01 M		5000 1	62	51				
15M/12W-21M01 M		5000 7	46	51 63				
15N/12W-35M01 M		5000 2	190	51				
HOPLAND VALLEY								
			1-16.00					
13N/11W-18E01 M		5000 7	52	53				
13N/11W-19P01 M		5000 2	44	53				
13M/11W-20G01 M		5000 1	135	53				
ALEXANDER VALLEY								
			1-17.00					
10M/09W-18B01 M		5000 2	180	50				
10M/09W-26L02 M		5000 1	40	50				
10M/09W-33C01 M	33B01	5000 1	20	50				
11N/10W-08P01 M		5000 1	30	51				
11N/10W-17P02 M		5000 2	36	53				
11N/10W-19F02 M		5000 1	334	52				
SANTA ROSA VALLEY								
			1-18.00					
SANTA ROSA AREA								
			1-18.01					
6N/08W-07P02 M		5000 7	120	45				
6N/08W-13R01 M		5000 1	250	42				
7N/07W-06R01 M		5050 7	193	51				

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE		RECORD REC.	RECORDS ENOS
					LOG	WATER ANAL.		
SANTA ROSA AREA								
			1-18.01					
7N/09W-35D02 M		5050 1	167	50				
8N/09W-36N01 M		5000 0	89	49				
HEALDSBURG AREA								
			1-18.02					
8N/09W-03P01 M		5000 1	110	50				
8N/09W-22L01 M		5000 1	44	51				
9N/09W-28N01 M		5000 2	53	53				
10N/10W-35Q01 M		5000 0	285	54				
LOWER RUSSIAN RIVER VALLEY								
			1-98.00					
7N/10W-06N01 M	7D01	5000 3	120	58				
7N/11W-14E01 M		5000 1	47	51				

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE			RECORD REC. ENDS
					LOG	WATER ANAL.	PROD. REC.	

SUISUN-FAIRFIELD VALLEY 2-03.00

5N/01W-07E01 M		5109 9		33			48
5N/01W-28P01 M		5109 1		40			49
5N/02W-17D02 M		5109 2		70			48
5N/02W-27J02 M		5000 0		60			49
5N/02W-29R01 M		5109 2		120			49
5N/02W-30J01 M		5000 2		220			49
5N/03W-26F02 M		5109 1		282			18
YGNACIO VALLEY				2-06.00			
1N/01W-07K01 M		5050 1					58
1N/02W-11M01 M		5050 1		81 2			58
2N/02W-27R01 M		5050 1		131			58
2N/02W-36E01 M		5050 1		40			58
SANTA CLARA VALLEY				2-09.00			
SOUTH ALAMEDA COUNTY UPR AQUIFER				2-09.01			
3S/02W-08R05 M		5100 1		85			50
3S/03W-24Q02 M		5100 9		80			49
4S/01W-18G01 M		5401 4		160			58
4S/01W-22P05 M		5100 2		180			48
4S/01W-29C04 M		5401 0		145			50
4S/02W-24Q02 M		5100 2					49
5S/01W-04F01 M		5401 0		97			57
5S/01W-09Q01 M		5100 9		60			50

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE			RECORD REC. ENDS
					LOG	WATER ANAL.	PROD. REC.	

SAN FRANCISCO BAY REGION

PETALUMA VALLEY 2-01.00

3N/06W-01O01 M		5050 1		225			50
5N/07W-20B02 M		5000 9		158			53
5N/07W-21H01 M		5000 1		92			59
5N/07W-26R01 M		5000 0		428			50
5N/07W-35K01 M		5050 2		78			49
VAPA-SOMOMA VALLEY				2-02.00			
MAPA VALLEY				2-02.01			
5M/04W-11H01 M		5000 1		59 1			50
6M/04W-17A01 M		5000 0		250 1			49
7M/05W-09R01 M		5101 2		333 1			49
7M/05W-09R02 M	16802	5000 0		232			49
7M/05W-09Q03 M		5101 1		25			49
7M/05W-23D02 M		5101 2		129			49
8M/06W-10O01 M		5000 9		184 1			49
SOMOMA VALLEY				2-02.02			
5N/05W-17C01 M		5000 1		70			50
5N/05W-28N01 M		5050 2		130 1			46
5N/05W-29N01 M		5000 2		100			51
SUISUN-FAIRFIELD VALLEY				2-03.00			
4N/02W-06A01 M		5109 0		39			20
4N/02W-09A01 M		5109 0		37			48
4N/03W-01D01 M		5109 1		67			18
5N/01E-36A01 M		5109 9		38			29

TABLE C-2
DESCRIPTION OF SELECTED WELLS

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA WELL USE	WELL DEPTH IN FEET	DATA AVAILABLE		WELL USE	WELL DEPTH IN FEET	LOG	WATER ANAL.	PROD. REC.	RECORD BEGINS	RECORD ENDS
				LOG	WATER ANAL.							
SOUTH ALAMEDA COUNTY LWR AQUIFER												
2--09+01												
2S/03W-36R01 M		5100 2	601								59	
3S/02W-19A02 M		5050 0	218								50	
3S/03W-24J01 M		5100 7	511								49	
4S/02W-02001 M		5100 2	475								50	
4S/02W-35R02 M		5401 7	224	2							58	
4S/02W-38K01 M		5401 0	241								49	
5S/01W-09M01 M		5100 2	297	1							49	
NORTH SANTA CLARA COUNTY												
2--09+02												
6S/01E-07E01 M 59		2400 0	525								36	
6S/01E-21R01 M 342A		2400 2	560	2							51	
6S/01E-23P02 M 127		2400 0	295								36	
6S/01E-30M01 M 84		2400 7	250								30	
6S/01W-23E01 M		5000 2	425								58	
6S/02W-16R01 M 5		2400 2									36	
6S/02W-25C01 M 30		2400 1	500								30	
6S/02W-35C01 M 20		2400 2	480								30	
7S/01E-01K01 M 180A		2400 7	400								36	
7S/01E-08L01 M 274		2400	235								36	
7S/01E-09D02 M 120		2400 3									36	
7S/01E-18C05 M		5000 3	908								58	
7S/01E-31A02 M 148		2400 2									36	
7S/02E-07P01 M 403		2400 3	525								57	
7S/02E-17H01 M 304		2400	400								31	
NORTH SANTA CLARA COUNTY												
2--09+02												
7S/01W-35C01 M 117		2400 3	438								36	
7S/02W-03001 M 23A		2400 2	800								36	
7S/02W-04B01 M 13		2400 2	450								36	
7S/02W-22A01 M 37		2400 2	620								36	
8S/01E-07H02 M 166A		2400	350								54	
8S/01E-13H01 M 257		2400 7	110								36	
8S/02E-20F03 M 297		2400									40	
8S/02E-22D01 M 233		2400 7									36	
8S/01W-15B01 M 129		2400	64								36	
9S/02E-01J01 M 298B		2400 7	135								36	
9S/02E-01M01 M 279		2400	114								37	
LIVERMORE VALLEY												
2--10+00												
2S/02E-25H01 M		5100									48	
2S/01W-26C01 M		5100 2	360								48	
3S/01E-11M01 M		5100 7	303								49	
3S/02E-02R01 M		5100 2	437	1							48	
3S/02E-10H01 M		5100 2	376								48	
HALF MOON BAY TERRACE												
2--22+00												
5S/05W-20L01 M		5050 0	69								53	
5S/05W-29M01 M		5050 2	82								53	
6S/05W-08B01 M		5050 2	85								53	

DESCRIPTION OF SELECTED WELLS

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	LOG	DATA AVAILABLE	PROD REC.	RECORD BEGINS	RECORD ENDS
SAN GREGORIO VALLEY									
						2-24.00			
7S/05W-13E01 M	5050 0	5050 0	0	45				58	
7S/05W-15C01 M	5050 2	5050 2	0	85				58	
7S/05W-15E01 M	5050 7	5050 7						53	
7S/05W-15E02 M	5050 1	5050 1						53	
7S/05W-15H02 M	5050 1	5050 1						60	
PESCADERO VALLEY									
8S/05W-09H01 M	5050 2	5050 2				2-26.00		53	
8S/05W-11M01 M	5050 1	5050 1		36				53	

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	LOG	DATA AVAILABLE	PROD REC.	RECORD BEGINS	RECORD ENDS
CENTRAL COASTAL REGION									
SOQUEL VALLEY									
						3-01.00			
11S/01W-09L01 M	5050 0	5050 0	0					48	
11S/01W-15H01 M	5050 0	5050 0						48	
PAJARO VALLEY									
						3-02.00			
12S/01E-24G01 M	5050 2	5050 2	200					47	
12S/02E-16J01 M	5050 2	5050 2						47	
12S/02E-31K01 M	5050 2	5050 2	219					47	
12S/02E-31K01 M	5100 2	5100 2	219					47	
13S/02E-05801 M	5050 0	5050 0	225					56	
GILROY-HOLLISTER VALLEY									
						3-03.00			
SOUTH SANTA CLARA COUNTY									
						3-03.01			
9S/03E-27C02 M 374	2400 7	2400 7	300					43	
9S/03E-29801 M	5050 0	5050 0	170					48	
10S/03E-34L01 M	5050 7	5050 7			1			48	
10S/04E-18602 M	5050 7	5050 7	184					48	
10S/04E-35E01 M	5050 2	5050 2	447					48	
11S/03E-01801 M	5400 2	5400 2						57	
SAN BENITO COUNTY									
						3-03.02			
11S/05E-13D01 M	5050 2	5050 2	125					2	37
12S/04E-20C01 M	5101 2	5101 2	736		1			49	
12S/05E-33A01 M	5050 2	5050 2	150					24	
13S/05E-11001 M	5101 0	5101 0	44					24	

TABLE C-2
DESCRIPTION OF SELECTED WELLS

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	LOG	DATA AVAILABLE	RECORD REGRS ENDS
						MATER ANTL	
SALINAS VALLEY							
PRESSURE AREA 180 FOOT AQUIFER							
				3-04+00			
14S/02E-03C01 M	2B 001	2100 2					31
14S/02E-15L01 M	2C 025A	2100 2	176				16
15S/02E-01001 M	2D 023	2100 7	196 1				31
15S/03E-16M01 M	3D 040	2100 2					31
15S/04E-33A01 M	4D 056	2100 2	279 1				31
16S/04E-11001 M	4E 030D	2100 1					31
PRESSURE AREA 400 FOOT AQUIFER							
				3-04+01			
13S/02E-31001 M	1B 011A	2100 2	500 1				31
14S/03E-18J01 M	2C 119	2100 2	513 1				31
EAST SIDE AREA							
				3-04+02			
16S/05E-17R01 M	5E 026	2100 2	299				16
ARROYO SECO CONE							
				3-04+04			
18S/06E-15M01 M	7G 029	2100 2	288 1				31
19S/06E-11C01 M	7H 036	2100 2	320				44
UPPER VALLEY AREA							
				3-04+05			
19S/07E-10P01 M	8H 031	2100 2	245				31
20S/08E-05R01 M	9I 004	2100 2	372				16
21S/09E-06K01 M	10J 001	2100 2					16
21S/10E-32N01 M	11K 002	2100 2					31
22S/10E-16K01 M	12K 003	2100 2					31

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	LOG	DATA AVAILABLE	RECORD REGRS ENDS
						MATER ANTL	
PASO ROBLES							
				3-04+06			
24S/10E-11C01 M		5100					
24S/11E-25N01 M		5100					
24S/11E-33R01 M		5100					
24S/11E-35J01 M		5100					
24S/12E-17M01 M		5100					
24S/15E-33C01 M		5100					
25S/11E-35G01 M		5100					
25S/12E-17J01 M		5100					
25S/12E-17R01 M		5100					
25S/12E-26K01 M		5100					
25S/13E-11E01 M		5100					
25S/16E-17L01 M		5100					
25S/16E-30M01 M		5100					
26S/12E-04N01 M		5100					
26S/12E-26E01 M		5100					
26S/12E-35M01 M		5100					
26S/13E-10001 M		5100					
26S/13E-34B01 M		5100					
26S/14E-16L01 M		5100					
26S/14E-35D01 M		5100					
26S/15E-02B01 M		5100					
26S/15E-28002 M		5100					
26S/15E-29N01 M		5100					
27S/19E-21M01 M		5100					

DESCRIPTION OF SELECTED WELLS

STATE WELL NUMBER	AGENCY WELL NUMBER	AGENCY SUPPLYING DATA	WELL USE	WELL DEPTH IN FEET	LOG	DATA AVAILABLE	RECORD BEGINS ENDS
						WATER ANAL	PROD REC.

PASO ROBLES 3-04.06

27S/13E-24N01 M	5100						
27S/13E-32B01 M	5100						
27S/15E-10R02 M	5100						
27S/15E-13A01 M	5100						
27S/16E-21E02 M	5100						
28S/12E-10G01 M	5100						
28S/12E-10R02 M	5100						
28S/12E-13N01 M	5100						
28S/12E-14G01 M	5100						
28S/13E-04K01 M	5100						
28S/13E-04K02 M	5100						
28S/14E-07E01 M	5100						
28S/16E-23M01 M	5100						
29S/13E-05F03 M	5100						
29S/13E-05X02 M	5100						
29S/13E-06A01 M	5100						
29S/13E-19H01 M	5100						
CARMEL VALLEY							
16S/01E-25B01 M	5100		7	60			52
WEST SANTA CRUZ TERRACE							
11S/02N-22K01 M	5050		2				54

TABLE C-3
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD. SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD. SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION											
POTTER VALLEY											
1-14.00											
17N/11W-18J01 M	955.0	7-09-63	.5	954.5	5000	UKIAH VALLEY					
		8-19-63	.6	954.4		15N/12W-21M01 M					
		9-17-63	.5	954.7		10-22-63					
		10-23-63	.4	955.4		CONT.					
		11-20-63	.9	955.9		15N/12W-35M01 M					
		12-19-63	.9	955.9		7-09-63					
		1-19-64	.9	954.1		8-13-63					
		2-25-64	.9	954.1		9-16-63					
		3-17-64	.9	954.1		10-22-63					
		4-14-64	.9	954.1		11-19-63					
		5-12-64	1.1	953.9		12-19-63					
		6-16-64	.3	954.7		1-15-64					
						2-25-64					
						3-17-64					
						4-14-64					
						5-12-64					
						6-16-64					
						7-09-63					
						8-19-63					
						9-17-63					
						10-23-63					
						11-20-63					
						12-19-63					
						1-15-64					
						2-25-64					
						3-17-64					
						4-13-64					
						5-12-64					
						6-16-64					
						7-09-63					
						8-19-63					
						9-17-63					
						10-23-63					
						11-20-63					
						12-19-63					
						1-15-64					
						2-25-64					
						3-17-64					
						4-14-64					
						5-12-64					
						6-16-64					
						7-09-63					
						8-13-63					
						9-17-63					
						10-23-63					
						11-20-63					
						12-19-63					
						1-15-64					
						2-25-64					
						3-17-64					
						4-14-64					
						5-12-64					
						6-16-64					
						7-09-63					
						8-13-63					
						9-17-63					
						10-23-63					
						11-20-63					
						12-19-63					
						1-15-64					
						2-25-64					
						3-17-64					
						4-14-64					
						5-12-64					
						6-16-64					
						7-09-63					
						8-13-63					
						9-17-63					
						10-23-63					
						11-20-63					
						12-19-63					
						1-15-64					
						2-25-64					
						3-17-64					
						4-14-64					
						5-12-64					
						6-16-64					
						7-09-63					
						8-13-63					
						9-17-63					
						10-23-63					
						11-20-63					
						12-19-63					
						1-15-64					
						2-25-64					
						3-17-64					
						4-14-64					
						5-12-64					
						6-16-64					
						7-09-63					
						8-13-63					
						9-17-63					
						10-23-63					
						11-20-63					
						12-19-63					
						1-15-64					
						2-25-64					
						3-17-64					
						4-14-64					
						5-12-64					
						6-16-64					
						7-09-63					
						8-13-63					
						9-17-63					
						10-23-63					
						11-20-63					
						12-19-63					
						1-15-64					
						2-25-64					
						3-17-64					
						4-14-64					
						5-12-64					
						6-16-64					
						7-09-63					
						8-13-63					
						9-17-63					
						10-23-63					
						11-20-63					
						12-19-63					
						1-15-64					
						2-25-64					
						3-17-64					
						4-14-64					
						5-12-64					
						6-16-64					
						7-09-63					
						8-13-63					
						9-17-63					
						10-23-63					
						11-20-63					
						12-19-63					
						1-15-64					
						2-25-64					
						3-17-64					
						4-14-64					
						5-12-64					
						6-16-64					
						7-09-63					
						8-13-63					
						9-17-63					
						10-23-63					
						11-20-63					
						12-19-63					
						1-15-64					
						2-25-64					
						3-17-64					
						4-14-64					
						5-12-64					
						6-16-64					
						7-09-63					
						8-13-63					
						9-17-63					
						10-23-63					
						11-20-63					
						12-19-63					
						1-15-64					
						2-25-64					
						3-17-64					
						4-14-64					
						5-12-64					
						6-16-64					
						7-09-63					
						8-13-63					
						9-17-63					
						10-23-63					
						11-20-63					
						12-19-63					
						1-15-64					
						2-25-64					
						3-17-64					
						4-14-64					
						5-12-64					
						6-16-64					
						7-09-63					
						8-13-63					
						9-17-63					
						10-23-63					
						11-20-63					
						12-19-63					
						1-15-64					
						2-25-64					
						3-17-64					
						4-14-64					
						5-12-64					
						6-16-64					
						7-09-63					
						8-13-63					
						9-17-63					
						10-23-63					
						11-20-63					
						12-19-63					
						1-15-64					
						2-25-64					
						3-17-64					
						4-14-64					
						5-12-64					

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD. SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION					
HOPLAND VALLEY					
13N/11W-20G01 M	515.0	9-16-63	11.9	503.1	5000
CONT.		10-22-63	10.7	504.3	
		11-19-63	5.0	510.0	
		12-19-63	4.5	510.5	
		1-15-64	4.4	510.6	
		2-25-64	4.2	510.8	
		3-17-64	4.3	510.7	
		4-14-64	4.5	510.5	
		5-12-64	4.8	510.2	
		6-16-64	7.4	507.6	
NORTH COASTAL REGION					
ALEXANDER VALLEY					
10N/09W-18B01 M	230.0	7-09-63	□		5000
		8-16-63	□	210.2	
		9-16-63	19.8	210.5	
		10-22-63	19.5	210.5	
		11-19-63	17.7	215.3	
		12-19-63	17.3	215.7	
		1-16-64	18.0	215.0	
		2-25-64	18.9	215.1	
		3-17-64	17.1	215.9	
		4-14-64	18.0	215.0	
		5-12-64	18.9	211.1	
		6-16-64	18.6	210.4	
NORTH COASTAL REGION					
ALEXANDER VALLEY					
10N/09W-26L02 M	205.0	7-09-63	7.9	197.1	5000
		8-12-63	12.2	192.8	
		9-16-63	14.1	190.9	
		10-22-63	15.6	189.4	
		11-19-63	8.7	196.3	
		12-19-63	3.6	201.4	
		1-15-64	3.5	201.5	
		2-25-64	2.5	202.5	
		3-17-64	2.3	202.7	
		4-14-64	3.3	201.7	
		5-12-64	4.2	200.8	
		6-16-64	10.8	194.2	
NORTH COASTAL REGION					
HOPLAND VALLEY					
10N/09W-33C01 M	180.0	7-09-63	8.2	171.8	5000
		8-12-63	9.2	170.8	
		9-16-63	7.8	172.2	
		10-22-63	8.3	171.7	
		11-18-63	5.5	174.5	
		12-19-63	5.5	174.5	
NORTH COASTAL REGION					
ALEXANDER VALLEY					
11N/10W-08P01 M	305.0	7-09-63	□		5000
		8-12-63	12.6	292.4	
		9-16-63	□		
		10-22-63	12.0	293.0	
		11-19-63	11.0	294.0	
		12-19-63	7.8	297.2	
		1-15-64	11.1	293.9	
		2-25-64	10.0	295.0	
		3-17-64	10.8	294.2	
		4-14-64	11.4	293.6	
		5-12-64	12.8	292.2	
		6-16-64	12.7	292.3	
NORTH COASTAL REGION					
ALEXANDER VALLEY					
10N/09W-33C01 M	180.0	1-15-64	6.5	173.5	5000
CONT.		2-25-64	6.0	173.0	
		3-17-64	6.1	173.9	
		4-14-64	3.0	177.0	
		5-12-64	7.9	172.1	
		6-16-64	8.4	171.6	
NORTH COASTAL REGION					
ALEXANDER VALLEY					
11N/10W-17P02 M	292.0	7-09-63	□		5000
		8-12-63	10.6	281.4	
		9-16-63	10.1	281.9	
		10-22-63	8.7	283.3	
		11-19-63	10.9	281.1	
		12-19-63	9.0	283.9	
		1-15-64	8.5	283.9	
		2-25-64	8.8	283.2	
		3-17-64	9.4	282.6	
		4-14-64	□		
		5-12-64	10.5	281.5	
		6-16-64	4.1	341.9	
NORTH COASTAL REGION					
ALEXANDER VALLEY					
11N/10W-19F02 M	346.0	7-09-63	8.5	337.7	5000
		8-12-63	10.2	335.8	
		9-16-63	10.1	335.9	
		10-22-63	3.7	342.3	
		11-19-63	3.2	342.8	
		12-19-63	3.3	342.7	
		1-15-64	4.0	342.0	
		2-25-64	3.8	342.2	
		3-17-64	4.3	341.7	
		4-14-64	5.3	340.7	
		5-12-64	6.8	339.2	

TABLE C-3
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD. SUR. TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD. SUR. TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
NORTH COASTAL REGION											
SANTA ROSA VALLEY											
SANTA ROSA AREA											
6N/08W-07P02 M	95.0	7-09-63	19.1	75.9	5000	8N/09W-36N01 M	90.0	6-16-64	9.5	80.5	5000
		8-12-63	29.4	65.6							
		9-16-63	24.0	71.0							
		10-22-63	□								
		11-18-63	23.1	71.9							
		12-19-63	17.9	77.1							
		1-14-64	18.1	76.9							
		2-25-64	15.8	79.2							
		3-17-64	16.8	78.2							
		4-14-64	18.0	77.0							
		5-12-64	17.8	77.2							
		6-16-64	20.0	75.0							
6N/08W-13R01 M	115.0	7-09-63	□	96.9	5000	8N/09W-03P01 M	77.0	7-09-63	6.0	71.0	5000
		8-12-63	18.1								
		9-16-63	□								
		10-22-63	20.7	96.3							
		11-18-63	19.8	95.2							
		12-19-63	18.2	96.6							
		1-14-64	17.3	97.7							
		2-25-64	16.2	96.8							
		3-16-64	15.5	95.5							
		4-13-64	15.3	95.7							
		5-11-64	17.4	97.6							
		6-16-64	□								
7N/07W-06R01 M	275.0	3-24-64	11.6	263.4	5050	8N/09W-22L01 M	67.0	7-09-63	□	58.9	5000
7N/08W-31C01 M	85.0	3-23-64	#		5050						
7N/09W-35O02 M	135.0	3-23-64	32.0	103.0	5050						
8N/09W-36N01 M	90.0	7-09-63	3.2	86.8	5000						
		8-12-63	3.0	87.0							
		9-16-63	8.6	81.4							
		10-22-63	10.2	79.8							
		11-18-63	10.0	80.0							
		12-19-63	8.4	81.6							
		1-14-64	8.5	81.5							
		2-25-64	7.1	82.9							
		3-17-64	7.4	82.6							
		4-14-64	7.8	82.2							
		5-12-64	8.2	81.8							
		6-16-64	8.2								
7N/07W-06R01 M	275.0	3-24-64	11.6	263.4	5050	9N/09W-28N01 M	90.0	7-09-63	14.7	75.3	5000
7N/08W-31C01 M	85.0	3-23-64	#		5050						
7N/09W-35O02 M	135.0	3-23-64	32.0	103.0	5050						
8N/09W-36N01 M	90.0	7-09-63	3.2	86.8	5000						
		8-12-63	3.0	87.0							
		9-16-63	8.6	81.4							
		10-22-63	10.2	79.8							
		11-18-63	10.0	80.0							
		12-19-63	8.4	81.6							
		1-14-64	8.5	81.5							
		2-25-64	7.1	82.9							
		3-17-64	7.4	82.6							
		4-14-64	7.8	82.2							
		5-12-64	8.2	81.8							
		6-16-64	8.2								
10N/10W-35O01 M	142.0	7-09-63	3.6	138.4	5000						
		8-12-63	4.9	137.1							

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
-------------------	----------------------------------	------	------------------------------	---------------------------------	-----------------------

NORTH COASTAL REGION

HEALDSBURG AREA

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
10N/10W-35001 M	142.0	9-16-63	6.3	135.7	5000
		10-22-63	6.2	135.8	
		11-18-63	4.9	137.1	
		12-19-63	2.4	139.6	
		1-14-64	3.2	138.8	
		2-25-64	2.4	139.6	
		3-17-64	2.8	139.2	
		4-14-64	3.6	138.4	
		5-12-64	4.1	137.9	
		6-16-64	4.8	137.2	

LOWER RUSSIAN RIVER VALLEY

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
7N/10W-06N01 M	25.0	7-09-63	20.9	4.1	5000
		8-12-63	20.6	4.4	
		9-16-63	20.1	4.9	
		10-22-63	19.8	5.2	
		11-18-63	19.2	5.8	
		12-19-63	17.6	7.4	
		1-14-64	20.1	4.9	
		2-25-64	19.6	5.4	
		3-17-64	19.9	5.1	
		4-14-64	19.7	5.3	
		5-12-64	21.4	3.6	
		6-16-64	21.1	3.9	
7N/11W-14E01 M	25.0	7-09-63	19.0	6.0	5000
		8-12-63	19.3	5.7	
		9-16-63	19.0	6.0	
		10-22-63	15.8	9.2	
		11-18-63	16.8	8.2	
		12-19-63	17.1	7.9	
		1-14-64	18.4	6.6	
		2-25-64	19.0	6.0	
		3-17-64	18.7	6.3	
		4-14-64	16.8	8.2	
		5-12-64	19.8	5.2	
		6-16-64	20.1	4.9	

TABLE C-3 GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION											
PETALUMA VALLEY											
2-01-00											
3N/05W-01001 M	2.0	3-23-64	0.5	1.5	5050						
5N/07W-20802 M	41.0	7-09-63	69.5	28.5	5000						
		8-12-63	68.1	27.1							
		9-16-63	67.4	26.4							
		10-22-63	61.9	20.9							
		11-18-63	39.2	1.8							
		12-19-63	55.1	14.1							
		1-14-64	54.1	13.1							
		2-25-64	52.8	11.8							
		3-16-64	49.9	8.9							
		4-13-64	55.3	14.3							
		5-11-64	60.5	19.5							
		6-16-64	60.9	19.9							
5N/07W-21401 M	65.0	7-08-63	33.8	31.2	5000						
		8-12-63	39.0	26.0							
		9-16-63	39.1	25.9							
		10-22-63	41.7	23.3							
		11-18-63	42.7	22.3							
		12-19-63	43.4	21.6							
		1-14-64	43.7	21.3							
		2-25-64	40.0	25.0							
		3-16-64	42.7	22.3							
		4-13-64	40.1	24.9							
		5-11-64	41.2	23.8							
5N/07W-26R01 M	53.6	7-08-63	21.7	31.9	5000						
		9-16-63	21.7	31.9							
		10-22-63	25.4	28.2							
		11-18-63	23.7	29.9							
		12-19-63	23.2	29.2							
		1-14-64	24.4	29.2							
		2-25-64	23.2	30.4							
		3-16-64	23.8	29.8							
		4-13-64	15.3	38.3							
		5-11-64	26.1	27.5							
5N/07W-35K01 M	18.8	3-23-64	22.8	4.0	5050						
SAN FRANCISCO BAY REGION											
NAPA-SONOMA VALLEY											
2-02-00											
NAPA VALLEY											
5N/04W-11M01 M	13.0	7-08-63	8.1	4.9	5000						
		8-12-63	7.9	5.1							
		9-16-63	8.5	4.5							
		10-21-63	8.0	5.0							
		11-18-63	7.1	5.9							
		12-20-63	7.2	5.8							
		1-13-64	8.7	4.3							
		2-24-64	7.1	5.9							
		3-16-64	7.6	5.4							
		4-13-64	8.4	4.6							
		5-11-64	8.6	4.4							
		6-15-64	8.5	4.5							
6N/04W-17A01 M	67.0	7-08-63	7.2	59.8	5000						
		8-13-63	9.8	57.2							
		9-17-63	12.5	54.5							
		10-21-63	12.0	55.0							
		11-19-63	10.8	56.2							
		12-20-63	9.9	57.1							
		1-13-64	10.1	56.9							
		2-24-64	8.2	58.8							
		3-16-64	8.5	58.7							
		4-13-64	8.6	58.4							
		5-11-64	16.4	50.6							
		6-15-64	13.9	51.1							
7N/05W-09001 M	155.0	4-06-64	10.0*	145.0	5101						
7N/05W-09002 M	155.0	7-08-63	10.3	144.7	5000						
		8-13-63	16.2*	138.8							
		9-17-63	13.7	141.3							
		10-21-63	14.8	140.2							
		11-19-63	13.8	141.2							
		12-20-63	12.3	142.7							
		1-13-64	11.9	143.1							
		2-24-64	9.8	145.2							
		3-16-64	10.0	145.0							
		4-13-64	10.4	144.6							
		5-11-64	11.2	143.8							
		6-15-64	13.0	142.0							
7N/05W-09003 M	155.0	4-06-64	7.1*	147.9	5101						
7N/05W-23D02 M	127.0	4-08-64	2.6	124.4	5101						

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
SUISUN-FAIRFIELD VALLEY					
2-03-00					
4N/02W-06A01 M	35.0	10-11-63 3-16-64	16.5 16.4	18.5 18.6	5109
4N/02W-09A01 M	7.0	10-15-63 3-16-64	4.9 3.6	2.1 2.4	5109
4N/03W-01D01 M	37.0	10-15-63 3-16-64	8.0 5.4	29.0 31.6	5109
5N/01E-36A01 M	24.0	10-16-63 3-16-64	9.8 13.2	14.2 10.8	5109
5N/01W-07E01 M	115.0	10-16-63 3-16-64	13.3 11.8	101.7 103.2	5109
5N/01W-28P01 M	15.0	10-16-63 3-16-64	□	□	5109
5N/02W-17D02 M	101.0	10-16-63 3-17-64	#	□	5109
5N/02W-27J02 M	24.0	7-08-63 8-12-63 9-16-63 10-21-63 11-18-63 12-20-63 1-13-64 2-24-64 3-16-64 4-13-64 5-11-64 6-15-64	21.0 21.3 23.1 23.0 21.8 14.8 12.3 9.8 9.1 8.8 2.6 13.6	3.0 2.7 0.9 1.0 2.2 9.2 11.7 14.2 14.9 15.2 21.4 10.4	5000
5N/02W-29R01 M	46.0	10-16-63 3-16-64	13.7 9.9	32.3 36.1	5109
5N/02W-30J01 M	65.0	7-08-63 8-12-63 9-16-63 10-21-63 11-18-63 12-20-63 1-13-64 2-24-64	20.3 20.6 23.0 23.5 23.4 23.9 23.0	44.7 42.0 41.4 41.5 41.6 41.1 42.0	5000

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
NAPA VALLEY					
2-02+01					
8N/06W-10001 M	290.0	7-08-63 8-13-63 9-17-63 10-21-63 11-19-63 12-20-63 1-13-64 2-14-64 3-16-64 4-13-64 5-11-64 6-15-64	3.8 5.0 6.6 7.4 3.8 3.4 4.2 2.1 2.5 3.2 4.0 5.0	286.2 285.0 283.4 282.2 284.2 286.6 285.8 287.9 287.5 286.8 286.0 285.0	5000
SONOMA VALLEY					
2-02+02					
5N/05W-17C01 M	85.0	7-08-63 8-12-63 9-16-63 10-22-63 11-00-63 12-19-63 1-00-64 2-24-64 3-24-64 4-13-64 5-00-64 6-16-64	18.8 20.3 21.8 20.5 □ 17.9 □ 13.8 16.2 16.6 □ 19.4	66.2 64.7 63.2 64.5 67.1 71.2 68.8 68.4 65.6	5000
5N/05W-28N01 M	11.0	3-24-64	6.9	4.1	5050
5N/05W-29N01 M	16.0	7-08-63 8-12-63 9-16-63 10-22-63 11-18-63 12-19-63 1-14-64 2-24-64 3-16-64 4-13-64 5-11-64 6-16-64	9.4 10.6 11.6 12.0 11.5 10.0 10.3 8.3 8.8 8.8 9.5 10.1	6.6 5.4 4.4 4.0 4.5 6.0 5.7 7.7 7.2 7.2 6.5 5.9	5000

TABLE C-3
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD. SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD. SUR TO WATER SUR IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION											
SUISUN-FAIRFIELD VALLEY											
2-03-00											
5N/02W-30J01 M CONT.	65.0	3-16-64 4-13-64 5-11-64 6-15-64	23.3 23.2 20.2 19.5	41.7 41.8 44.8 45.5	5000	35/02W-08R05 M	64.0	9-00-63 4-00-64	33.0 34.0	31.0 30.0	5100
5N/03W-26F02 M	111.0	10-17-63 3-18-64	□ □	5109		35/03W-24002 M	8.0	9-00-63 4-00-64	8.5 7.0	0.5 1.0	5100
YGNACIO VALLEY											
2-06-00											
1N/01W-07K01 M	83.0	7-18-63 8-24-63 9-23-63 10-21-63 11-19-63 12-17-63 1-20-64 2-17-64 3-17-64 4-20-64 5-18-64 6-19-64	7.2 10.2 10.9 10.1 9.5 9.2 9.0 10.8 9.9 10.5 9.7 □	75.8 72.8 72.2 72.9 73.5 73.8 74.0 72.2 73.1 72.5 73.3	5050	4S/01W-18G01 M	41.0	7-19-63 8-23-63 9-00-63 10-25-63 11-22-63 12-20-63 1-24-64 2-28-64 3-27-64 4-17-64 5-15-64 6-12-64	82.7 85.4 □ □ □ 81.3 78.3 74.3 73.6 74.3 78.5 83.6	41.7 44.4 - 43.3 - 40.3 37.3 33.3 32.6 33.3 37.5 42.6	5401
1N/02W-11N01 M	63.0	9-23-63 3-17-64	15.2 12.9	47.8 50.1	5050	4S/01W-22P05 M	80.0	9-00-63 4-00-64	48.2 48.2	31.8 31.8	5100
2N/02W-27R01 M	15.0	7-18-63 8-24-63 9-23-63 10-21-63 11-19-63 12-17-63 1-20-64 2-17-64 3-17-64 4-20-64 5-18-64 6-19-64	6.2 4.4 3.5 2.8 2.9 2.5 2.3 2.6 2.8 4.4 5.3	8.8 10.6 10.7 11.5 12.2 12.1 12.5 12.7 12.4 12.2 10.6 9.7	5050	4S/01W-29C04 M	55.0	9-20-63 3-20-64	92.0 83.6	37.0 28.6	5401
2N/02W-27R01 M	15.0	7-18-63 8-24-63 9-23-63 10-21-63 11-19-63 12-17-63 1-20-64 2-17-64 3-17-64 4-20-64 5-18-64 6-19-64	6.2 4.4 3.5 2.8 2.9 2.5 2.3 2.6 2.8 4.4 5.3	8.8 10.6 10.7 11.5 12.2 12.1 12.5 12.7 12.4 12.2 10.6 9.7	5050	4S/02W-24002 M	33.4	9-00-63 4-00-64	66.7 □	33.3	5100
2N/02W-36E01 M	48.0	3-17-64	16.0	32.0	5050	5S/01W-04F01 M	42.0	7-19-63 8-23-63 9-20-63 10-18-63 11-15-63 12-20-63 1-24-64 2-21-64 3-20-64 4-24-64 5-22-64 6-19-64	72.1 69.9 72.1 72.2 72.0 72.2 71.1 70.9 70.6 70.3 70.8	30.1 27.9 30.1 30.2 30.0 30.2 29.1 28.9 28.6 28.6 28.3 28.8	5401

GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD. SUR TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
SOUTH ALAMEDA COUNTY UPR AQUIFER 2-09*01					
55/01W-09001 M	19*5	4-00-64	□	5100	5100
SOUTH ALAMEDA COUNTY LWR AQUIFER 2-09*01					
25/03W-36R01 M	45*0	9-00-63	172.0*	- 127.0	5100
		4-00-64	153.5*	- 118.0	
35/02W-19A02 M	30*0	7-08-63	20.9	9*1	9050
		8-24-63	23*4	6*2	
		9-24-63	25*0	4*6	
		10-21-63	25*0	5*0	
		11-19-63	22*8	7*2	
		12-17-63	21*8	6*2	
		1-22-64	21*1	8*9	
		2-18-64	20*2	9*8	
		3-17-64	20*1	9*9	
		4-21-64	20*0	10*0	
		5-18-64	20*6	9*4	
		6-19-64	21*4	8*6	
35/03W-24J01 M	11*0	9-00-63	77*6	- 66*6	5100
		4-00-64	76*3	- 65*3	
45/02W-02001 M	26*0	9-00-63	□	- 63*7	5100
		4-07-64	89*7	- 63*7	
45/02W-35R02 M	15*0	7-19-63	82*5	- 67*5	5401
		8-23-63	81*8	- 66*8	
		9-20-63	79*4	- 64*4	
		10-00-63	□	- 64*4	
		11-00-63	□	- 64*4	
		12-00-63	□	- 64*4	
		1-00-64	□	- 64*4	
		2-00-64	□	- 64*4	
		3-00-64	□	- 64*4	
		4-00-64	□	- 64*4	
		5-00-64	□	- 64*4	
		6-00-64	□	- 64*4	
45/02W-36K01 M	24*0	7-19-63	93*2	- 69*2	5401
		8-23-63	94*2	- 70*2	
		9-20-63	92*1	- 68*1	
		10-18-63	87*4	- 63*4	
		11-15-63	81*1	- 57*1	
		12-20-63	72*4	- 48*4	
		1-24-64	64*9	- 40*9	
		2-21-64	66*4	- 42*4	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GRD. SUR TO WATER SUR. IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
SOUTH ALAMEDA COUNTY LWR AQUIFER 2-09*01					
45/02W-36K01 M	24*0	3-20-64	71*5	- 47*5	5401
		4-17-64	74*2	- 50*2	
		5-22-64	84*5	- 60*5	
		6-19-64	89*5	- 59*5	
55/01W-09M01 M	15*0	9-00-63	89*3	- 74*3	5100
		4-00-64	□	- 74*3	
NORTH SANTA CLARA COUNTY 2-09*02					
65/01E-07E01 M	15*8	7-24-63	127*3*	- 111*5	2400
		8-22-63	121*5	- 105*7	
		9-23-63	124*3	- 108*5	
		10-22-63	109*4	- 93*6	
		11-21-63	104*1	- 88*3	
		12-19-63	97*3	- 81*5	
		1-22-64	79*5	- 63*7	
		2-21-64	80*9	- 65*1	
		3-19-64	84*1	- 68*3	
		4-17-64	106*8	- 91*0	
		5-21-64	112*8	- 97*0	
		6-18-64	117*2	- 101*4	
65/01E-21R01 M	138*0	7-23-63	232*8	- 94*8	2400
		8-21-63	238*2	- 100*2	
		9-20-63	□	- 96*6	
		10-21-63	234*6	- 87*3	
		11-20-63	225*3	- 81*1	
		12-17-63	219*1	- 75*6	
		1-17-64	218*6	- 71*5	
		2-20-64	209*5	- 83*9	
		3-18-64	221*9	- 101*4	
		4-16-64	221*9	- 83*9	
		5-28-64	239*4	- 81*8	
		6-17-64	□	- 82*8	
65/01E-23P02 M	240*5	7-22-63	154*7*	85*8	2400
		8-19-63	137*7	81*7	
		9-19-63	156*8	78*9	
		10-18-63	161*6	78*9	
		11-18-63	161*8	78*9	
		12-17-63	163*3	77*2	
		1-17-64	164*8	75*7	
		2-19-64	165*4	75*1	
		3-18-64	164*2	76*5	

TABLE C-3 GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY					
2-09*02					
6S/01E-23P02 M CONT.	240.5	4-16-64 5-19-64 6-16-64	169.2 175.9 168.3	71.3 64.6 72.2	2400
6S/01E-30M01 M	43.0	7-25-63 8-22-63 9-23-63 10-23-63 11-21-63 12-19-63	153.1 143.4 139.7 114.7 105.1 98.4	- 100.4 - 96.7 - 71.7 - 62.1 - 55.4 - 52.5	2400
		1-23-64 2-24-64 3-26-64 4-20-64 5-21-64 6-19-64	95.5 90.0* 93.0* 120.0* 128.7 133.8	- 47.0 - 50.0 - 77.0 - 85.7 - 90.8	
6S/01W-22E01 M	21.0	7-15-63 8-12-63 9-10-63 10-08-63 11-06-63 12-08-63	162.3 131.2 158.6 150.2 104.3 93.8	- 141.3 - 110.2 - 137.8 - 107.2 - 95.3 - 72.8	5000
		1-05-64 2-07-64 3-07-64 4-20-64 5-00-64 6-22-64	83.3 116.3 131.0	- 62.3 - 95.3 - 110.0	
6S/02N-16R01 M	48.7	7-30-63 8-26-63 9-28-63 10-29-63 11-26-63 12-28-63	162.0 139.0* 135.4 130.6 125.5 122.0	- 94.0 - 91.0 - 87.4 - 82.6 - 77.5 - 74.0	2400
		1-27-64 2-26-64 3-30-64 4-24-64 5-25-64 6-25-64	120.8 119.4 120.3 132.8 134.1	- 72.8 - 71.4 - 72.3 - 85.9 - 84.8 - 86.1	
6S/02W-25C01 M	73.0	7-26-63 8-23-63 9-26-63 10-28-63 11-27-63 12-27-63	156.9 153.7 153.3 149.2 139.5 128.2	- 83.9 - 80.7 - 76.0 - 65.3 - 61.2 - 51.5	2400
		1-29-64 2-27-64	132.9 128.2	- 44.9 - 40.2	
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY					
2-09*02					
6S/02W-25C01 M CONT.	73.0	9-25-63 10-25-63 11-23-63 12-23-63	149.8 141.4 139.2 127.8	- 76.8 - 68.4 - 66.2 - 54.8	2400
		1-24-64 2-25-64 3-27-64 4-29-64 5-25-64 6-24-64	128.3 127.5 132.0* 146.5* 145.8* 149.7	- 55.3 - 54.5 - 59.0 - 71.5 - 82.8 - 76.7	
6S/02W-35C01 M	140.1	7-29-63 8-26-63 9-26-63 10-28-63 11-23-63 12-26-63	255.8 262.7* 260.6 266.7* 267.4* 237.4*	- 115.7 - 127.0 - 120.9 - 104.3 - 97.9 - 91.3	2400
		1-27-64 2-26-64 3-30-64 4-23-64 5-35-64 6-25-64	231.2* 232.9* 241.7* 250.9* 252.8* 271.9*	- 92.8 - 101.6 - 110.8 - 122.7 - 131.8	
7S/01E-01K01 M	179.0	7-19-63 8-19-63 9-19-63 10-18-63 11-18-63 12-16-63	199.5 198.7 201.8 200.6 198.8 197.4	- 20.5 - 19.7 - 22.8 - 21.6 - 19.8 - 18.4	2400
		1-15-64 2-18-64 3-17-64 4-15-64 5-19-64 6-15-64	196.1 195.2 195.4 195.0 196.9 196.9	- 17.1 - 16.2 - 16.4 - 16.0 - 16.4 - 17.9	
7S/01E-08L01 M	88.0	7-24-63 8-27-63 9-26-63 10-28-63 11-27-63 12-27-63	164.0 164.7 153.3 152.9 149.2 139.5	- 76.0 - 76.7 - 65.3 - 64.9 - 61.2 - 51.5	2400
		1-29-64 2-27-64	132.9 128.2	- 44.9 - 40.2	

SAN FRANCISCO BAY REGION

SAN FRANCISCO BAY REGION

NORTH SANTA CLARA COUNTY

NORTH SANTA CLARA COUNTY

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO FACE TO SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
2-09-02					
75/02E-07P01 M CONT.	130.0	8-19-63	142.4	39.9	2400
		9-10-63	143.0	53.4	
		10-18-63	140.5	61.0	
		11-18-63	139.7	66.2	
		12-16-63	137.4		
		1-13-64	136.9	81.1	2400
		2-19-64	136.4	86.6	
		3-17-64	136.2	92.6	
		4-15-64	136.1	90.6	
		5-19-64	134.3	73.6	
	6-15-64	136.1	65.6		
75/02E-17H01 M	349.0	7-18-63	100.8	121.6	5000
		8-15-63	98.7	121.2	
		9-19-63	97.4	128.9	
		10-16-63	96.6	126.4	
		11-18-63	95.7	126.4	
		12-16-63	96.4	82.9	
		1-15-64	98.3	83.9	
		2-18-64	95.4	64.7	
		3-16-64	96.3	69.0	
		4-15-64	97.2	55.5	
75/02E-33C01 M	462.0	7-18-63	20.2	108.9	2400
		8-15-63	19.5	12.0	
		9-18-63	21.4	18.7	
		10-16-63	20.9	23.0	
		11-15-63	21.3	18.2	
		12-13-63	20.7	2.2	
		1-14-64	21.1	6.1	
		2-18-64	20.8	1.3	
		3-16-64	21.2	13.8	
		4-14-64	20.8	6.6	
75/01W-35C01 M	202.0	7-01-63	198.0	1.3	2400
		8-01-63	196.0	1.3	
		9-01-63	194.0	6.6	
		10-01-63	200.0	9.9	
		11-01-63	194.0	2.2	
		12-01-63	193.0		
		1-02-64	193.0*		
		7-01-63	198.0	1.3	
		8-01-63	196.0	1.3	
		9-01-63	194.0	6.6	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO FACE TO SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	
2-09-02						
75/01E-08L01 M CONT.	88.0	3-27-64	127.9	39.9	2400	
		4-24-64	141.4	53.4		
		5-27-64	145.0	61.0		
		6-29-64	156.2	66.2		
	75/01E-09D02 M	95.9	7-01-63	177.0	81.1	2400
			8-01-63	178.5	86.6	
			9-01-63	189.5	92.6	
			10-01-63	186.5	90.6	
			11-01-63	168.5	73.6	
			12-01-63	159.5	65.6	
		1-01-64	151.5	55.6		
		2-01-64	147.5	51.6		
		3-01-64	141.5	45.6		
		4-01-64	141.5	45.6		
75/01E-16C05 M	105.0	7-15-63	226.6	121.6	5000	
		8-12-63	226.2	121.2		
		9-10-63	229.9	128.9		
		10-08-63	231.4	126.4		
		11-05-63	193.9	82.9		
		12-06-63	187.9	83.9		
		1-08-64	188.9	83.9		
		2-07-64	169.7	64.7		
		3-06-64	174.0	69.0		
		4-02-64	160.5	55.5		
75/01E-31A02 M	151.6	6-22-64	213.9	108.9	2400	
		7-02-63	162.4	12.0		
		8-05-63	163.6	18.7		
		9-06-63	170.3	23.0		
		10-02-63	174.6*	18.2		
		11-04-63	169.8	2.2		
		12-03-63	153.8	6.1		
		1-02-64	157.7*	1.3		
		2-03-64	152.9	13.8		
		3-03-64	137.8*	6.6		
75/02E-07P01 M	130.0	7-19-63	144.3	14.3	2400	
		8-15-63	144.3	14.3		
		9-10-63	144.3	14.3		
		10-16-63	144.3	14.3		
		11-18-63	144.3	14.3		
		12-16-63	144.3	14.3		
		1-15-64	144.3	14.3		
		2-18-64	144.3	14.3		
		3-16-64	144.3	14.3		
		4-15-64	144.3	14.3		

TABLE C-3 GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE ELEVATION IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY					
2-09*02					
75/01W-35C01 M	202*0	2-03-64	186*0	16*0	2400
		3-02-64	189*0	13*0	
		4-02-64	195*0	7*0	
		5-01-64	216*0	-	
		6-01-64	230*0	- 28*0	
75/02W-03001 M	216*7	7-31-63	363*0	- 146*3	2400
		8-02-63	363*0	- 146*3	
		9-01-63	368*0	- 151*3	
		10-01-63	374*0	- 157*3	
		10-30-63	359*0	- 142*3	
		12-01-63	343*0	- 126*3	
		1-02-64	335*0	- 118*3	
		2-01-64	□	-	
		3-02-64	333*0	- 116*3	
		4-02-64	336*0*	- 119*3	
		5-03-64	343*0	- 126*3	
		6-01-64	350*0	- 133*3	
75/02W-04801 M	218*0	7-30-63	193*3	24*7	2400
		8-28-63	194*9	23*1	
		9-26-63	193*1	24*9	
		10-29-63	194*7*	23*3	
		11-26-63	194*2*	23*8	
		12-27-63	193*9*	24*1	
		1-28-64	193*7*	24*3	
		2-26-64	193*9	24*1	
		3-30-64	193*0*	25*0	
		4-24-64	194*2	23*8	
		5-26-64	197*3	20*7	
		6-26-64	196*7	21*3	
75/02W-22A01 M	340*0	7-30-63	□	-	2400
		8-28-63	15*9	324*1	
		9-27-63	□	-	
		10-29-63	17*5	322*5	
		11-26-63	19*0*	321*0	
		12-27-63	20*0	320*0	
		1-28-64	18*0	322*0	
		2-26-64	23*0*	317*0	
		3-31-64	29*9	310*1	
		4-27-64	23*3*	316*7	
		5-26-64	22*3*	316*7	
		6-26-64	22*5	317*5	
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY					
2-09*02					
85/01E-07H02 M	207*0	8-06-63	70*2	136*8	2400
		9-10-63	70*1	136*9	
		10-16-63	73*4	133*6	
		11-05-63	73*3	133*7	
		12-04-63	74*8	132*2	
		1-03-64	76*6	130*4	
		2-04-64	76*0	130*6	
		3-04-64	76*0	131*0	
		4-03-64	79*1	127*9	
		5-06-64	83*9	123*1	
		6-29-64	93*7	113*3	
85/01E-13H01 M	184*6	7-09-63	31*9	152*7	2400
		8-07-63	30*1	154*5	
		9-12-63	24*5	160*1	
		10-04-63	25*6	159*0	
		11-07-63	23*7	160*9	
		12-05-63	19*9	164*7	
		1-07-64	18*8	165*8	
		2-06-64	15*1	169*5	
		3-09-64	20*5*	164*1	
		4-07-64	24*4	160*2	
		5-07-64	26*8	157*8	
		6-04-64	24*8	159*8	
85/02E-20F03 M	209*0	7-10-63	31*8	177*2	2400
		8-08-63	28*4	180*6	
		9-12-63	24*5	184*5	
		10-07-63	22*0	186*0	
		11-07-63	23*3	186*7	
		12-06-63	21*1	187*9	
		1-07-64	22*1	186*9	
		2-07-64	21*3	187*7	
		3-09-64	23*8	185*2	
		4-07-64	25*7	183*3	
		5-07-64	24*1	184*9	
		6-04-64	24*1	184*9	
85/02E-22D01 M	239*7	7-10-63	12*1	227*6	2400
		8-08-63	10*0	229*7	
		9-12-63	10*2	229*8	
		10-07-63	9*9	229*8	
		11-07-63	9*7	230*0	
		12-06-63	10*4	229*3	
		1-08-64	11*7	228*0	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO FACE TO SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
LIVERMORE VALLEY					
2-10.00					
2S/02E-25N01 M	555.3	9-00-63 4-00-64	10.7 10.2	544.6 545.1	5100
2S/01W-26C01 M	416.9	9-00-63 4-00-64	93.2 67.2	323.7 349.7	5100
3S/01E-11H01 M	372.9	9-00-63 4-00-64	137.2 123.0	235.7 249.9	5100
3S/02E-02R01 M	562.2	9-00-63 4-00-64	□ □		5100
3S/02E-10H01 M	551.0	9-00-63 4-00-64	99.5	451.5	5100
HALF MOON BAY TERRACE					
2-22.00					
5S/05W-20L01 M	73.0	7-19-63 8-23-63 9-27-63 10-22-63 11-22-63 12-19-63	13.5 18.7 19.0 15.8 15.8 16.1	59.5 58.7 57.3 58.1 59.2 60.9	5050
5S/05W-29N01 M	46.0	3-24-64	31.1	14.9	5050
6S/05W-08B01 M	108.0	4-23-64	53.9	54.1	5050
SAN GREGORIO VALLEY					
2-24.00					
7S/05W-13E01 M	80.0	7-19-63 8-23-63 9-27-63 10-22-63 11-22-63 12-19-63	□ □ 12.0 11.9 11.4 11.5	68.0 68.1 68.5 68.2 68.8 68.7	5050
7S/05W-13E01 M	80.0	1-23-64 2-20-64 3-19-64 4-23-64 5-21-64 6-19-64	10.8 11.2 11.3 11.5 11.8 12.1	69.2 68.8 68.7 68.5 68.2 67.9	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO FACE TO SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION					
NORTH SANTA CLARA COUNTY					
2-09.02					
8S/02E-22D01 M	239.7	2-07-64 3-09-64 4-07-64 5-08-64 6-04-64	13.3 14.1 12.6 11.7 11.2	226.4 225.6 227.1 228.0 228.5	2400
8S/01W-18B01 M	331.2	7-02-63 8-05-63 9-10-63 10-02-63 11-04-63 12-03-63 1-03-64 2-08-64 2-03-64 3-03-64 4-27-64 5-02-64	31.5 30.7 32.4 34.1 33.4 33.4 □ □ □ 34.7 34.6	299.7 300.5 298.8 297.1 297.8 297.8 297.3 295.9 296.5 296.6	2400
9S/02E-01J01 M	314.6	7-15-63 8-12-63 9-16-63 10-11-63 11-08-63 12-10-63 1-10-64 2-08-64 3-11-64 4-10-64 5-11-64 6-29-64	29.3 28.0 28.1 30.4 31.7 34.3 32.1 33.6 35.1 36.0 36.9 38.1	285.3 286.6 286.5 284.2 282.9 280.3 282.5 281.0 279.5 278.6 277.7 276.5	2400
9S/02E-01M01 M	287.6	7-11-63 8-08-63 9-13-63 10-07-63 11-08-63 12-06-63 1-08-64 2-08-64 3-09-64 4-08-64 5-08-64 6-05-64	20.8 20.5 21.7 23.7 23.9 23.3 23.3 23.5 23.2 26.1 26.1 28.1	266.8 267.1 265.7 263.9 263.7 264.3 264.3 261.8 264.4 264.5 261.5 259.5	2400

TABLE C-3
GROUND WATER LEVELS AT WELLS

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA	STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
SAN FRANCISCO BAY REGION											
SAN GREGORIO VALLEY											
2-24.00											
75/05W-15C01 M	80.0	3-24-64	12.4	67.6	5050						
75/05W-15E01 M	75.2	3-24-64	6.0	69.2	5050						
75/05W-15E02 M	30.0	7-19-63	□		5050						
		8-23-63	14.4	15.6							
		9-27-63	14.4	15.6							
		10-22-63	14.5	15.5							
		11-22-63	13.6	16.4							
		12-19-63	13.8	16.2							
		1-23-64	12.7	17.3							
		2-20-64	13.3	16.7							
		3-19-64	13.6	16.4							
		4-23-64	13.7	16.3							
		5-21-64	14.3	15.7							
		6-19-64	13.8	16.2							
75/05W-15H02 M	40.0	3-24-64	16.2	23.8	5050						
PESCADERO VALLEY											
2-26.00											
85/05W-09H01 M	20.0	7-19-63	5.0	15.0	5050						
		8-23-63	□								
		9-27-63	4.9	15.1							
		10-22-63	4.8	15.2							
		11-22-63	4.2	15.8							
		12-19-63	4.3	15.7							
		1-23-64	3.9	16.1							
		2-20-64	4.4	15.6							
		3-19-64	4.7	15.3							
		4-23-64	4.8	15.2							
		5-21-64	4.9	15.1							
		6-19-64	5.0	15.0							
85/05W-11M01 M	45.0	3-24-64	10.4	34.6	5050						

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CENTRAL COASTAL REGION					
3-01-00					
SOQUEL VALLEY					
115/01W-09L01 M	124.2	7-19-63	67.1	57.1	5050
		8-23-63	67.3	66.9	
		9-27-63	68.3	65.9	
		10-22-63	67.1	67.1	
		11-21-63	66.9	67.3	
		12-19-63	67.1	67.1	
		1-23-64	67.0	67.2	
		2-19-64	69.3	64.9	
		3-19-64	68.4	65.8	
		4-23-64	67.6	66.6	
		5-20-64	67.9	66.3	
		6-19-64	67.5	66.7	
115/01W-19H01 M	91.7	11-21-63	59.9	31.8	5050
		12-19-63	60.6	31.1	
		1-23-64	60.3	31.4	
		2-19-64	59.9	31.8	
		3-19-64	58.8	32.9	
		4-23-64	58.4	33.3	
		5-20-64	58.9	32.8	
		6-19-64	58.0	33.7	
3-02-00					
PAJARO VALLEY					
125/01E-24G01 M	9.4	7-18-63	18.2*	8.8	5050
		8-23-63	22.5*	13.1	
		9-25-63	8.5*	0.9	
		10-22-63	6.6*	2.8	
		11-21-63	5.6*	3.8	
		12-19-63	5.5*	3.9	
		1-22-64	6.0*	3.4	
		2-19-64	9.4*	6.7	
		3-17-64	16.1*	6.7	
		4-22-64	16.1*	6.7	
		5-20-64	27.9*	18.5	
		6-18-64	27.9*	18.5	
125/02E-16J01 M	20.5	7-18-63	22.6*	2.1	5050
		8-23-63	22.6*	4.2	
		9-25-63	16.3*	6.0	
		10-22-63	14.5*	7.9	
		11-21-63	12.8*	8.1	
		12-19-63	12.8*	8.1	
		1-22-64	12.0*	8.5	
		2-19-64	12.0*	8.5	

STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CENTRAL COASTAL REGION					
3-02-00					
PAJARO VALLEY					
125/02E-16J01 M	20.5	3-17-64	13.8*	6.7	5050
		4-22-64	20.7*	0.2	
		5-20-64	22.2*	1.7	
		6-18-64	□	-	
125/02E-31K01 M	30.0	11-21-63	28.4	1.6	5050
		1-10-64	26.5	3.5	5100
		3-19-64	26.0	4.0	5050
135/02E-05B01 M	136.0	7-18-63	□	-	5050
		8-23-63	□	-	
		9-25-63	139.3	3.3	
		10-22-63	139.1	3.1	
		11-21-63	137.8	1.8	
		12-19-63	137.6	1.6	
		1-22-64	137.3	1.3	
		2-19-64	135.3	0.7	
		3-17-64	136.7	0.7	
		4-22-64	135.4	0.6	
		5-20-64	136.7	0.7	
		6-18-64	137.5	1.5	
3-03-00					
GILROY-HOLLISTER VALLEY					
SOUTH SANTA CLARA COUNTY					
95/03E-27C02 M	347.0	7-11-63	86.9	260.1	2400
		8-09-63	88.4*	258.6	
		9-16-63	79.6	267.4	
		10-09-63	87.4	259.6	
		11-12-63	80.1	266.9	
		12-09-63	79.7	267.3	
		1-09-64	73.6	273.4	
		2-10-64	70.2	276.8	
		3-10-64	68.9	278.1	
		4-09-64	69.3	277.7	
		5-11-64	73.3	273.7	
		6-09-64	80.7	266.3	
95/03E-29B01 M	397.6	3-18-64	13.0	384.6	5050
105/03E-34L01 M	249.3	7-18-63	7.9	241.4	5050
		8-22-63	7.8	241.5	
		9-24-63	8.2	241.1	
		10-23-63	8.4	240.9	

TABLE C-3 GROUND WATER LEVELS AT WELLS

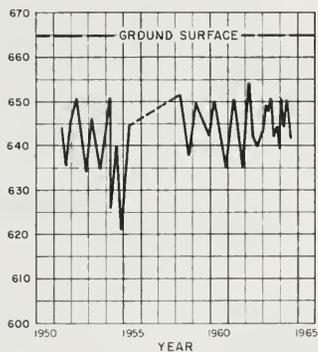
STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO WATER SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CENTRAL COASTAL REGION					
SOUTH SANTA CLARA COUNTY					
3-03-01					
105/03E-34L01 M	249.3	11-20-63	8.1	241.2	5050
CONT.		12-18-63	9.3	240.0	
		1-22-64	8.2	241.1	
		2-18-64	8.2	241.1	
		3-19-64	8.1	241.2	
		4-01-64	8.1	241.2	
		5-00-64	#		
105/04E-18G02 M	259.5	7-18-63	63.4	196.1	5050
		8-22-63	55.9	203.6	
		9-24-63	□		
		10-23-63	53.7	205.8	
		11-20-63	48.4	211.1	
		12-18-63	48.3	211.2	
		1-22-64	50.8	208.7	
		2-18-64	50.6	208.9	
		3-18-64	52.4	207.1	
		4-21-64	59.6	199.9	
		5-19-64	68.7	190.8	
		6-17-64	72.9	186.6	
105/04E-35E01 M	248.0	3-19-64	86.7	161.3	5050
115/03E-01B01 M	227.0	4-00-64	□		5400
SAN BENITO COUNTY					
3-03-02					
115/05E-13001 M	255.7	7-18-63	22.8	232.9	5050
		8-22-63	22.9	232.8	
		9-24-63	24.1	231.6	
		10-23-63	21.5	236.2	
		11-20-63	21.1	236.6	
		12-18-63	21.6	236.1	
		1-22-64	22.5	233.2	
		2-18-64	23.2	232.5	
		2-20-64	28.0	227.7	
		4-21-64	□		
		5-19-64	33.0	222.7	
		6-17-64	□		
125/04E-20C01 M	152.9	4-00-64	36.3	116.6	5101
125/05E-33A01 M	280.0	7-00-63	□		5050
		8-00-63	□		
CENTRAL COASTAL REGION					
SAN BENITO COUNTY					
3-03-02					
125/05E-33A01 M	280.0	10-24-63	90.1	189.9	5050
CONT.		11-20-63	89.8	190.2	
		12-18-63	92.4	187.6	
		1-22-64	91.9	188.1	
		2-19-64	88.5	191.5	
		3-19-64	90.2	189.8	
		4-22-64	□		
		5-19-64	98.8	181.2	
		6-18-64	100.0	180.0	
135/05E-11001 M	325.5	4-00-64	54.6	270.9	5101
SALINAS VALLEY					
3-04-00					
PRESSURE AREA 180 FOOT AQUIFER					
3-04-01					
145/02E-03C01 M	10.6	12-05-63	12.6	- 2.0	2100
		3-26-64	14.6	- 4.0	
145/02E-15L01 M	23.0	12-09-63	19.7	3.3	2100
		3-25-64	□		
155/02E-01001 M	42.0	7-17-63	□		2100
		8-16-63	□		
		9-18-63	□		
		10-15-63	44.6	- 2.6	
		11-14-63	□		
		12-09-63	33.5	8.5	
		12-09-63	33.5	8.5	
		1-21-64	□		
		2-17-64	□		
		4-08-64	35.8	6.2	
		5-15-64	□		
		6-17-64	□		
155/03E-16M01 M	58.0	12-11-63	46.2	11.8	2100
		4-08-64	46.8	11.2	
155/04E-33A01 M	125.0	12-30-63	84.9	40.1	2100
		4-07-64	87.7	37.3	
165/04E-11D01 M	110.0	12-31-63	50.2	59.8	2100
		4-08-64	49.7	60.3	

TABLE C-3
GROUND WATER LEVELS AT WELLS

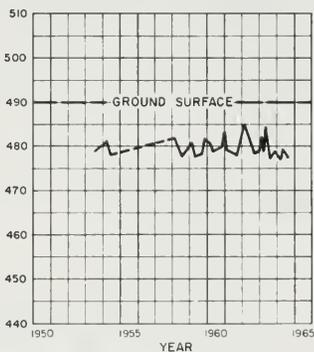
STATE WELL NUMBER	GROUND SURFACE ELEVATION IN FEET	DATE	GROUND SURFACE TO FACE TO SURFACE IN FEET	WATER SURFACE ELEVATION IN FEET	AGENCY SUPPLYING DATA
CENTRAL COASTAL REGION					
PASO ROBLES					
255/13E-11E01 M	1184.0	3-31-64	60.4	1123.6	5100
255/16E-17L01 M	1164.5	3-31-64	62.5	1102.0	5100
255/16E-30M01 M	1218.0	3-31-64	71.9	1146.1	5100
265/12E-04N01 M	674.5	3-30-64	45.0	629.5	5100
265/12E-26E01 M	839.0	4-03-64	194.4	644.6	5100
265/12E-35M01 M	818.0	4-03-64	146.4	671.6	5100
265/13E-10D01 M	799.0	4-03-64	16.6	782.4	5100
265/13E-34B01 M	1005.0	4-03-64	161.8	843.2	5100
265/14E-16L01 M	1018.0	4-03-64	73.2	944.8	5100
265/14E-35D01 M	1134.5	4-02-64	119.1	1015.4	5100
265/15E-02B01 M	1114.0	3-31-64	29.6	1084.4	5100
265/15E-28O02 M	1111.4	4-02-64	83.0	1028.4	5100
265/15E-29N01 M	1134.4	4-02-64	100.0	1034.4	5100
275/12E-21N01 M	747.5	4-03-64	6.6	740.9	5100
275/13E-24N01 M	1030.0	4-01-64	12.8	1017.2	5100
275/13E-32B01 M	1103.5	4-01-64	51.7	1051.8	5100
275/15E-10R02 M	1130.0	4-02-64	57.4	1072.6	5100
275/15E-13A01 M	1153.5	4-02-64	21.0	1132.5	5100
275/16E-21E02 M	1253.0	4-02-64	56.8	1196.2	5100
285/12E-10G01 M	825.0	4-03-64	12.7	811.3	5100
285/12E-10R02 M	805.0	3-29-64	10.1	794.9	5100
285/12E-13N01 M	850.3	4-01-64	9.6	840.7	5100
CENTRAL COASTAL REGION					
PASO ROBLES					
285/13E-04K01 M	1199.5	4-01-64	64.7	1134.8	5100
285/13E-04K02 M	1195.0	4-01-64	78.8	1116.2	5100
285/14E-07E01 M	1150.0	4-02-64	14.0	1136.0	5100
285/16E-23M01 M	1439.0	4-02-64	38.0	1401.0	5100
295/13E-05F03 M	915.6	3-30-64	16.6	899.0	5100
295/13E-05K02 M	928.5	3-30-64	13.3	915.2	5100
295/13E-06A01 M	920.0	3-30-64	52.3	867.7	5100
295/13E-19H01 M	1002.5	3-30-64	5.9	996.6	5100
CARMEL VALLEY					
165/01E-25B01 M	140.0	7-00-63	□		5100
		8-16-63	15.9	124.1	
		9-17-63	16.2	123.8	
		10-15-63	16.0	124.0	
		11-18-63	15.9	124.1	
		12-08-63	15.6	124.4	
		1-22-64	15.4	124.6	
		2-19-64	15.2	124.8	
		3-16-64	15.5	124.5	
		4-13-64	15.4	124.6	
		5-18-64	15.5	124.5	
		6-17-64	15.9	124.1	
WEST SANTA CRUZ TERRACE					
115/02W-22K01 M	30.0	11-13-63	79.3	-	5050
		3-18-64	66.6	-	36.6

FIGURE C1
FLUCTUATION OF WATER LEVEL
IN WELLS
NORTH COASTAL REGION

UKIAH VALLEY (1-15.00)
MENDOCINO COUNTY
WELL 15N/12W-8LI, M.D.B. & M
GROUND SURFACE ELEVATION 665'



SANEL VALLEY (1-16.00)
MENDOCINO COUNTY
WELL 13N/11W-18E1, M.D.B. & M
GROUND SURFACE ELEVATION 490'



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

SANTA ROSA VALLEY, SONOMA COUNTY (1-18.00)
SANTA ROSA AREA (1-18.01)
WELL 6N/8W-13R1, M.D.B. & M
GROUND SURFACE ELEVATION 115'

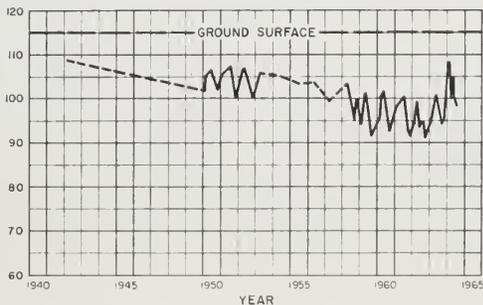
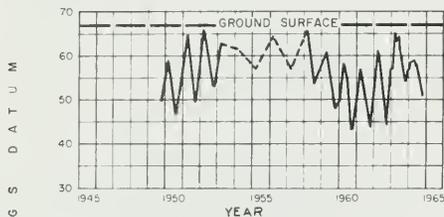
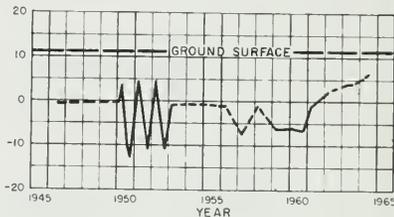


FIGURE C1
FLUCTUATION OF WATER LEVEL
IN WELLS
SAN FRANCISCO BAY REGION

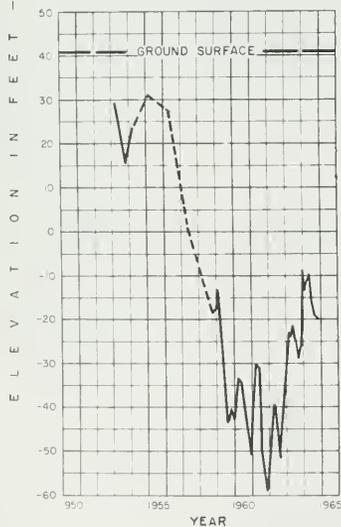
NAPA VALLEY (2-2.01)
 NAPA COUNTY
 WELL 6N/4W-17A1, M D B & M
 GROUND SURFACE ELEVATION 67'



SONOMA VALLEY (2-2.02)
 SONOMA COUNTY
 WELL 5N/5W-28N1, M D B & M
 GROUND SURFACE ELEVATION 11'



PETALUMA VALLEY (2-100)
 SONOMA COUNTY
 WELL 5N/7W-20B2, M D B & M
 GROUND SURFACE ELEVATION 4'



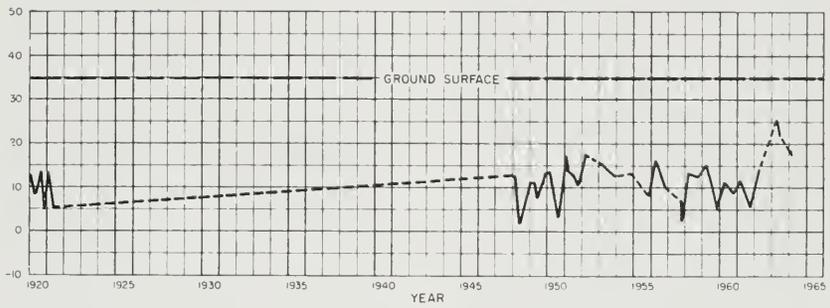
SANTA CLARA VALLEY (2-9.00)
 NORTH SANTA CLARA COUNTY (2-9.02)
 WELL 7S/1E-31A2, M D B & M
 GROUND SURFACE ELEVATION 153'



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

FIGURE C1
FLUCTUATION OF WATER LEVEL
IN WELLS
SAN FRANCISCO BAY REGION

SUISUN-FAIRFIELD VALLEY (2-3.00)
SOLANO COUNTY
WELL 4N/2W-6A1, MDB 8 M
GROUND SURFACE ELEVATION 35'



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

SANTA CLARA VALLEY (2-9.00)
SOUTH ALAMEDA COUNTY (2-9.01) UPPER AQUIFER
WELL 4S/1W-29C4, MDB 8 M
GROUND SURFACE ELEVATION 55'

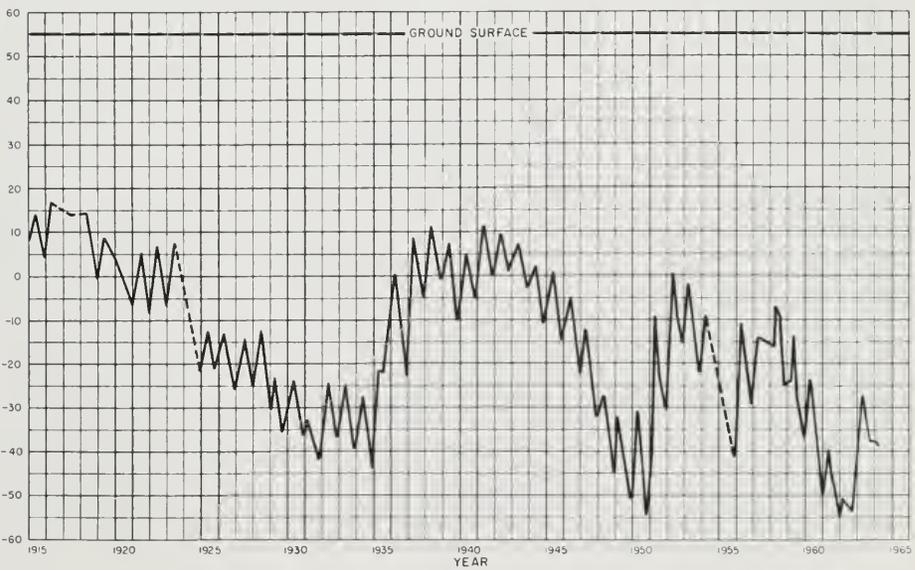
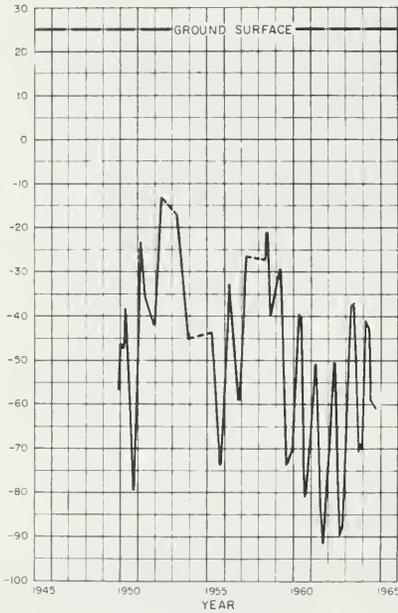
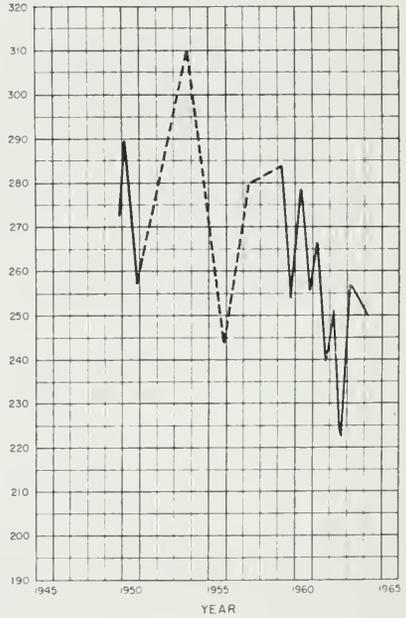


FIGURE C1
FLUCTUATION OF WATER LEVEL
IN WELLS
SAN FRANCISCO BAY REGION

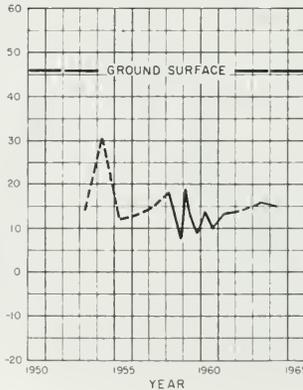
SANTA CLARA VALLEY (2-900)
SOUTH ALAMEDA COUNTY (2-901) LOWER AQUIFER
 WELL 4S/2W-36K1, M D B & M
 GROUND SURFACE ELEVATION 25'



LIVERMORE VALLEY (2-10.00)
ALAMEDA COUNTY
 WELL 3S/1E-11H1, M D B & M
 GROUND SURFACE ELEVATION 373'



HALF MOON BAY TERRACE (2-2200)
SAN MATEO COUNTY
 WELL 5S/5W-29N1, M D B & M
 GROUND SURFACE ELEVATION 46'

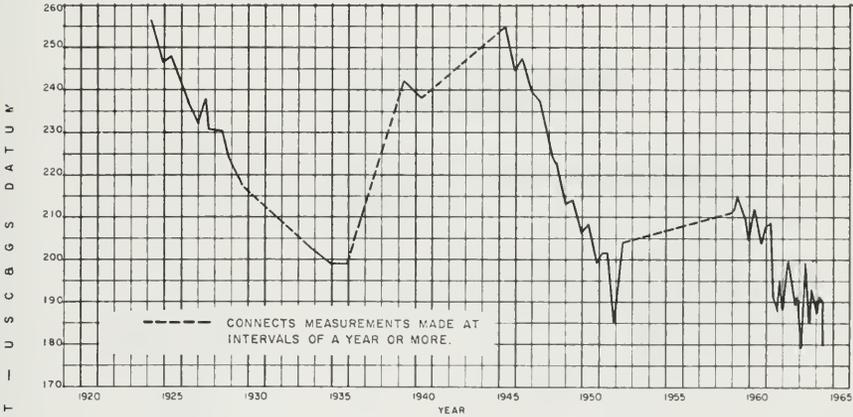


--- CONNECTS MEASUREMENTS
 MADE AT INTERVALS OF
 A YEAR OR MORE

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

FIGURE C1
FLUCTUATION OF WATER LEVEL
IN WELLS
CENTRAL COASTAL REGION

GILROY-HOLLISTER VALLEY (3-3.00)
 SAN BENITO COUNTY (3-3.02)
 WELL 12S/5E-33A1, M.D.B.M.
 GROUND SURFACE ELEVATION 280'

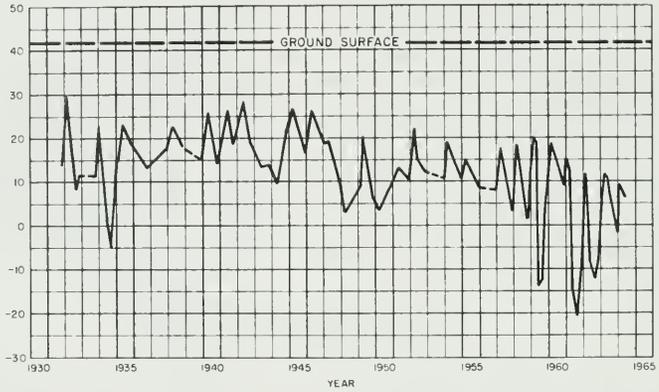


GILROY-HOLLISTER VALLEY (3-3.00)
 SOUTH SANTA CLARA VALLEY (3-3.01)
 WELL 9S/3E-27C2, M.D.B.M.
 GROUND SURFACE ELEVATION 347'



FIGURE C1
FLUCTUATION OF WATER LEVEL
IN WELLS
CENTRAL COASTAL REGION

SALINAS VALLEY, MONTEREY COUNTY (3-4.00)
 PRESSURE AREA - 180 FOOT AQUIFER (3-4.01)
 WELL 15S/2E-1Q1, M DB BM
 GROUND SURFACE ELEVATION 42'



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

SALINAS VALLEY, MONTEREY COUNTY (3-4.00)
 PRESSURE AREA - 400 FOOT AQUIFER (3-4.01)
 WELL 14S/3E-18J1, M DB BM
 GROUND SURFACE ELEVATION 71'

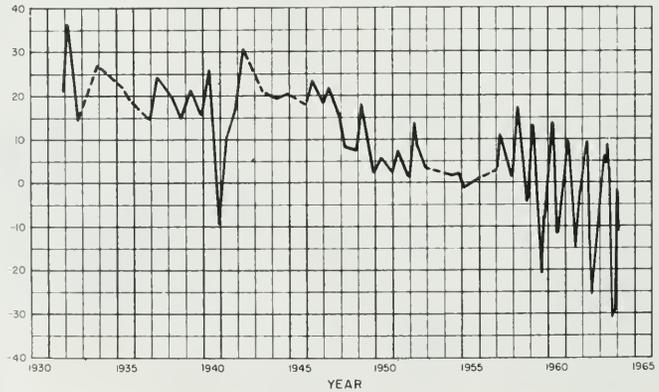
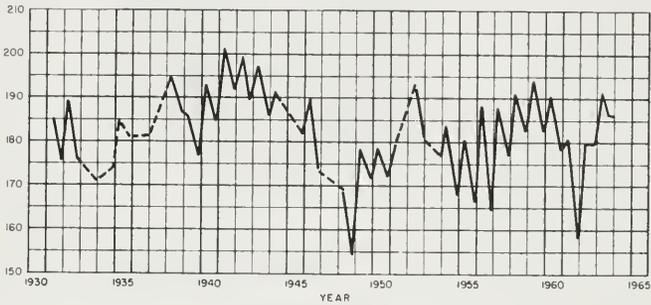


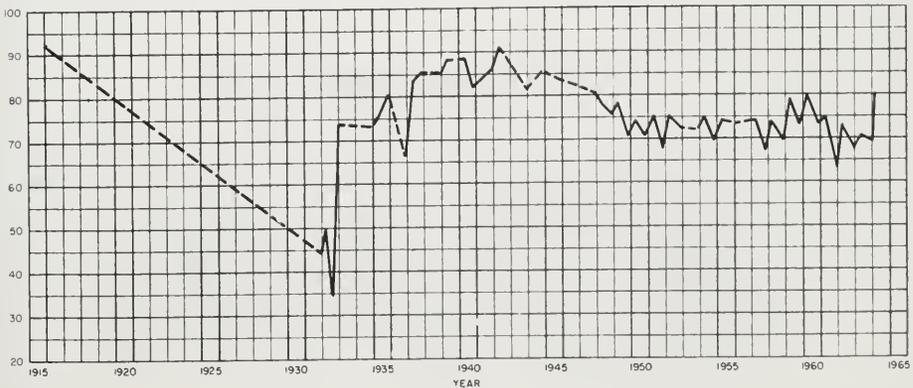
FIGURE C1
FLUCTUATION OF WATER LEVEL
IN WELLS
CENTRAL COASTAL REGION

SALINAS VALLEY, MONTEREY COUNTY (3-4.00)
ARROYO SECO CONE (3-4.04)
WELL 1BS/6E-15MI, M D B B M
GROUND SURFACE ELEVATION 277



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

SALINAS VALLEY, MONTEREY COUNTY (3-4.00)
EAST SIDE AREA (3-4.02)
WELL 16S/5E-17RI, M D B B M
GROUND SURFACE ELEVATION 180

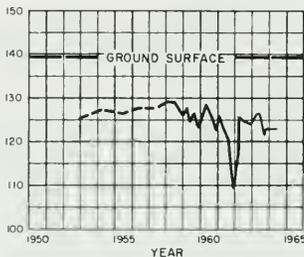


E
L
E
V
A
T
I
O
N
I
N
F
E
E
T
U
S
C
B
S
D
A
T
U
M

FIGURE C1

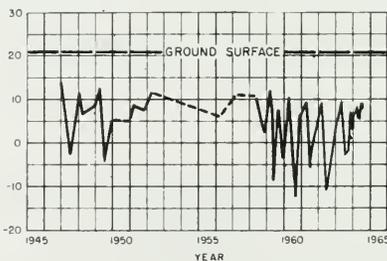
FLUCTUATION OF WATER LEVEL IN WELLS CENTRAL COASTAL REGION

CARMEL VALLEY (3-7.00)
MONTEREY COUNTY
WELL 16S/1E-2581, M.D.B. & M.
GROUND SURFACE ELEVATION 139'

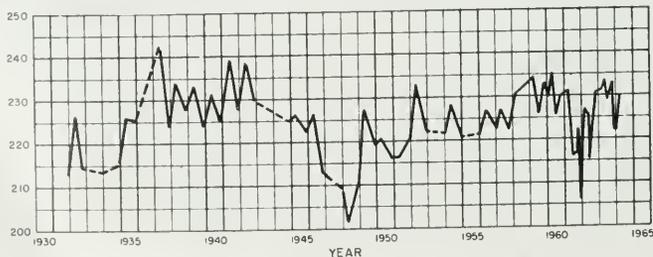


--- CONNECTS MEASUREMENTS MADE AT INTERVALS OF A YEAR OR MORE.

PAJARO VALLEY (3-2.00)
MONTEREY COUNTY
WELL 12S/2E-16J1, M.D.B. & M.
GROUND SURFACE ELEVATION 21'



SALINAS VALLEY, MONTEREY COUNTY (3-4.00)
UPPER VALLEY AREA (3-4.05)
WELL 19S/7E-10P1, M.D.B. & M.
GROUND SURFACE ELEVATION 315'



APPENDIX D

SURFACE WATER QUALITY



ACKNOWLEDGMENTS

The Department of Water Resources gratefully acknowledges the assistance and contributions of the many public agencies, private organizations, and individuals whose cooperation greatly facilitated the preparation of this appendix. Special mention is made of the following agencies:

Federal

United States Geological Survey

State

California Department of Public Health

INTRODUCTION

This appendix contains data pertaining to the quality of surface waters in the Central Coastal Area. The data presented are the observed physical, chemical, bacteriological, and radiological characteristics of surface waters sampled during the 1964 water year, which covers the period from October 1, 1963 through September 30, 1964.

Laboratory Methods and Procedures

Methods of mineral and bacterial analysis, in general, are those described in the American Public Health Association publication, "Standard Methods for the Examination of Water and Sewage", 11th Edition, 1960. In some cases, the methods described in U. S. Geological Survey, "Methods for Collection and Analysis of Water Samples", Water Supply Paper 1454, 1960, have been employed.

Types of analyses normally made of surface water samples collected by the Department are mineral, bacterial, radiological, and trace element.

Sampling Station Data and Index

Table D-1, "Sampling Station Data and Index", is an alphabetic listing of stations from which surface water samples were collected. The analyses of these samples are reported in subsequent tables. The station number is an arbitrary number that has been assigned to each station. The location pertains to either the township, range, and section of the Public Land Survey or to latitude and longitude. The stations are classified into monitoring, investigational, and operational types.

Analyses of Surface Water

Table D-2, "Analyses of Surface Water", includes physical characteristics of the water and results of mineral and bacterial analyses. The data are presented in numerical order by Water Quality Control Board regions, and in a north to south order of streams within a region. At the time the samples were collected for laboratory examination, field determinations were made for dissolved oxygen (DO) by the modified Winkler method, water temperature, and pH. Visual inspections were made of the streams and the physical conditions were noted. This information is kept on file with the Department.

Samples collected for bacterial examination were delivered to the laboratory as quickly as possible. Results of bacterial determinations presented in this appendix should be considered as qualitative and quantitative indicators. Undue weight should not be given to the values for quantitative purposes.

Data from operational stations are shown separately at the end of the table. These data consist of analyses of South Bay Aqueduct water.

Summary of Coliform Analyses

Coliform data included in Table D-2 are made more usable by summarizing the results of the analyses of the 24 samples collected at each station during the year. Table D-3 is a summary of these analyses.

Spectrographic Analyses of Surface Water

Spectrographic analyses were made to determine the concentration of 17 different metals in surface water samples. Most of these metals are present in very small amounts and are often called trace metals. The concentrations indicated in Table D-4 are in parts per billion instead of parts per million

which is commonly used in reference to concentrations of mineral constituents.

The symbols included with the constituent quantities are:

< Less than the amount indicated.

≤ Equal to or slightly less than the amount indicated.

Radioassays of Surface Water

Table D-5, "Radioassays of Surface Water", presents the radioactivity of surface water samples collected at 24 monitoring stations. The samples were collected in May and September at the same time that samples were collected for standard mineral analyses shown on Table D-2. The methods and procedures of sample preparation and determination of radioactivity in surface water are described in "Standard Methods for the Examination of Water and Sewage, 11th Edition".

Results are expressed as pico curies per liter (pc/l). The term pico curies is also written micro-micro curies and is further defined as 10^{-12} curies. Four values are reported for each sample: (a) alpha activity in the filtrate (dissolved material), (b) alpha activity in the solids retained on the filter (suspended material), (c) beta activity in the filtrate, and (d) beta activity in the solids. Sample counts are corrected for background and geometric efficiency. Dissolved material is designated by "Diss." in the table. Standard statistical procedures are utilized to compute the 0.9 error. The final result is expressed (symbolically) as $x \pm y$ pc/l. This means that in a series of determinations on the same sample, the value of x should fall between $x - y$ and $x + y$ 90 percent of the time.

Salinity Observations at Bay and Delta Stations

Table D-6 describes the seven stations for which salinity data are listed in Table D-7 and includes maximum observed salinity at bay and delta

tations. Table D-7 presents chloride concentrations of samples collected at seven stations between Sobrante Beach and Collinsville for the period October 1, 1963 through June 30, 1964.

Electrical Conductance

Data from two electrical conductivity recorders are presented in figures D-1 and D-2. These data are machine prepared graphs. Daily mean values are plotted in Figure D-1 and single daily reading at 1300 hours are plotted in Figure D-2. Each figure or graph presents the data from a station.

TABLE D-1
SAMPLING STATION DATA AND INDEX

Station	Station Number	Location ^a	Beginning of Record	Station Type ^c	Sampled By ^d	Analysis on page
ALAMEDA CREEK NEAR NILES	73	4S/1W-15	Dec. 1951	M	DWR	116
ALAMEDA CREEK NEAR NILES	73	4S/1W-15	Dec. 1959	M	USGS	114
ALBA CREEK	245	9S/2W-32	Oct. 1963	I	DWR	134
ALAMONT CREEK AT ALAMONT TURNOUT OF SOUTH BAY AQUEDUCT	201	2S/3E-31	June 1962	O	DWR	113
ARROYO DEL VALLE NEAR LIVERMORE	71	4S/2E-4	July 1958	M	DWR	117
BEAN CREEK ONE MILE EAST OF FELTON	204	10S/2W-22	Aug. 1963	I	DWR	143
BEAR CREEK AT BOULDER CREEK	205	9S/2W-30	Aug. 1963	I	DWR	132
BEAR CREEK FOUR MILES NORTHEAST OF BOULDER CREEK	206	9S/2W-10	Aug. 1963	I	DWR	129
BETHANY FOREBAY AT SOUTH BAY PUMPING PLANT	207	2S/3E-10	Apr. 1962	O	DWR	163
BIG RIVER NEAR MOUTH	8c	17N/17W-24	Jan. 1959	M	DWR	105
BLANCO DRAIN INTO SALINAS RIVER	246	14S/2E-16	Aug. 1964	I	DWR	153
BOULDER CREEK AT BOULDER CREEK	208	9S/2W-30	Aug. 1963	I	DWR	133
BOULDER CREEK	247	9S/3W-14	Oct. 1963	I	DWR	136
BRANCIFORTE CREEK NEAR SANTA CRUZ	209	11S/1W-7	Nov. 1963	I	DWR	147
BRANCIFORTE CREEK	248	11S/1W-7	Aug. 1963	I	DWR	148
BUTANO CREEK	249	8S/5W-14	Sept. 1963	I	DWR	123
BUTANO CREEK	250	8S/5W-25	Apr. 1964	I	DWR	124
CARBONERA CREEK	251	11S/1W-7	Jan. 1964	I	DWR	149
CARMEL RIVER AT ROBLES DEL RIO	83	17S/2E-2	Jan. 1952	M	DWR	158
CLEAR CREEK AT BROOKDALE	210	9S/2W-32	Aug. 1963	I	DWR	135
COLLINSVILLE	236	38°04' Lat ^b 121° 51' Long	1924	M	DWR	171
COYOTE CREEK NEAR MADRONE	82	9S/3E-9	Jan. 1952	M	DWR	124
CROCKETT	237	38°03' Lat ^b 122°13' Long	1946	M	DWR	171
DENNISTON CREEK	252	5S/6W-2	Sept. 1963	I	DWR	118
FALL CREEK ONE-HALF MILE NORTH OF FELTON	211	10S/2W-16	Aug. 1963	I	DWR	142
GAZOS CREEK	253	9S/5W-11	Sept. 1963	I	DWR	125
GUALALA RIVER, SOUTH FORK, NEAR ANNAPOLIS	9a	10N/14W	Jan. 1959	M	DWR	107
KINGS CREEK TWO MILES NORTH OF BOULDER CREEK	213	9S/2W-18	Aug. 1963	I	DWR	130
LIVERMORE CANAL AT PATTERSON RESERVOIR	214	3S/3E-6	Aug. 1962	O	DWR	164
LOMPIO CREEK ONE MILE NORTH OF OLYMPIA	215	10S/2W-11	Aug. 1963	I	DWR	141
LOS GATOS CREEK NEAR LOS GATOS	74	8S/1W-29	Dec. 1951	M	DWR	121
LOVE CREEK AT BEN LOMOND	216	10S/2W-4	Aug. 1963	I	DWR	139
MARTINEZ	239	38°02' Lat ^b 122°08' Long	1926	M	DWR	171
MARSHALL CREEK	254	10S/2W-5	Oct. 1963	I	DWR	140
MIDDLE POINT	255	38°03' Lat ^b 121°59' Long	Jan. 1964	M	DWR	171
NACIMIENTO RIVER NEAR SAN MIGUEL	43b	25S/11E-4	July 1958	M	DWR	161
NAFA RIVER NEAR ST. HELENA	72	8N/5W-33	Dec. 1951	M	DWR	112

a Locations are referenced to Mt. Diablo Base and Meridian.

b Locations given in latitude and longitude because the areas have not been surveyed for township, range, and section.

c M-Monitoring, I-Investigational, O-Operational.

d DWR-Department of Water Resources, USGS-United States Geological Survey

TABLE D-1
SAMPLING STATION DATA AND INDEX

Station	Station Number	Location ^a	Beginning of Record	Station Type ^c	Sampled By ^d	Analysis on page
VARRO RIVER NEAR NAVARRO	8b	15N/16W-7	Jan. 1959	M	DWR	106
WELL CREEK ONE MILE NORTHEAST OF BEN LOMOND	219	10S/2W-3	Aug. 1963	I	DWR	139
YO RIVER NEAR FORT BRAGG	10c	18N/17W-10	Jan. 1959	M	DWR	104
VARO RIVER NEAR CHITTENDEN	77	12S/3E-12	Dec. 1951	M	DWR	152
WASCADERO CREEK	256	8S/4W-5	Sept. 1963	I	DWR	122
WETSBURG	240	38°02' Lat ^b 121°53' Long	1945	M	DWR	171
WORT CHICAGO	241	38°04' Lat ^b 122°02' Long	1946	M	DWR	171
WRISIMA CREEK	257	6S/5W-2	Sept. 1963	I	DWR	119
WRISIMA CREEK	258	6S/5W-21	Feb. 1964	I	DWR	120
WSSIAN RIVER, EAST FORK, AT POTTER VALLEY POWERHOUSE	10a	17N/11W-6	May 1951	M	DWR	111
WSSIAN RIVER AT GUERNEVILLE	10	8N/10W-32	Apr. 1951	M	DWR	108
WSSIAN RIVER NEAR HEALDSBURG	9	9N/9W-22	Apr. 1951	M	DWR	109
WSSIAN RIVER NEAR HOPLAND	8a	14N/12W-36	Apr. 1951	M	DWR	110
WLINAS RIVER NEAR BRADLEY	43c	23S/10E-15	July 1958	M	DWR	159
WLINAS RIVER AT PASO ROBLES	43a	26S/12E-28	Apr. 1951	M	DWR	162
WLINAS RIVER NEAR SPECKELS	43	15S/3E-18	Apr. 1951	M	DWR	156
WLINAS RIVER, MILE 9.51	259	15S/2E-2	Aug. 1964	I	DWR	155
WLINAS RIVER, MILE 7.13	260	14S/2E-33	Aug. 1964	I	DWR	155
WLINAS RIVER, MILE 4.65	261	14S/2E-16	Aug. 1964	I	DWR	154
WLINAS RIVER, MILE 3.50	262	14S/2E-16	Aug. 1964	I	DWR	154
WLINAS RIVER, MILE 1.70	263	14S/2E-7	Aug. 1964	I	DWR	153
WLINAS RIVER, MILE 0.00	264	14S/1E-1	Aug. 1964	I	DWR	153
WNTONIO RIVER NEAR PLEYTO	43d	24S/9E-3	July 1958	M	DWR	160
WSENITO RIVER NEAR BEAR VALLEY FIRE STATION	77a	15S/7E-28	July 1958	M	DWR	157
WREGORIO CREEK	265	7S/5W-15	Sept. 1963	I	DWR	120
WLORENZO RIVER AT BIG TREES	226	10S/2W-27	Aug. 1963	I	DWR	146
WLORENZO RIVER AT BIG TREES NEAR FELTON	75	10S/2W-27	Dec. 1951	M	DWR	146
WLORENZO RIVER AT BOULDER CREEK	227	9S/2W-30	Aug. 1963	I	DWR	134
WLORENZO RIVER SIX MILES NORTH OF BOULDER CREEK	228	8S/3W-25	Aug. 1963	I	DWR	128
WLORENZO RIVER AT FELTON	229	10S/2W-22	Aug. 1963	I	DWR	144
WLORENZO RIVER AT SANTA CRUZ	230	11S/2W-12	Aug. 1963	I	DWR	151
WQUEL CREEK AT SOQUEL	76	11S/1W-10	Dec. 1951	M	DWR	150
WMOONBILL CREEK	243	38°04' Lat ^b 121°54' Long	1957	M	DWR	171
WNO BAR CREEK ONE MILE NORTH OF BOULDER CREEK	232	9S/2W-19	Aug. 1963	I	DWR	131
WNOAS CREEK NEAR MORGAN HILL	96	10S/3E-17	July 1952	M	DWR	137
WNOTEHOUSE CREEK	266	9S/5W-13	Sept. 1963	I	DWR	126
WNYANTE CREEK AT FELTON	233	10S/2W-22	Aug. 1963	I	DWR	145
WNYANTE CREEK AT ZAYANTE	234	10S/2W-2	Aug. 1963	I	DWR	138

Locations are referenced to Mt. Diablo Base and Meridian.

Locations given in latitude and longitude because the areas have not been surveyed for township, range, and section.

M-Monitoring, I-Investigational, O-Operational.

DWR-Department of Water Resources, USGS-United States Geological Survey

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

Date and time sample engaged (P.S.T.)	Discharge Temp in air	Dissolved oxygen in ppm % Sat	Specific Conductance at 25°C	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Hardness as CaCO ₃ ppm	Turbidity in nephelometric turbidity units	Coliforms per 100 ml	Analyzed by 1			
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)						Boron (B)	Silica (SiO ₂)	Other constituents
10-9-63 1120	6 est.	7.8	80	222	7.8	1.76	0.32	12	0	121	0.00	1.98	0.28	9.8	0.2	23	88	0	1	USGS	
11-14-63 1345	100 est.	56	10.0	155	7.2	1.22	0.26	8.3	0	74	0.00	1.21	0.18	6.3	0.2	23	61	0	65		
12-11-63 0945	90 est.	44	11.7	90	179	1.42	0.41	9.4	0	80	0.00	1.48	0.20	7.0	0.2	22	71	0	5		
1-9-64 1415	75 est.	46	11.8	99	177	1.44	0.43	9.9	0	97	0.00	1.55	0.22	7.8	0.2	23	72	0	10		
2-6-64 1700	147.8	48	11.8	102	156	1.22	0.37	8.6	0	79	0.00	1.29	0.18	6.5	0.1	23	61	0	2		
3-12-64 1520	277	46	11.7	98	140	1.10	0.36	8.3	0	69	0.00	1.13	0.16	5.8	0.2	25	55	0	170		
6-18-64 1500	51	58	10.3	101	193	1.36	0.48	11	0	100	0.00	1.64	0.20	7.0	0.2	24	78	0	1		
5-13-64 1310	29.5	64	9.8	104	205	6.6	1.1	1.2	0	109	0.00	1.79	0.17	8.0	0.2	128	22	82	0		15
6-4-64 1220	19.6	64	9.3	98	216	1.72	0.52	12	0	117	0.00	1.92	0.18	6.5	0.2	23	83	0	1		
7-16-64 1245	10 est.	70	9.3	105	223	1.74	0.57	13	0	120	0.00	1.97	0.20	7.1	0.4	25	87	0	1		
8-12-64 1165	66	8.9	96	223	8.0	1.42	0.61	16	0	124	0.00	2.03	0.20	7.0	0.4	26	87	0	1		
9-2-64 1315	8.8	64	9.6	102	224	7.3	1.10	1.2	0	122	0.00	2.00	0.10	8.0	0.4	129	24	87	0		2

e Field pH

f Laboratory pH

g Sum of calcium and magnesium in ppm

h Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

i Derived from conductivity vs TDS curves

j Determined by addition of analyzed constituents.

k Gravimetric determination

l Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

m Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); Unrefined Deposits of Iron, Zinc, Barium, or Potassium (USRB); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWDSC); Metropolitan Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LDBPH); Terminal Testing Laboratories, Inc. (TTL); California Department of Water Resources (DWR); as indicated.

303-264 043 200 300

TABLE D-2
ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

Date in of P.S.T.	Discharge in cfs	Temp in of	Ossolved in of ppm	Specific conductance in of µmhos/cm	pH	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Mercuric as CaCO ₃ Total Hg in ppm	Tot - Coliform bid - in ppm	Analyzed by		
						Calcium (Ca)	Magne- (Mg)	Sodium (Na)	Potash (K)	Carbon- ate (CO ₃)	Bicarb- onate (HCO ₃)	Sulf- ate (SO ₄)	Chlo- ride (Cl)	No. of trials (NO ₃)	Flocc- ulate (F)					Boron (B)	Silic- ic acid (SiO ₂)
10-9-63 1237	24	64	8.6	90	265	7.3	12	2.28 ^c	0.52	0	0	150	11	0.31	0.0	19	113	0	1	5.0	USGS
11-14-63 1745	1,000	57	9.5	91	193	7.3	9.7	1.54 ^c	0.42	0	0	88	7.5	0.21	0.1	21	77	5	300	230.	
12-11-63 1100	155	46	10.5	96	232	7.1	11	1.92 ^c	0.48	0	0	119	9.0	0.25	0.2	20	96	0	3	6.2	
1-10-64 1030	142	46	11.5	96	242	6.9	13	2.02 ^c	0.57	0	0	125	9.0	0.25	0.1	22	101	0	3	2.3	
2-7-64 1125	285	47	11.6	98	210	7.1	10	1.77 ^c	0.44	0	0	110	7.0	0.20	0.1	20	86	0	4	23.	
3-13-64 1050	180	47	11.3	96	197	7.3	10	1.60 ^c	0.44	0	0	95	7.2	0.20	0.1	22	80	2	20	6.2	
4-17-64 1100	80	56	10.1	96	249	7.6	12	2.10 ^c	0.52	2	2	128	8.5	0.24	0.1	20	105	0	1	6.2	
5-16-64 0914	50	58	9.5	92	259	7.5	10	1.85	0.44	0	0	138	9.5	0.27	0.1	154	110	0	1	1.3	
6-5-64 0940	36	63	9.1	94	265	7.3	13	2.20 ^c	0.57	0	0	141	8.5	0.24	0.2	21	110	0	1	2.1	
7-16-64 1400	12	74	10.3	119	269	7.6	13	2.22 ^c	0.57	0	0	144	8.6	0.24	0.2	20	111	0	1	.60	
8-13-64 0865	7.1	65	6.9	73	270	7.3	16	2.32 ^c	0.61	0	0	166	7.5	0.21	0.3	21	112	0	3	2.3	
9-4-64 1045	9.3	62	7.8	80	269	7.2	10	1.40	0.56	0	0	167	9.0	0.23	0.2	157	113	0	1	620.	

NAVABO RIVER NEAR NAVABO (STA. 8b)

As = 0.00
ABS = 0.00
P% = 0.05

As = 0.00
ABS = 0.11
P% = 0.00

a Field pH
b Laboratory pH
c Sum of calcium and magnesium in gm.
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
e Derived from conductivity vs TDS curves.
f Determined by addition of analyzed constituents.
g Gravimetric determination
h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (CDWR), as indicated.

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

Date on which sample collected P.S.T.	Discharge Temp in cfe in °F	Dissolved oxygen in ppm	%Sat	Specific Conductance at 25°C, μ	pH	Mineral constituents in parts per million										Total Dissolved Solids in ppm	Hardness as CaCO ₃ ppm	Total N.C. ppm	Total Coliform MPN/ml	Analyzed by 1		
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)						Boron-Silica (B) (SiO ₂)	Other constituents
10-11-63																						
0920	260	8.2	84	237	7.7	7.7	2.20 ^c	7.0	0	0	137	0	0	0	0.2	12	110	0	8	62.	USGS	
11-15-63																						
1410	605	9.8	97	245	7.8	7.8	2.22 ^c	7.4	0	0	133	0	0	0	0.4	13	111	2	15	62.	62.	
12-13-63																						
1210	418	11.8	99	292	7.2	7.2	2.74 ^c	9.2	0	0	162	0	0	0	0.4	13	137	4	2	6.2	6.2	
1-8-64																						
1215	1,560	11.9	105	192	7.3	7.3	1.72 ^c	7.3	0	0	102	0	0	0	0.3	16	86	0	30	62.	230.	
2-5-64																						
1329	800	10.8	100	263	7.2	7.2	2.48 ^c	8.8	0	0	166	0	0	0	0.3	13	124	4	10	6.2	6.2	
3-11-64																						
1530	544	11.4	102	258	8.0	8.0	2.36 ^c	8.5	0	0	140	0	0	0	0.3	14	118	3	3	23.	23.	
4-15-64																						
1210	313	10.9	120	288	8.2	8.2	2.72 ^c	9.5	2	2	158	0	0	0	0.6	13	136	3	2	23.	23.	
5-12-64																						
1139	166	9.5	103	309	8.0	8.0	1.5	8.2	0	0	171	0	0	0	0.5	12	144	4	1	13.	13.	
6-3-64																						
1110	150	9.7	108	310	8.1	8.1	2.88 ^c	7.4	2	2	168	0	0	0	0.5	10	144	3	1	13.	13.	
7-15-64																						
1045	195	8.7	105	262	7.8	7.8	2.48 ^c	8.8	0	0	140	0	0	0	0.5	13	124	3	2	6.2	6.2	
8-11-64																						
1209	182	7.4	101	258	8.2	8.2	2.38 ^c	9.3	0	0	168	0	0	0	0.6	14	119	0	2	23.	23.	
9-2-64																						
1215	180	7.0	98	257	8.1	8.1	1.35	8.8	1.0	1.0	145	1.1	1.1	0.5	12	142	14	119	0	6.2	6.2	

a Field pH
 b Laboratory pH
 c Sum of calcium and magnesium in ppm.
 d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{VI}), reported here as 0.0 except as shown.
 e Derived from conductivity vs TDS curves
 f Determined by addition of analyzed constituents.
 g Gasometric determination.
 h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
 i Analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWSD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.
 3255-64d 6-6d 200 390

ANALYSES OF SURFACE WATER

NORTH COASTAL REGION (NO. 1)

Date collected and sample P.S.T.	Ditch/charge Temp in °F	Dissolved oxygen ppm	Specific conductance at 25°C	pH	Mineral constituents in equivalents per million										Total dissolved in ppm	Hardness as CaCO ₃ in ppm	Turbidity in MPN/m	Analyzed by
					Calcium (Ca)	Magnesium (Mg)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Silica (SiO ₂)	Other constituents	Per cent sodium in ppm				
RUSSIAN RIVER, EAST FORK, AT POTTER VALLEY POWER HOUSE (STA. 104)																		
10-10-63	217	8.4	178	7.7	1.62	0.22	0.00	0.99	4.8	0.14	0.1	0.1	0.1	12	81	0	23.	USGS
10-14-63	309	9.9	193	7.4	1.70	0.30	0.00	1.06	5.8	0.16	0.7	0.7	15	85	0	10	23.	
11-13-63	302	11.4	167	7.3	1.50	0.24	0.00	0.89	4.8	0.14	0.4	0.4	14	75	2	10	2.3	
12-13-63	303	4.3	164	8.5	1.47	0.26	0.20	1.38	4.5	0.13	0.3	0.3	15	74	0	3	2.3	
1-8-64	299	4.3	136	7.3	1.22	0.23	0.00	0.72	2.8	0.08	0.2	0.2	16	61	2	4.0	2.3	
2-5-64	288	4.4	146	7.4	1.29	0.23	0.00	0.77	3.8	0.11	0.3	0.3	15	65	2	15	0.2	
3-11-64	298	4.4	146	7.9	1.29	0.23	0.00	1.26	5.2	0.11	0.4	0.4	16	79	0	2	2.3	
4-15-64	60	9.4	179	8.6	1.58	0.30	0.13	1.31	5.2	0.15	0.4	0.4	16	79	0	2	2.3	
5-12-64	27	9.0	186	7.6	1.6	0.3	0.0	0.98	5.8	0.5	0.1	0.1	15	82	2	1	2.3	
6-3-64	28	9.1	182	7.9	1.60	0.30	0.00	1.59	3.5	0.10	0.5	0.5	16	80	0	2	6.2	
7-16-64	200	6.8	168	7.9	1.50	0.24	0.00	1.48	2.6	0.07	0.3	0.3	14	75	1	3	2.3	
8-11-64	120	8.9	169	8.0	1.50	0.25	0.00	0.91	2.5	0.07	0.4	0.4	16	75	0	2	2.3	
9-2-64	130	5.9	172	8.0	1.25	0.31	0.00	1.52	2.9	0.5	0.4	0.4	103	14	78	2	2	

o Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Annual analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles County Flood Control District (LACFC); City of Los Angeles, Department of Public Health (ADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR); as indicated.

AA = 0.01

ABS = 0.0

PO₄ = 0.00

AA = 0.00

ABS = 0.00

PO₄ = 0.00

AA = 0.01

ABS = 0.0

PO₄ = 0.00

AA = 0.01

ABS = 0.0

PO₄ = 0.00

AA = 0.01

ABS = 0.0

PO₄ = 0.00

AA = 0.01

ABS = 0.0

PO₄ = 0.00

TABLE D-2
ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time in cfs in of P.S.T.	Discharge Temp in cfs in of P.S.T.	Dissolved oxygen in ppm	Specific Conductance at 25°C or %SD	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Percent calcium carbonate	Mercurials as CaCO_3 ppm	Total N.C. in ppm	Type - California BDPH/ml	Analyzed by
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Nitrate (NO_3)	Fluoride (F)						
10-11-63 1030	4.0	64	4.1	4.3	4.00	7.6	19	0.180	0.00	2.795	21	0.39	0.3	21	152	4	2	7000.	USGS	
						7.6	3,104c	0.700	0.00	2.795	0.39	0.3	0.3	21	152	4	2	7000.		
11-13-63 1530	7.0	64	7.5	7.9	308	7.0	25	0.117	0.00	1.792	26	0.68	0.7	26	100	4	8	62.	USGS	
						7.0	2,006c	0.117	0.00	1.792	26	0.68	0.7	26	100	4	8	62.		
12-13-63 1330	18	47	8.1	7.3	238	7.1	18	0.90	0.00	1.448	14	0.39	0.4	14	76	2	5	62.	USGS	
						7.1	1,552c	0.90	0.00	1.448	14	0.39	0.4	14	76	2	5	62.		
1-8-64 1255	11	50	10.4	9.2	274	7.1	24	0.102	0.00	1.67	21	0.39	0.6	21	83	0	15	23.	USGS	
						7.1	1,666c	0.102	0.00	1.67	21	0.39	0.6	21	83	0	15	23.		
2-5-64 1910	48	54	9.3	8.7	208	7.2	14	0.87	0.00	1.44	12	0.34	0.1	12	72	1	10	234.	USGS	
						7.2	1,446c	0.87	0.00	1.44	12	0.34	0.1	12	72	1	10	234.		
3-11-64 1720	21	52	11.0	10.0	270	7.2	19	0.110	0.00	1.80	19	0.34	0.7	19	99	9	20	62.	USGS	
						7.2	1,988c	0.110	0.00	1.80	19	0.34	0.7	19	99	9	20	62.		
4-15-64 1530	9.1	73	9.8	114	315	7.2	24	0.121	0.00	1.738	25	0.71	0.8	25	97	0	1	21.	USGS	
						7.2	1,944c	0.121	0.00	1.738	25	0.71	0.8	25	97	0	1	21.		
5-12-64 1415	4.3	73	12.5	146	335	7.3	14	0.139	0.00	2.28	22	0.53	0.4	22	116	0	1	6.2	USGS	
						7.3	2,280c	0.139	0.00	2.28	22	0.53	0.4	22	116	0	1	6.2		
6-3-64 1325	2.8	71	13.8	157	336	8.1	20	0.700	0.00	2.477	22	0.62	0.6	22	122	0	3	5.0	USGS	
						8.1	2,444c	0.700	0.00	2.477	22	0.62	0.6	22	122	0	3	5.0		
7-15-64 1200	0.2	75	6.5	77	372	7.6	20	0.189	0.00	3.10	16	0.45	0.4	16	149	0	3	6.2	USGS	
						7.6	2,988c	0.189	0.00	3.10	16	0.45	0.4	16	149	0	3	6.2		
8-11-64 1345	0.6	69	0.6	67	388	8.1	21	0.208	0.00	3.41	11	0.31	0.4	11	163	0	3	230.	USGS	
						8.1	3,286c	0.208	0.00	3.41	11	0.31	0.4	11	163	0	3	230.		
9-2-64 1415	0.2	66	0.5	5	387	7.4	34	0.207	0.00	3.39	12	0.35	0.4	12	161	0	1	62.	USGS	
						7.4	1,770c	0.207	0.00	3.39	12	0.35	0.4	12	161	0	1	62.		

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{6+}), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Geometric mean

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Annual analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

USGS = United States Geological Survey; USPHS = United States Public Health Service; USBR = United States Bureau of Reclamation; LADWP = Los Angeles Department of Water and Power; SBFCFD = San Bernardino County Flood Control District; MWD = Metropolitan Water District of Southern California; DWR = California Department of Water Resources; TTL = Terminal Testing Laboratories, Inc.

SAN FRANCISCO BAY REGION (NO. 2)

ANALYSES OF SURFACE WATER

Date sample completed P.S.T.	Discharge Temp in °F	Dissolved oxygen ppm % Sat	Specific conductance at 25°C µmhos/cm	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃ Total TAC in ppm	Tur- bid- ity in MPN/ml	Analyzed by 1	
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Calcium carbonate (CaCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)					Silica (SiO ₂)
10-28-63	33.9		502			2.34c						75					117		DWR
12-2-63	16.9		526		2.38c							60					119		
1-6-64	48.6		549		2.36c							79					117		
1-30			2610		6.31c	19.79	6.55					418					316		
2-3-64			786		3.66c							122					183		
3-2-64	33.3		636		3.08c							91					154		
4-1-64	2.1		1650		4.88c							252					244		
5-1-64			408		2.10c							56					105		
6-1-64	51.3		322		1.77c							35					86		
7-1-64	55.6		381		1.77c							55					86		
8-1-64	51.9		576		2.20c							107					110		
1435												32							
9-1-64	32.0											3.02							
1615																			

ALTAHONT CREEK AT ALTAHONT TURNOUT OF SOUTH BAY AQUEDUCT (STA. 201)

a Field pH
 b Laboratory pH
 c Sum of calcium and magnesium in ppm.
 d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
 e Derived from conductivity vs TDS curves
 f Determined by addition of analyzed constituents.
 g Gravimetric determination
 h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
 i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Field Central District (SBCECD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPHH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.
 3255-6-64 6-63 200 290

TABLE D-2
ANALYSES OF SURFACE WATER
SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled P.S.T.	Discharge (mgals) in discharge pipe	Dissolved iron in ppm	%Sot	Specific conductance (micro-mhos/cm at 25°C)	pH	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Hardness as CaCO ₃ in ppm	Tur- bidity in pt/m	Coliforms MPN/ml	Analyzed by				
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)						Boron (B)	Silica (SiO ₂)	Other constituents	
ALAMEDA CREEK NEAR NILES (STA. 73)																								
6/11-20/64	44			483	7.9	30	1.7	4.3	3.2	0	1.38	42	60	2.9	0.11	0.3	14	284.8	39	145	32		USGS	
						1,320	1.87	1.87	0.38	0.00	2.26	0.37	1.69	0.05	0.01									
6/21-30/64	41			461	8.0	29	1.6	39	2.9	0	1.62	38	52	3.2	0.2	0.3	17	273.6	37	140	24			
						1,475	1.35	1,770	0.07	0.00	2.33	0.79	1,447	0.05	0.01									
ALAMEDA CREEK NEAR NILES (STA. 73)																								
10-3-63	28	66	8.8	94	646	8.0	3,238	2,911		67	0	160	96		0.2			47	164	33	45	23	USGS	
10-13						8.2					0	205	78		0.6									
11-7-63	7.8	56	10.5	100	692	7.5	4,234	2,770		62	0	2,770	2,220		0.2			39	212	44	15	23		
12-5-63	4.6	45	12.9	106.3	726	8.3	4,724	3,704		70	3	1.94	88		0.5			42	212	48	10	2.3		
2000						8.3				40	0	13.8	98		0.5									
1-9-64	35	42	12.5	99	620	7.9	2,986	2,651		60	0	2,110	2,776		0.6			47	149	44	60	23		
1100						8.1				58	13	255	62		0.6									
2-7-64	10	43	11.6	93	780	8.2	5,806	2,572		88	3	4.18	175		0.6			30	290	60	13	2.3		
1030						8.5				88	4.43	4,181	1,751		0.6									
3-5-64	38	53	11.3	103	842	8.2	4,484	3,339		78	3	1.59	122		0.6			43	224	89	30	21		
1020						8.1				36	0	1,761	3,444		0.6									
4-9-64	33	59	10.2	100	779	8.1	4,406	3,222		2	2	182	103		0.6			42	220	67	20	23		
1130						8.4				2,911	0	2,986	2,911		0.6									
5-5-64	5.4	57	10.5	101	904	8.2	3,676	2,766		36	0	316	90		0.2			536	34	320	71	8	2.3	
1555						8.1				76	0	518	1,877		0.02									
6-10-64	44	60	9.8	98	448	8.2	2,881	3,131		42	3	1.28	51		0.3									
1730						8.4				42	0	1,710	1,444		0.3									
7-8-64	41	70	8.5	95	407	8.3	2,664	1,448		36	3	1.33	60		0.2			41	133	23	55	62		
1715						8.2				36	0	1,113	1,113		0.2									

a Field pH
b Laboratory pH
c Sum of calcium and magnesium in ppm.
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
e Derived from conductivity vs TDS curves
f Determined by addition of analyzed constituents.
g Gravimetric determination.
h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFCD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled (P.S.T.)	Observed Temp in °F	Observed oxygen ppm	Specific Conductivity at 25°C (microhm/cm)	pH	Major constituents in parts per million							Total dissolved in ppm	Hardness as CaCO ₃ Total in ppm	Turbidity in nephelometric units	Analyzed by				
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonates (CO ₃)	Bicarbonates (HCO ₃)	Sulfate (SO ₄)					Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Silica (SiO ₂)
8-5-64	41	8.6	105	483	8.1	46	0	131	0	0.00	0.2	65	1.83	43	133	26	80	130.	USGS
10-4-63	2230					2,66c	0.00	7.15	0.00	2.96	0.2	1.83	43	133	26	80	130.	USGS	
11-5-63	0.1	5.8	7.5	74	8.0	88	0	436	0.00	2.96	1.8	1.83	43	133	26	80	130.		USGS
12-5-63	0.1	4.6	7.3	62	8.2	196	0	348	0.00	3.05	1.8	1.83	43	133	26	80	130.	USGS	
1-10-64	1.4	4.9	11.8	104	7.32	50	2	27.6	0.07	4.32	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0
2-3-64	15	5.4	10.4	98	8.2	25	10	21.6	0.10	1.8	0.4	1.8	4.9	14.3	4.1	2.0	62.	USGS	
3-2-64	4.6	5.7	10.8	106	5.57	4,44c	0.03	3.34	0.03	3.34	0.6	0.6	2.0	222	28	5			USGS
4-10-64	2.2	6.0	10.2	104	6.15	29	6	2.30	0.20	3.77	0.73	2.6	2.6	2.1	2.39	4.1	15		
5-4-64	0.8	6.0	10.5	104	6.94	34	8	26.4	0.27	4.33	0.4	2.4	2.4	2.2	2.59	2.9	1		USGS
6-10-64	0.4	6.6	11.1	121	7.00	44	0	31.8	0.00	5.21	0.3	3.5	0.4	0.3	0.6	1.8	3.3	3	
7-8-64	0.4	7.4	8.9	105	7.13	34	1.9	7.6	0.10	4.69	1.0	2.1	0.59	3.2	2.69	3.0	0		USGS
1900						5,13c	0.79	1.71	0.79	1.71	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
						5,17c	0.79	1.71	0.79	1.71	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	USGS

ALAMEDA GREEN NEAR WILES (STA. 73)
 ARROYO DEL VALLE NEAR LIVERMORE (STA. 71)

a Field pH
 b Laboratory pH
 c Sum of calcium and magnesium in eqm.
 d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
 e Derived from conductivity vs TDS curves.
 f Determined by addition of analyzed constituents.
 g Gravimetric determination.
 h Annual median and range, respectively. Calculated from one year of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
 i Mineral analyses made by United States Geological Survey, Quality of Water Branch, (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service, (USPHS); San Bernardino County Flood Control District of Southern California (FCD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DMR), as indicated.

TABLE D-2
ANALYSES OF SURFACE WATER
SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled P.S.T.	Discharge Temp in °C in °F	Dissolved oxygen ppm	Specific conductance at 25°C µmhos/cm	Mineral constituents in equivalents per million						Total solids in ppm	Per- cent solids in ppm	Hardness as CaCO ₃ ppm	Turbidity NTU	Acidified by 1 MPN/ml				
				Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Carbon- ate (CO ₃)	Bicor- bonate (HCO ₃)						Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Flu- oride (F)
8-5-64 1700	Flooded																	
9-1-64 1150	Flooded																	
10-8-63 1335	2	70	9.8	7.8 7.7	2.6 0.85	2.6 0.92	0.8 0.92	0.89 1.46	8.6 0.18	31 0.87	0.2 0.00	0.4 0.02	0.02 1.9	153	41	75	2	DRR
10-17-63 1330				260														Field determi- nations
11-14-63 1200	2.25	58	9.1	6.7 7.7	6.4 1.05	2.3 1.00	0.8 0.02	0.88 1.42	1.0 0.21	32 0.90	1.2 0.02	0.0	0.0	131	38	79	7	DRR
11-27-63				257														Field determi- nations
12-12-63 1435	1.5	47	10.9	7.2 7.4	6.9 1.05	2.3 1.00	0.6 0.02	0.89 1.46	9.5 0.20	33 0.93	0.4 0.01	0.3 0.02	0.04 2.0	159	38	81	8	DRR
12-31-63 1000				265														Field determi- nations
1-13-64 1100	2.00	46	10.9	7.3									0.2	156		80		DRR
1-27-64 0941				265												90		Field determi- nations

a Field pH.
b Laboratory pH.
c Sum of calcium and magnesium in ppm.
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
e Derived from conductivity vs TDS curves.
f Determined by addition of analyzed constituents.
g Gravimetric determination.
h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWSD); Los Angeles Department of Public Health (LADPH); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LDBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

SAN FRANCISCO BAY REGION (NO. 2)
ANALYSES OF SURFACE WATER

Date and time sampled P.S.T.	Discharge Temp in cts in ft	Dissolved oxygen ppm	% Sat	Specific conductance at 25°C	pH	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Percent of total dissolved solids in ppm	Increase in CaCO ₃ from 1960 to 1964	Tur- bid- ity in nph	Analyzed by				
						Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Carbo- nate (CO ₃)	Bicar- bonate (HCO ₃)	Sul- fide (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluo- ride (F)						Bio- gen (B)	Silico- gen (Si)	Other constituents	
DENNISTON CREEK (STA. 252)																								
2-17-64	1	52	10.6	268	7.2	22	5.8	24	0.6	0	81	12	32	4.3	0.0	0.0	153	39	79	DNR				
1220				775		1.10	0.48	1.04	0.02	0.00	1.33	0.25	0.30	0.07					13		Field deter- mination			
2-28-64				300									36					80			Field deter- mination			
3-23-64	1.5	55	11.5	262	7.5								36				156		78	6.5	DNR			
3-27-64				275															85		Field deter- mination			
4-20-64	1	58		292									32				162		84	8.0	DNR			
4-24-64				282															72		Field deter- mination			
5-11-64	2	63	9.6	292	7.3												170		82	3.25	DNR			
1340																						Field deter- mination		
FURKSTAD CREEK (STA. 257)																								
10-9-63	1.1	62	9.3	681	8.1	86	22	30	3.6	0	318	72	26	0.1	0.4	0.08	24		418	18	302	41	DNR	
1415				681	8.3	4.19	1.04	1.30	0.09	0.00	3.21	1.30	0.73	0.00	0.02									
1250	1.8	58	9.7	654	8.2	85	19	29	3.1	0	304	67	23	0.9	0.1				380	18	290	41		
12-12-63	1.2	45	11.6	680	8.1	88	20	31	2.5	0	311	74	26	0.2	0.6	0.09	21		424	18	302	47		
1340				680	8.2	4.39	1.64	1.35	0.06	0.00	5.10	1.34	0.73	0.00	0.02									
1-13-64	1.1	45	11.9	695	8.2	88	22	32	2.6	0	320	76	26	0.4	0.4	0.1	19		445	18	310	48		
1130				695	8.2	4.39	1.80	1.39	0.06	0.00	5.24	1.38	0.73	0.01	0.02									

o Field pH

b Laboratory pH

c Sum of calcium and magnesium in spm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Tammany Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

TABLE D-2
ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time in P.S.T.	Diagrams Temp in °F in 6 ft	Dissolved oxygen in ppm %Sat	Specific conductance in micromhos at 25°C	pH	Mineral constituents in parts per million											Total dissolved solids in ppm	Total H.C. ppm	Hardness as CaCO ₃ in ppm	Tur- bid- ity in nephelometric units	Analyzed by
					Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potash (K)	Potash (K)	Calcium (Ca)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					
5-6-64 1040	1.5 58	10.6 105	685	8.2	8.2	31	25	2.8	4.2	11.6	16	1.1	0.3	0.1	14	336	95	105	2.3	USGS
6-10-64 1010	5.7 60	9.6 98	524	8.3	8.4	4.886	20	0.7	2.7	2.42	12	0.34	0.02	0.1	15	244	62	40	62	
7-8-64 1000	60 72	8.5 99	807	8.4	8.4	8.046	32	8	5.1	5.1	18	0.31	0.1	15	402	113	220	13	6.2	
8-6-64 1000	0.5 68	9.5 106	863	8.3	8.4	8.646	33	4	3.6	3.6	22	0.62	0.2	14	432	107	5	23	62	
9-3-64 1100	0.5 68	9.7 108	785	8.0	8.1	8.24	20	3.0	0.08	1.31	1.6	0.6	0.4	0.3	13	393	105	1	2.3	6.2
10-9-63 1100	5 63	9.0	774	7.8	8.2	2.79	27	4.6	0.12	7.3	63	0.1	0.4	0.38	33	262	24			DMR
10-17-63 1010	4.5		630				2.74			1.52	1.78	0.00	0.02	26	230					Field determinations
11-16-63 1413	9 59	9.9	666	8.2	8.3	3.09	19	3.5	0.09	7.7	48	0.7	0.7	0.4	386	31	234	42		DMR
11-27-63 1205	18		500				1.59			1.60	40				205					Field determinations
12-12-63 1030	8 38	12.8	658	7.7	8.0	3.24	17	2.8	0.07	7.9	44	0.4	0.4	0.39	30	233	42			DMR
12-31-63 1100	6.6		672				1.42			1.84	55	0.01	0.02	21	255					Field determinations

a Field pH
b Laboratory pH
c Sum of calcium and magnesium in ppm
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown
e Derived from conductivity vs TDS curves
f Determined by addition of analyzed constituents
g Gravimetric determination
h Actual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service
i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPDH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DMR); as indicated

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date on which samples were analyzed P.S.T.	Orecharge Temp in °F in cfs	Dissolved oxygen in ppm	% Sat	Specific conductance in micromhos/cm at 25°C	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃ Total in ppm	Tur- bid- ity in nephelometric turbidity units	Analyzed by					
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Boron (B)	Silica (SiO ₂)	Other constituents		
1-13-64 1300	5.5	41	14.3	712	8.2 8.7	69 3,744	19 1,339	55 2,339	3.0 0.708	0	255 1,744	81 1,639	51 1,244	0.1 0.00	0.4 0.02	0.4	19	ABS = 0.0	434	32	252	4.3	DMR	
1-27-64 1145	43			450								32									185		Field determinations	
2-18-64 0950	14.5	42	12.7	621	7.6 8.0	63 3,114	18 1,766	37 1,811	2.8 0.07	0	213 3,491	78 1,621	38 1,077	5.7 0.09	0.3			ABS = 0.0	364	26	230	55	DMR	
2-28-64 1300	11.4			570								50									240		Field determinations	
3-23-64 1630	28.2	48	11.2	518	8.1 7.9	50 2,350	13 1,004	35 1,552	2.9 0.07	0	159 2,611	76 1,338	30 0.85	0.6 0.01	0.2			ABS = 0.0	310	30	177	47	160	DMR
3-27-64 1350	14			560								42									220		Field determinations	
4-20-64 1430	5.5	59	10.9	695	8.2							52									240		4.5	DMR
4-24-64	5			600																	240		Field determinations	
5-11-64 1630	4.5	66	10.0	710	8.4																243		2.7	DMR
10-9-63 0930	2	61	7.7	458	7.3																140		140	DMR

a Field pH.

b Laboratory pH.

c Sum of calcium and magnesium in ppm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Actual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL) or California Department of Water Resources (DMR); as indicated.

3255-4-61 6-43 300 370

TABLE D-2
ANALYSES OF SURFACE WATER
SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled P.S.T.	Discharge in cfs	Temp in °F	Dissolved oxygen in ppm	Specific Conductance at 25°C	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Turbidity in NTU	Hardness in mg/l	Analyzed by			
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Bromide (Br)	Iodide (I)	Other constituents
11-14-63 1545	10	58	9.1	358	7.6												185	120	DHR			
12-12-63 1125	4	41	11.9	431	7.3												246	135				
1-13-64 1320	3	45	10.9	539	8.1												304	160				
2-18-64 1055	5.5	47	11.1	404	7.4												249	127				
3-23-64 1700	10.1	50	11.0	319	7.4	2.6 1.30	8.3 0.68	22 0.96	2.8 0.07	0 0.00	101 1.66	26 0.34	24 0.68	0.9 0.01			190	99	16	330		
4-20-64 1320	1.8	52	8.5	472	7.8												272	137	45			
5-11-64 1705	1.5	57	8.0	442	7.5												257	134	40			
6-20-64 1600	0.8			607													238	138	33	DHR		
10-3-63 1120	7.7	68	8.6	339	8.3			1.4 0.61	2.76c	2 0.07	160 2.62	11 0.31					17	148	14	1	6.3 2.3	USGS

a Field pH.
b Laboratory pH.
c Sum of calcium and magnesium in ppm.
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
e Derived from conductivity vs TDS curves
f Determined by addition of analyzed constituents.
g Gravimetric determination.
h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

ANALYSES OF SURFACE WATER

SAN FRANCISCO BAY REGION (NO. 2)

Date and time sampled P.S.T.	Discharge Temp. in °F	Dissolved oxygen ppm % Sat	Specific conductance at 25°C	pH	Mercural constituents in equivalents per million										Total solids in ppm	Percent suspended in ppm	Mercural constituents in ppm	Tur- bid- ity in pt/m	Analyzed by 1		
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)						Bromide (Br)	Silica (SiO ₂)
11-7-63 11:40	20	63	10.5	110	7.4 8.3	16 3.30c	2 0.07	174 2.85	10 0.28	0.1					18	165	19	1	23. 62.	USGS	
12-5-63 13:30	24	55	11.1	105	8.4 8.7	17 3.40c	4 0.74	126 2.88	9.0 0.25	0.0				18	170	19	2	13. 23.			
1-9-64 12:45	37	55	11.4	108	8.2 8.8	17 3.46c	6 0.20	178 2.92	11 0.31	0.1				18	173	17	1	1.3 6.2			
2-5-64 11:20	16	52	12.2	111	8.3 8.6	18 3.18c	8 0.27	156 2.56	12 0.34	0.1				20	159	18	15	5. 6.2			
3-6-64 10:30	6.8	51	12.8	115	8.4 8.5	17 3.62c	9 0.30	125 2.87	12 0.34	0.2				17	181	23	15	23. 6.2			
4-9-64 13:30	88	57	13.4	130	8.2 8.5	16 3.36c	5 0.17	186 3.05	12 0.34	0.6				16	178	17	1	230. 62.			
5-7-64 13:45	102	57	11.4	111	8.2 8.2	46 2.30	0 0.00	191 3.13	38 0.79	0.2 0.01	As = 0.01 Pb = 0.00 PO ₄ = 0.00			238	177	20	2	2.3 -62			
6-9-64 10:15	110	59	9.6	96	8.2 8.7	10 3.86c	7 0.23	185 3.03	10 0.28	0.2				18	192	29	3	620. 6.2			
7-7-64 13:00	75	75	9.3	111	8.4 8.6	9.0 4.10c	9 0.30	207 3.31	13 0.37	0.2				9	205	25	5	62. 23.			
8-5-64 13:15	1.3	80	8.7	109	8.5 8.5	28 5.24c	9 0.30	264 4.23	20 0.56	0.2				19	262	31	5	62. 62.			
9-6-64 11:55	0.6	72	13.0	150	8.4 8.7	56 2.69	33 0.06	276 4.49	25 0.71	0.2	As = 0.00 Pb = 0.00 PO ₄ = 0.05			367	20	272	37	2	23. 23.		
10-10-63 10:00	1.5	55	9.5	375	7.4					0.18				221		109					DWR

COYOTE CREEK NEAR MADRONE (STA. 82)

GAZDOS CREEK (STA. 2533)

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and barium/strontium (Ba/Sr), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination

h Annual median and range, respectively

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (CDWR), as indicated.

j Gramimetric determination

k Annual median and range, respectively

l Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (CDWR), as indicated.

m Gramimetric determination

n Annual median and range, respectively

o Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (CDWR), as indicated.

p Gramimetric determination

q Annual median and range, respectively

r Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (CDWR), as indicated.

s Gramimetric determination

t Annual median and range, respectively

TABLE D-2
ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge Temp. in cft in deg. F.	Dissolved oxygen in ppm % Sat.	Specific Conductance at 25°C in micromhos/cm	pH a	Mineral constituents in parts per million equivalents per million										Total dissolved solids in ppm	Total N.C. ppm	Hardness as CaCO ₃ ppm	Total Coliformity MPN/ml	Analyzed by I
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					
SAN LORENZO RIVER SIX MILES NORTH OF BOULDER CREEK (STA. 278)																			
10-7-63 1220	1	57	9.8	94	8.0 8.2	5,100c	26 1,104	0	0	261 4,28	13 0.37	0.8 0.01	0.8 0.01	0.8 0.01	355	250			DR
11-6-63 1500	4	51	10.0	90	8.4 8.0	3,840c	18 0,78	0	0	184 3,02	12 0.34	0.7 0.01	0.7 0.01	285	192				
12-10-63 0915	2	41	11.3	88	7.9			0	0	230 4,10	15 0.42	0.4 0.01	0.4 0.01	345	246				
1-14-64 0905	1,5	40	12.0	92	8.0 7.5	4,920c	0	0	235 3,83	16 0.45	0.2 0.00	0.2 0.00	0.2 0.00	345	238				
2-19-64 0840	2	45			5.36	4,760c													
3-24-64 0930	3	42	12.0	95	4.93	4,300c	0	0	204 3,34	15 0.42	1.0 0.02	1.0 0.02	1.0 0.02	320	215		40		
4-21-64 0930	2	47	11.6	98	8.4 8.1	4,880c	0	0	232 4,13	16 0.45	1.2 0.02	1.2 0.02	1.2 0.02	335	243		3.2		
5-12-64 0910	1	50	10.2	90	8.3 8.3	4,980c	2 0.07	2 0.07	234 4,16	16 0.45	0.4 0.01	0.4 0.01	0.4 0.01	360	249		1.3		
6-25-64 0755	1,5	59	8.9	88	7.8 8.4	4,980c	26 1,104	2 0.07	2 0.07	238 4,23	15 0.42	1.8 0.03	1.8 0.03	360	249		1.5		
7-21-64 0730	1	56	8.1	77	7.5 8.7	5,070c		16 0.45	237 3,88	15 0.42	0.0 0.00	0.0 0.00	0.0 0.00	365	254		0.6		
8-18-64 1313	0,8	62	9.7	99	8.2					16 0.45	0.6 0.01	0.6 0.01	0.6 0.01	365	249		0.1		
9-23-64 0810	0,5	55	9.1	86	8.0	4,980c				9.3 0.26	1.1 0.02	1.1 0.02	1.1 0.02	370	249		1.5		

a Field pH
b Laboratory pH
c Sum of calcium and magnesium in ppm
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
e Derived from conductivity vs. TDS curves
f Determined by addition of analyzed constituents
g Gravimetric determination
h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service
i Mineral analyses made by United States Geological Survey, Quality Water Branch, (USGS), United States Department of the Interior, Bureau of Reclamation, (ISRR), United States Public Health Service, (USPHS), San Bernardino County Flood Control District, (SBCFD), Los Angeles County Flood Control District, (LACFD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

TABLE D-2
ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time analyzed (P.S.T.)	Observed Temp in cte in °F	Dissolved oxygen in ppm %Sat	Specific Conductance at 25°C in µmhos/cm	pH a	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Hardness as CaCO ₃ in ppm	Total N in ppm	Total P in ppm	Total Kjeldahl N in ppm	Analyzed by
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)						
BEAR CREEK FOUR MILES NORTHEAST OF BOULDER CREEK (STA. 206)																				
10-7-63	0.5	9.4	88	7.7	42	5.31c	1.83	0	0	24.5	4.02	0	27	0.8						
0820				8.2				0.00	0.00	0	0	0.76		0.01						266
11-6-63	3	52	10.1	92	7.9	4.02c	1.13	0	0	15.4	2.52	0	1.6	0.6						201
1430				7.9				0.00	0.00	0	0	0.45		0.01						330
12-9-63	2	47	10.9	93	8.1			0	0	21.7	3.56	0	2.0	0.0						380
1530				581				0.00	0.00	0	0	0.56		0.01						252
1-14-64	1	40	12.6	97	6.14	5.03c		0	0	19.5	3.10	0	1.7	0.3						242
1100				8.3				0.00	0.00	0	0	0.48		0.01						385
2-19-64	2	44			7.6	4.80c		0	0	17.2	1.4	0	1.3	0.0						335
1050				591				0.00	0.00	0	0	0.39		0.02						205
3-24-64	3	47	11.3	96	8.1	4.10c		0	0	21.4	3.31	0	2.0	1.3						242
1600				514				0.00	0.00	0	0	0.56		0.02						395
4-21-64	1.5	51	10.7	96	8.3	4.84c		0	0	21.8	3.37	0	2.2	0.0						249
1445				607				0.00	0.00	2	0	0.02		0.00						405
5-12-64	1.5	63	9.9	102	8.2	4.98c		0	0	21.8	3.37	0	2.2	0.0						249
1800				624				0.00	0.00	2	0	0.02		0.00						405
6-24-64	1	70	9.0	100	644	5.05c	1.65	4	22.5	2.8	3.69	0	2.8	1.0						253
1220				644				0	0	22.5	3.69	0	2.8	1.0						253
7-21-64	1	60	9.5	95	7.6	5.31c		0	0	23.1	4.11	0	3.6	0.0						266
0945				711				0.00	0.00	0	0	1.02		0.00						465
8-18-64	0.8	59	8.9	88	905	5.41c		0	0	23.1	4.11	0	3.6	0.0						266
0945				88				0	0	23.1	4.11	0	3.6	0.0						266
9-23-64	0.5	60	9.3	93	818	5.41c		0	0	23.1	4.11	0	3.6	0.0						266
1200				818				0	0	23.1	4.11	0	3.6	0.0						266

a Field pH
b Laboratory pH
c Sum of calcium and magnesium in ppm
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
e Derived from conductivity vs TDS curves.
f Determined by addition of analyzed constituents.
g Gravimetric determination.
h Annual median and range. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFD); Metropolitan Water District of Southern California (MWD); Department of Water and Power (DWP), City of Los Angeles, Department of Public Health (DOPH); City of Long Beach, Department of Public Health (LDBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

TABLE D-2
ANALYSES OF SURFACE WATER
CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Dissolved oxygen in % Sat	Specific conductance at 25°C	pH	Mineral constituents in parts per million equivalents										Total dissolved solids in ppm	Hardness in ppm CaCO ₃	Total TDS in ppm	Total Coliform MPN/ml	Analyzed By
				Calcium (Ca)	Magnesium (Mg)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Bromide (Br)	Silica (SiO ₂)	Other constituents						
10-7-63 1320	9.6	659	8.1	5.01c	3.779	0	0.00	0.00	1.91	44	36	1.02	0.6	425	252			
11-7-63 0845	9.0	570	8.0	4.44c	2.75	0	0.00	0.00	1.30	30	26	0.75	0.5	370	222			
12-10-63 0935	12.0	613	7.7	5.21c	3.32	0	0.00	0.00	1.91	44	36	1.02	0.6	400	261			
1-14-64 0939	13.0	667	7.8	4.30c	2.80	0	0.00	0.00	1.30	30	26	0.75	0.5	430	215			
3-24-64 0940	12.3	553	7.8	5.07c	3.47	0	0.00	0.00	1.91	44	36	1.02	0.6	360	215			
4-21-64 1000	12.6	659	8.0	5.13c	3.59	0	0.00	0.00	1.91	44	36	1.02	0.6	425	254			
5-12-64 0945	10.0	674	7.8	5.23c	3.82	0	0.00	0.00	1.91	44	36	1.02	0.6	435	257			
6-25-64 0840	7.9	698	7.9	5.53c	3.97	0	0.00	0.00	1.91	44	36	1.02	0.6	455	263			
7-21-64 0815	8.0	760	7.3			0	0.00	0.00					0.1	490	277			
8-18-64 1239	8.0	829	7.8			0	0.00	0.00					0.2	540	292			
9-23-64 0830	7.1	864	7.7	5.83c		0	0.00	0.00					1.5	560	292			

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (CDWR), as indicated.

9 Gravimetric determination.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (CDWR), as indicated.

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time of day P.S.T.	Discharge Temp. in cfs	Dissolved oxygen in ppm	Specific conductance in microhos at 25°C	pH	Mineral constituents in parts per million							Other constituents	Total dissolved solids in ppm	Per cent solids in ppm	Hardness as CaCO ₃ Total N.C. ppm	Tur- big- Coliform ^b MPN/ml	Analyzed by ^c	
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Pinac- (K)	Carbon- (CO ₃)	Bicarb- (HCO ₃)	Sul- (SO ₄)							Chlo- (Cl)
BOULDER CREEK AT BOULDER CREEK (STA. 208)																		
10-7-63	3	9.8	207	7.7					0	89	1.62	7.4	0.7					
11-03		9.4	207	7.5	1.64c	0.73		0.00	0.00	1.62	0.71	0.21	0.7					
11-6-63	12	10.3	166	7.4		1.0		0.00	0.93	0.57	0.23	8.8	0.5					
12-10-63	8	11.5	205	7.4		0.73		0.00	0.93	0.23	0.01	8.8	0.5					
1-14-64	7	12.2	208	7.7				0	0.70	0.85	0.28	9.9	1.2					
2-19-64	8	4.5	198	7.8		1.46c		0	0.00	1.31	0.23	8.8	0.3					
3-24-64	10	12.5	185	7.3		1.30c		0	0.00	1.08	0.23	8.3	1.5					
4-21-64	5	11.5	207	7.9		1.56c		0	0.00	1.42	0.27	9.5	0.1					
5-12-64	3	10.5	214	7.9		1.62c		0	0.00	1.31	0.27	9.7	0.2					
6-24-64	4	9.0	235	7.3		1.72c	1.1	0.00	0.67	1.1	0.31	11	1.1					
7-21-64	4	9.3	235	7.5		1.76c	0.48	0	0.00	1.75	0.17	5.9	0.0					
8-18-64	5	9.6	245	8.0				0	0.00	1.75	0.17	12	1.4					
9-23-64	4	9.7	242	7.6		1.88c			0.34	1.1	0.02	11	1.0					
9-25-64	4	9.7	242	7.6		1.88c			0.31	1.1	0.02	11	1.0					

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

j

k

l

m

n

o

p

q

r

s

TABLE D-2
ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date analysis sampled P.S.T.	Dissolved Temp in °F	Disolved oxygen in %	Specific conductance at 25°C in μ mhos/cm	pH	Calcium (Ca) (mg)	Magnesium (Mg) (mg)	Sodium (Na) (mg)	Potas- sium (K) (mg)	Mineral constituents in parts per million						Total Dis- solved solids in ppm	Hardness as CaCO ₃ in ppm	Tur- bidity in pt/m	Analyzed by 1
									Carbon- dioxide (CO ₂)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluo- ride (F)				
SAN LORENZO RIVER AT BOULDER CREEK (STA. 227)																		
10-7-63	2	57	9.5	92	8.0	5.13c	53	0	0.239	68	0.8	0.01	0.17	455	257			
1015				8.1	2.30		1.92	0.00	3.92	0.01	1.7	0.01	Fe = 0.36					
11-6-63	10	51	10.0	90	7.7	2.34c	23	0	0.86	21	1.7	0.1	Fe = 0.30	225	127			
1400				7.7	0.91		0.139	0.00	1.41	0.03	0.0	0.1	Fe = 0.63					
12-9-63	6	46	11.3	95	7.7					0.2	0.00		PO ₄ = 0.21	360				
1530				582						0.6								
1-14-64	4	39	12.9	98	8.1	4.70c	44	0	1.95	4.4	0.5	0.01	PO ₄ = 0.23	390	230			
1125				628					3.20	1.24	0.01		Color = 0					
2-19-64	6	42		569	8.2	4.20c	42	0	1.66	35	0.5	0.0	PO ₄ = 0.20	350	210			
1020				8.2					2.72	0.01	0.0							
3-24-64	8	46	12.2	102	8.0	3.56c	48	0	1.66	29	0.6	0.01	PO ₄ = 0.21	310	178		DMR	
1130				496	7.8		2.09	0	0.00	0.82	0.01							
4-21-64	3	52	12.2	111	8.2	4.48c	48	0	1.95	46	0.0	0.00	PO ₄ = 0.23	390	224			
1145				627	8.1		2.09	0	3.20	1.30	0.00							
5-12-64	2	60	10.7	107	8.2	4.58c	48	0	3.04	52	0.0	0.00	PO ₄ = 0.34	405	229			
1300				654	8.2		2.09	0	3.34	1.47	0.00							
6-25-64	2	64	8.3	87	7.7	4.76c	48	0	2.19	59	1.2	0.02	PO ₄ = 0.23	430	238			
0930				689	8.2		2.09	0	3.59	1.66	0.02							
9-24-64	2	64	8.5	89	7.8	5.33c	48	0		1.86	0.0		PO ₄ = 0.32	575	270			
1500				924						1.86	0.0							
ALBA CREEK (STA. 245)																		
10-10-63	0.1	58	8.0	78	228													DMR
1400				6.8														

a Field pH.
b Laboratory pH.
c Sum of calcium and magnesium in ppm.
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr^{VI}), reported here as 0.0 except as shown.
e Derived from conductivity vs TDS curves.
f Determined by addition of analyzed constituents.
g Gravimetric determination.
h Anion medium and range, respectively. Calculated from analysis of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DMR), as indicated.

TABLE D-2
ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and sample P.S.T.	Discharge temp in °F	Dissolved oxygen in ppm	Specific conductivity at 25°C	pH	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Hardness as CaCO ₃ in ppm	Tur- bid- ity in ntu	Coliform- MPN/ml	Analyzed by		
					Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Carbon- ate (CO ₃)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluo- ride (F)						Silica (SiO ₂)	Other constituents
10-10-63	0.3	56	4.2	40	289	7.1															
1220																					
11-7-63	1	49	10.4	91	284	7.2															
0940																					
12-10-63	1	47	11.7	99	298	7.2															
1-14-64	1	39	12.6	96	348	7.5															
1025																					
3-24-64	2	44	12.0	98	234	7.3															
1055																					
4-21-64	1.5	50	11.0	97	349	7.2															
1100																					
5-12-64	1	54	10.0	93	351	7.3															
1040																					
6-25-64	0.5	65	7.9	84	386	7.4															
1205																					
7-21-64	0.5	61	7.2	73	409	7.1															
1215																					
8-18-64	0.5	63	6.1	63	336	7.3															
1115																					
9-23-64	0.5	53	3.7	34	375	7.2															
0920																					

BOULDER CREEK (STA. 247)

a Field pH
b Laboratory pH
c Sum of calcium and magnesium in eqm.
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
e Derived from conductivity vs TDS curves
f Determined by addition of analyzed constituents
g Gravimetric determination
h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
i Annual analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.
DWR

TABLE D-2
ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge in cfs in 7 days	Temp. in °F	Dissolved oxygen in % Sat	Specific conductance at 25°C	pH	Mineral constituents in parts per million						Total solids in ppm	Percent solids in %	Hardness as CaCO ₃ in ppm	Tur- bid- ity in ntu	Coliform MPN/ml	Analyzed by	
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)							Sulfate (SO ₄)
12-10-63 1225	0.3	44	11.6	94	367	7.4												
1-15-64 0930	0.3	38	12.7	95	390	7.8	2,94c			0	140	22	0.7					
2-18-64 1220	0.5	46		361	7.6	7.9	2,774c			0	120	18	1.3					
3-23-64 1100	0.5	44	12.6	103	342	7.9	2,56c			0	123	17	1.3					
4-22-64 0935	0.3	49	11.5	100	391	8.0	2,94c			0	146	21	0.2					
5-13-64 0930	0.3	53	10.4	95	408	7.8	2,99c			0	153	22	0.1					
7-21-64 1300	0.3	60	9.1	91	436	7.6	3,130c			0	170	25	0.0					
8-18-64 0850	0.3	58	9.2	90	467	7.9				0	200	27	0.0					
9-23-64 1330	Dry																	
10-10-63 1300	0.3	59	9.8	97	235	7.3												
11-7-63 1110	0.5	51	10.5	94	217	7.6												
12-10-63 1305	0.3	67	11.1	94	208	7.3												

a Field pH.
b Laboratory pH.
c Sum of calcium and magnesium in ppm.
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
e Derived from conductivity vs TDS curves.
f Determined by addition of analyzed constituents.
g Gravimetric determination.
h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

MARSHALL CREEK (STA. 254)
LOVE CREEK AT BEN LORND (STA. 216)

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	Discharge Temp. in cfs in ft. °F. S.F.	Dissolved oxygen ppm %Sat	Specific Conductance (microhm/cm at 25°C) a	Major constituents in equivalents per million										Total dissolved solids in ppm	Percent total solids in ppm	Inerts as % of CO ₂ in ppm	Turbidity in pt./ft. in ppm	Analyzed by 1	
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonates (CO ₃)	Bicarbonates (HCO ₃)	Sulfates (SO ₄)	Chlorides (Cl)	Nitrates (NO ₃)	Fluorides (F)						Silica (SiO ₂)
MARSHALL CREEK (STA. 254)																			
1-15-64 0910	0.3 43	12.2 98	219	7.4														DNR	
3-25-64 1030	0.5 46	11.8 99	215	7.5	1.36c				0 92	1.51			8.4 0.8	0.24 0.01				78	PO ₄ = 0.10
6-22-64 0910	0.5 48	11.4 98	224	7.7	1.64c				0 106	1.70			8.9 0.3	0.23 0.00				82	PO ₄ = 0.13
5-13-64 0910	0.5 51	10.8 97	237	7.7	1.74c				0 108	1.77			9.3 0.0	0.26 0.00				87	PO ₄ = 0.15
9-23-64 1317	0.3 59	9.8 97	304	7.7	2.20c				0 108	1.77			12 1.8	0.34 0.03				110	PO ₄ = 0.20
LONCELO CREEK ONE MILE NORTH OF OLYMPIA (STA. 215)																			
10-8-63 1415	0.3 58	9.8 96	606	8.2					0 228	3.74			1.8 0.9	0.51 0.01				390	PO ₄ = 0.38
11-6-63 1145	1 52	10.2 92	383	8.0					0 199	3.26			1.6 1.2	0.45 0.02				245	Color = 5 PO ₄ = 0.40
12-11-63 1125	1 41	12.0 94	418	7.8					0 187	3.06			1.6 1.0	0.45 0.02				270	PO ₄ = 0.39
1-15-64 1230	0.3 61	12.6 98	481	8.3	4.24c				0 239	3.92			1.8 0.3	0.51 0.00				310	PO ₄ = 0.45
2-20-64 1000	0.5 45		446	7.9	3.72c				0 199	3.26			1.6 1.2	0.45 0.02				285	Color = 5 PO ₄ = 0.40
3-25-64 1400	0.8 48	12.2 105	428	8.1	3.34c				0 239	3.92			1.8 0.3	0.51 0.00				275	PO ₄ = 0.39
6-22-64 1300	0.5 52	11.6 105	506	8.2	4.32c				0 239	3.92			1.8 0.3	0.51 0.00				325	PO ₄ = 0.45

a Field pH
b Laboratory pH
c Sum of calcium and magnesium in ppm
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
e Derived from conductivity vs TDS curves.
f Determined by addition of analyzed constituents.
g Gravimetric determination
h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service
i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); San Joaquin Hills Water Agency (SJHWA); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

TABLE D-2

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (CG, 3)

Date and time sampled P.S.T.	Oscargage Temp. in °C in °F	Dissolved Solids in mg/l ppm	Specific Conductance (micro-mhos/cm at 25°C)	pH	Mineral constituents in equivalents per million						Total dissolved solids in ppm	Hardness as CaCO ₃ in ppm	Total Nitrate in ppm	Total Coliform MPN/ml	Analyzed by ¹				
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Polysulfate (PO ₄)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)						Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)
LODOPICO CREEK ONE MILE NORTH OF OLYMPIA (STA. 215)																			
5-13-64 1310	0.3	54	10.9	101	8.2	4.42c				2.47	0.00	2.0	0.7			330	221	1.6	DRR
7-22-64 0850	0.5	56	9.1	87	7.7	5.39c				3.6	0	2.1	1.2			395	270	1.1	
8-18-64 0715	0.5	56	9.2	88	8.2					5.15	0.00	0.59	0.5			415		1.6	
9-23-64 1515	0.5	60	9.3	93	8.1	5.07c						2.2	1.5			415	294	1.3	
FALL CREEK ONE-HALF MILE NORTH OF FELTON (STA. 211)																			
10-8-63 1115	2	56	10.0	95	7.9							7.8	0.2			175			DRR
11-7-63 1430	2	52	10.8	98	8.1							0.22	0.00			165			
12-11-63 1225	1.5	45	11.8	97	7.9							0.2	0.0			165			
1-15-64 1020	2	43	12.3	99	8.0	2.28c				1.90	0.00	0.2	0.0			165	114		
3-25-64 1215	1.5	47	12.1	103	8.0	2.02c				1.17	0.00	0.26	0.8			150	101	2	
4-22-64 1045	2	49	11.3	98	8.1	2.22c				1.32	0.00	0.23	0.0			165	111	2.2	
5-13-64 0945	2.5	51	11.0	98	8.1	2.28c				1.36	0.00	0.24	0.1			165	114	0.9	
7-22-64 0955	2.5	56	10.1	96	7.6	2.46c				1.60	0.13	0.26	0.6			185	123	0.4	
8-18-64 0830	2	55	10.3	97	8.0					0.13	0.00	0.23	0.1			183		0.3	

a Field pH
b Laboratory pH
c Sum of calcium and magnesium in ppm
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown
e Derived from conductivity vs TDS curves
f Determined by addition of analyzed constituents
g Gravimetric determination
h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, an United States Public Health Service
i Mineral analyses made by United States Geological Survey, Quality of Water Branch, (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS) - San Bernardino County Flood Control District (SBCFD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sample emptied P.S.T.	Discharge Temp. in °F	Dissolved oxygen in ppm	Specific Conductance at 25°C in $\mu\text{mhos/cm}^2$	pH	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Turbidity in MPN/ml	Coliforms per 100 ml	Analyzed by		
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonates (CO ₃)	Bicarbonates (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Boron (B)	Silica (SiO ₂)
9-23-64 1340	2	59	9.9	98	7.2		2.36c						1.0	0.7			195	128	0.2	DNR
FALL CREEK ONE-HALF MILE NORTH OF FELTON (STA. 211)																				
10-8-63	2	58	9.6	94	7.8	2.5	2.58c					26	2.5				245	129		
11-6-63	8	53	10.0	92	7.6	1.9	2.28c					19	2.0				215	114		
12-11-63	4	64	11.6	94	7.5	0	2.76c					27	2.6				255	138		
1-15-64	4	44	11.7	95	7.5	0	2.76c					26	2.6				255	138		
2-20-64	4	48			7.4	0	2.82c					26	1.7				260	141		
3-25-64	4	52	10.9	99	7.8	0	2.72c					23	2.6				250	136	12	
6-22-64	3	53	10.3	95	7.6	0	2.66c					26	2.0				255	133	14	
5-13-64	2.5	57	10.1	97	8.0	0	2.77c					28	1.5				260	136	7.5	
6-23-64	2	64	8.9	93	7.5	2.3	2.82c					28	2.2				265	141	4.0	
7-22-64	2.5	57	9.8	94	7.6	0	2.86c					29	2.1				270	143	2.0	
8-18-64	2.5	55	10.2	96	7.8	0	2.78c					28	2.0				270	143	2.0	
8-20-64	2.5	55	10.2	96	7.8	0	2.78c					28	2.0				270	143	2.0	
BEAN CREEK ONE MILE EAST OF FELTON (STA. 204)																				
10-8-63	2	58	9.6	94	7.8	2.5	2.58c					26	2.5				245	129		
11-6-63	8	53	10.0	92	7.6	1.9	2.28c					19	2.0				215	114		
12-11-63	4	64	11.6	94	7.5	0	2.76c					27	2.6				255	138		
1-15-64	4	44	11.7	95	7.5	0	2.76c					26	2.6				255	138		
2-20-64	4	48			7.4	0	2.82c					26	1.7				260	141		
3-25-64	4	52	10.9	99	7.8	0	2.72c					23	2.6				250	136	12	
6-22-64	3	53	10.3	95	7.6	0	2.66c					26	2.0				255	133	14	
5-13-64	2.5	57	10.1	97	8.0	0	2.77c					28	1.5				260	136	7.5	
6-23-64	2	64	8.9	93	7.5	2.3	2.82c					28	2.2				265	141	4.0	
7-22-64	2.5	57	9.8	94	7.6	0	2.86c					29	2.1				270	143	2.0	
8-18-64	2.5	55	10.2	96	7.8	0	2.78c					28	2.0				270	143	2.0	
8-20-64	2.5	55	10.2	96	7.8	0	2.78c					28	2.0				270	143	2.0	

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in eqm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TD5 curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Office of Water Branch, (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCD); Merriam-Powell, Inc. (M-P); Southern California (SWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

3205-2-64 6-63 200 390

TABLE D-2
ANALYSES OF SURFACE WATER
CENTRAL COASTAL REGION (NO. 3)

Date analyzed or sampled P.S.T.	Discharge temp in °F ppm	Dissolved oxygen ppm	Specific conductance at 25°C µmhos/cm	pH	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Mineral constituents in equivalents per million						Total solids (ppm)	Per- cent solids (ppm)	Turbid- ity (ppm)	Total Hardness (ppm)	Analyzed by
									Carbon- ate (CO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Flu- oride (F)	Iron (Fe)					
9-23-64 1455	2	60	9.7	97	408	7.8	2.78c			30	3.2	0.85	0.705		265	139	2.1		DRR
10-8-63 1210	8	60	9.8	98	390	7.8	2.88c	22	0	1.63	0.70	2.34	22	1.2	240	144			DRR
11-6-63 0945	35	54	9.7	90	295	7.5	2.14c	1.6	0	7.6	1.24	0.70	0.45	1.8	185	107			
12-11-63 1030	30	42	12.0	95	375	7.4				0	1.37	0.70	2.0	0.6	235	235			
1-15-64 1050	25	42	13.7	108	391	7.9	2.92c	0	0	1.37	2.08	2.74	2.0	0.5	245	146			
2-19-64 1555	30	49	11.3	98	378	7.5	2.76c	0	0	1.77	2.08	2.74	1.8	1.0	235	138			
3-25-64 1230	35	50	12.3	109	349	7.9	2.54c	0	0	1.15	1.88	2.54c	1.7	1.1	220	127			
4-22-64 1110	20	53	10.7	98	387	7.9	2.84c	0	0	1.61	2.31	2.84c	2.1	1.3	240	142			
5-13-64 1045	18	52	10.1	92	394	7.9	2.88c	0	0	1.62	2.33	2.88c	2.2	0.9	245	144			
6-23-64 1205	15	70	10.5	117	383	8.0	2.85c	21	0	1.43	2.34	2.85c	2.2	1.2	240	141			
7-22-64 0800	18	61	7.3	74	380	7.3	2.80c	0	0	1.64	2.36	2.80c	2.1	0.6	230	140			
8-17-64 1545	18	71	9.7	109	376	8.0		22	0	1.62	2.33	2.88c	2.2	0.9	245	144			

BEAN CREEK ONE MILE EAST OF FELTON (STA. 204)
SAN LORENZO RIVER AT FELTON (STA. 229)

Other constituents: PO₄ = 1.1, Fe = 0.16, Mn = 0.00, PO₄ = 0.37, Fe = 0.69, Mn = 0.00, ABS = 0.00, PO₄ = 0.51, PO₄ = 0.29, PO₄ = 0.24, PO₄ = 0.23, PO₄ = 0.24, Fe = 0.89, PO₄ = 0.26, PO₄ = 0.32, PO₄ = 0.34, PO₄ = 0.30, ABS = 0.0, PO₄ = 0.44

a. Field pH
b. Laboratory pH
c. Sum of calcium and magnesium in ppm
d. Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
e. Derived from conductivity vs TDS curves
f. Determined by addition of analyzed constituents.
g. Gravimetric determination
h. Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service
i. Mineral analyses made by United States Geological Survey, Division of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DRR), as indicated.

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date on which sample analyzed P.S.T.	Discharge Temp. in °F	Dissolved oxygen in ppm	% Sat.	Specific conductance (micromhos/cm at 25°C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Per cent total dissolved solids	Total N.C. in ppm	Total hardness as CaCO ₃ in ppm	Tur- bid- ity in MPN/ml	Coliforms analyzed by 1		
						Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Carbon- dioxide (CO ₂)	Bicar- bonate (HCO ₃)	Sul- fates (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluo- ride (F)							Boron (B)	Silicic acid (SiO ₂)
9-23-64 1410	16	9.8	106	386	7.7		2.72c												136	1.8		DNR	
10-8-63 1230	3	59	10.6	103	8.0	2.5	2.56c	1.09	0	12a	2.03	26	0.68	0.03					128				DNR
11-6-63 0950	15	53	10.0	92	7.7	20	2.42c	0.87	0	9a	1.5c	18	0.31	0.04					121				
12-11-63 1005	8	42	12.3	97	4.10	2.8						2.0	0.03						265				
1-15-64 1105	6	41	13.6	106	4.03	8.3	2.94c		0	131	2.15	23	1.8	0.03					167				
2-19-64 1605	8	53	10.7	98	4.17	7.9	3.02c		0	130	2.15	22	1.3	0.02					151				
3-25-64 1240	8	51	11.8	106	4.15	7.9	3.02c		0	131	2.15	22	1.2	0.04					151				
4-22-64 1135	6	53	11.2	103	3.82	7.7	2.84c		0	126	2.06	22	1.8	0.03					132				
5-13-64 1100	8	55	10.6	100	4.02	8.1	2.84c		0	134	2.20	25	1.0	0.02					142				
6-23-64 1210	7	68	9.5	104	4.04	7.8	2.84c	1.04	0	136	2.23	28	1.6	0.03					142				
7-22-64 0730	8	59	9.9	98	3.97	8.2	2.76c		0	132	2.16	27	1.1	0.02					138				
8-12-64 1530	8	66	9.5	102	4.12	8.2			0	132	2.16	30	1.5	0.02					138				
9-23-64 1423	8	62	9.7	99	3.86	8.0	2.78c		0	132	2.16	29	1.3	0.04					139				

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analysis of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

305-5-4-64 6-41 200 JPO

TABLE D-2
ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time of day and P.S.T.	Discharge Temp in cfs in ft	Dissolved oxygen ppm, % Sat	Specific Conductivity at 25°C	pH	Mineral constituents in parts per million							Total dissolved solids in ppm	Per cent total suspended in ppm	Headbase as CaCO ₃ ppm	Turbidity in MPN/ml	Analyzed by 1			
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)						Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)
10-8-63	12	60	9.7	97	386	8.0	SAN LORENZO RIVER AT BIG TREES (STA. 226)							240				DHR	
1430																			
11-7-63	56	52	9.4	85	349	7.7													
1505																			
12-11-63	51	40	11.8	91	361	7.2													
0910																			
1-15-64	34	45	13.3	110	383	7.2													
1400																			
3-25-64	56	53	11.2	103	357	7.5													
1515																			
6-22-64	33	59	10.4	103	382	7.7													
1430																			
5-13-64	27	10.1			386	8.2													
1335																			
10-3-63	12	62	8.8	91	372	8.0													
1745																			
11-8-63	45	55	10.4	99	356	7.9													
1230																			
12-4-63	53	46	12.9	108	363	8.0													
1740																			
1-7-64	35	49	13.2	116	370	8.3													
1240																			
2-6-64	77	50	11.6	103	360	8.6													
1245																			
3-5-64	44	54	11.2	105	375	8.2													
1330																			
10-3-63																			
1745																			
11-8-63																			
1230																			
12-4-63																			
1740																			
1-7-64																			
1240																			
2-6-64																			
1245																			
3-5-64																			
1330																			

a. Field pH.
b. Laboratory pH.
c. Sum of calcium and magnesium in ppm.
d. Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
e. Derived from conductivity vs TDS curves.
f. Determined by addition of analyzed constituents.
g. Gravimetric determination.
h. Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service, National Sanitation Foundation, United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation, (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBFCFD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

San Bernardino County Flood Control District (SBFCFD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Notes and time sampled P.S.T.	Dissolved Trace in cfi in cfi	Dissolved oxygen ppm	% Sat	Specific Conductance (microhm/cm at 25°C)	Mineral constituents in amounts per million parts per million										Total dissolved in ppm	Hardness as CaCO ₃ Total ppm	Turbidity from nephelometer	Coliforms MPN/ml	Analyzed by	
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)						Boron (B)
8-17-64 1350	1.2	66	10.6	113	611												1.9		DNR	
9-26-64 0945	0.9	61	9.1	92	668	5.09c											255	4.0		
BRANCIFFORTE CREEK (STA. 248)																				
CARBONERA CREEK (STA. 251)																				
1-16-64 1020	2	40	13.4	103	312	2.00c														
2-20-64 1345	2	53			315	2.00c														
3-26-64 1500	2.5				320	1.82c														
5-16-64 1455	0.8	61	10.0	101	314	1.82c														
6-23-64 0730	0.5	58	9.0	88	325	1.88c														
7-22-64 1220	0.3	66	9.9	106	330	1.76c														
8-12-64 1350	0.3	67	9.4	102	350	1.96c														
9-23-64 1000	0.3	60	7.8	78	383	1.96c														

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Division (USGS) and State Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LDBPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

3055-5-64 6-63 200 JFO

TABLE D-2
ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time sampled P.S.T.	On-site temperature in °F	On-site oxygen in ppm %Sat	Specific Conductance (microhm/cm at 25°C)	pH	Major constituents in equivalents per million							Total dissolved solids in ppm	Hardness as CaCO ₃ Total in ppm	Nitrate-N in mg/l	Coliforms MPN/ml	Analyzed by	
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)						Chloride (Cl)
10-10-63 1600	15	62	11.3	115	388	8.3 7.3	2,884c 1,000	23	0	141 4,331	22 0.92	0.5 0.91	240	141			
11-5-63 1625	150	56	9.6	91	331	7.4	2,344c 0.83	19	0	112 1,84	1.2 0.54	1.2 0.02	205	117			
12-11-63 0840	50	40	12.5	96	380	7.7	2,904c	22	0	134 2,420	0.6 0.62	0.6 0.91	235	145			
1-16-64 0900	35	39	12.7	96	390	7.7	2,844c	19	0	132 2,16	1.5 0.54	1.5 0.02	235	142			
2-20-64 1430	50	55	13.2	124	382	8.1	2,684c	18	0	125 2,05	1.8 0.51	0.8 0.01	225	134			
3-24-64 1400	50	59	12.6	124	364	8.0	2,844c	22	0	138 2,420	0.6 0.62	0.6 0.91	240	142			
4-23-64 1830	30	60	12.2	122	389	8.4 8.3	2,844c	22	0	141 2,31	0.3 0.62	0.3 0.02	240	142			
5-14-64 1340	25	10.6			389	7.5	2,884c	21	0	164 2,36	2.3 0.65	0.9 0.01	240	143			
6-23-64 0920	20	67	9.1	98	387	8.2	2,884c 0.91	21	0	143 2,34	0.6 0.68	1.2 0.02	240	140			
7-22-64 1200	27	74	9.9	115	386	8.4	2,884c	23	0	144 2,36	2.3 0.65	0.9 0.01	240	143			
8-17-64 1445	25	76	11.2	133	380	8.4	2,884c	21	0	143 2,34	0.6 0.68	1.2 0.02	235	135			
9-24-64 0800	25	60	8.2	82	389	7.6	2,704c	21	0	143 2,34	0.6 0.68	1.2 0.02	240	135			

o Field pH
b Laboratory pH
c Sum of calcium and magnesium in ppm
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0, except as shown.
e Derived from conductivity vs TDS curves
f Determined by addition of analyzed constituents
g Gravimetric determination
h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of San Bernardino County Public Health Service.
i Annual analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFD); District of Southern California (JMD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.
32505-048 6-41 200 JMO

TABLE D-2
ANALYSES OF SURFACE WATER
CENTRAL COASTAL REGION (NO. 3)

Date and time and P.S.F. #	Discharges Temp in cfs in deg F	Dissolved oxygen ppm %Sat	Specific Conductance (micro-mhos at 25°C) a	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃ Total in ppm	Total N.C. in ppm	Turbidity - big in diam	Coriform MPN/ml	Analyzed by
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)						
PAJARO RIVER NEAR CHILTENDEN (STA. 77)																			
10-3-63	4.2	65	8.3	87	1690	8.0	37.0	74.0	4	5.64	189	1.0	43	496	43	2	6.2	USGS	
13-65			8.1			8.1	9732c	74.0	4	8.92	5733								
11-7-63	22	55	8.2	77	1310	7.4	111	47.83	4	4.62	111	0.6	33	482	97	4	230.		
09-65			8.3			8.3	9.64c	47.83	0	7.57	313								
12-5-63	17	49	9.8	85	1490	7.8	116	57.05	0	37.4	115	0.7	30	598	291	10	6.2		
15-65			8.8			8.8	11.96c	57.05	0	6.13	324								
1-7-64	24	50	9.3	82	1300	8.0	71	27	4	20.8	22	0.4	22	554	310	6	2.3		
16-65			8.1			8.1	11.08c	37.09	0.13	4.75	2403								
2-5-64	36	54	11.0	102	1030	8.0	76	24	2.4	26.0	63	0.4	27	442	189	9	2.3		
13-65			8.6			8.6	8.84c	31.31	0.80	4.26	1778								
3-4-64	23	56	11.7	111	1250	8.3	80	8	37.6	7.6	110	0.6	24	560	239	10	23.		
13-65			8.3			8.3	11.20c	37.48	0.27	6.16	2714								
4-7-64	23	62	8.8	90	1280	8.2	86	10	2.02	27	27	0.5	25	562	265	1	2.3		
16-65			8.2			8.2	11.24c	37.85	0.33	5.91	2117								
5-7-64	17	56	8.3	79	1420	8.3	85	2.4	6.20	26.2	95	0.5	24	574	212	2	2.3		
09-64			8.3			8.3	6.5c	37.0	0.06	5.45	2.68								
6-9-64	3.5	64	8.3	86	1340	8.2	126	18	38.8	110	110	0.8	35	498	150	1	62.		
14-65			8.2			8.2	9.96c	37.48	0.60	6.36	3170								
7-7-64	3.0	72	12.1	137	1470	8.4	133	20	27.2	77.4	110	0.6	35	540	120	10	23.		
16-65			8.6			8.6	10.80c	37.79	0.67	7.74	3170								
8-5-64	2.5	72	6.7	76	1550	8.2	149	10	500	12.5	12.5	0.8	40	488	62	5	62.		
11-15			8.4			8.4	9.76c	6.48	0.33	8.20	3.53								
9-6-64	1.9	63	6.7	69	1520	7.8	82	79	15.6	5.0	4	0.8	959	39	530	68	4	62.	
10-00			8.2			8.2	47.09	6.51	8.79	0.13	37.91	3.81							

a Field pH
b Laboratory pH
c Sum of Calcium and magnesium in eqm.
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
e Derived from conductivity vs TDS curves.
f Determined by addition of analyzed constituents.
g Gravimetric determination.
h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
i Mineral analyses made by United States Geological Survey, Quality Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBFC), Metropolitan Water District of California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBPH), Teminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.
j 33254-HI-0-61, 2A, JPL

TABLE D-2
ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time of sample and P.S.T.	Discharge Temp. in cfs in °F.	Dissolved oxygen in ppm % Sat.	Specific conductance in micromhos at 25°C	pH	Mineral constituents in parts per million										Total dissolved in ppm	Hardness as CaCO ₃ in ppm Total N.C.	Turbidity in MPN/ml	Analyzed by 1.
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)				
					SALINAS RIVER MILE 0.00 (STA. 264)													
8-3-64			9.2		41	87	655	21	32	230	400	366	0.4					
1535	73	9.0	3020	8.9	2.1	7.15	19.79	0.54	1.07	4.10	8.33	15.97	0.01		1.0		90	DMR
8-4-64			9.1															
0445	69	3.1	36	9.1														Field determinations
9-17-64			9.4															
0420	63	11.3	117	9.4														Field determinations
9-17-64			9.6															
1340	68	21.0	2830	9.6								368				460	100	Field determinations
8-3-64			9.3															
1450	75	17.3	2360	9.3	47	76	348	15	41	261	373	372	0.2	0.9				DMR
8-4-64			9.2															
0410	69	12.5	138	9.2	2.34	6.27	15.11	0.38	1.37	4.28	7.76	10.49	0.00					Field determinations
9-17-64			9.0															
0430	64	16.5	171	9.0														Field determinations
9-17-64			9.4															
1410	69	32.2	2240	9.4	78	76	312	14	20	406	304	378	12	0.7				DMR
8-3-64			9.6															
1715	3	70	3580	9.6	3.89	6.08	13.57	0.36	0.87	6.62	6.33	9.25	0.19					Field determinations
9-17-64			8.3															
0330	3	71	5.8	8.3	130	163	671	4.6	18	608	939	362	59	1.4				DMR
			7.9	8.2	6.49	13.41	20.49	0.12	0.60	9.96	19.55	10.21	0.95					Field determinations

a Field pH
b Laboratory pH
c Sum of calcium and magnesium in ppm.
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
e Derived from conductivity vs TDS curves
f Determined by addition of analyzed constituents.
g Gravimetric determination
h Atomic median and range, respectively. Calculated from analysis of replicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service
i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

TABLE D-2
ANALYSES OF SURFACE WATER
CENTRAL COASTAL REGION (NO. 3)

Date samples analyzed P.S.T.	Discharge in cfs in 7/24	Temp in F	Dissolved oxygen ppm	% Sat	Specific conductance (µmhos/cm at 25°C)	pH	Mineral constituents in parts per million										Type of solids in ppm	Hardness as CaCO ₃ in ppm	Turbidity in nephelometric turbidity units	Analyzed by	
							Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Phos-phorus (P)	Chloride (Cl)	Sulfate (SO ₄)	Bicarbonate (HCO ₃)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Boron (B)
9-17-64 1353	3	65	8.7	92	3000	8.1												830	12	Field stations	
8-3-64 1315	71	16.8	190	2000	9.1 8.9	9.1 8.9	88 4.39	76 5.08	244 10.61	12	51 1.70	376 6.16	331 6.89	238 6.71	8.5 0.14	0.8	ABS = 1.2	524	130	100	DMR Field stations
8-6-64 0335	69	23.5	259																		Field stations
9-17-64 0407	65	12.1	128			8.2															Field stations
9-17-64 1445	67	17.7	191	1995		8.4															Field stations
8-9-64 1820	75	18.8	221	1680		8.1															Field stations
8-4-64 0390	70	11.5	128			8.3															Field stations
9-17-64 0345	63	4.5	47			7.6															Field stations
9-17-64 1410	68	10.6	116	1375		8.0															Field stations

a Field pH.
b Laboratory pH.
c Sum of calcium and magnesium in ppm.
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
e Derived from conductivity vs TDS curves.
f Determined by addition of analyzed constituents.
g Gravimetric determination.
h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL) or California Department of Water Resources (DMR), as indicated.

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time reported P.S.T.	Discharge Temp in °F in cfs	Dissolved oxygen ppm %Sat	Specific conductance (microhm/cm at 25°C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃ in ppm	Tur- bid- ity in ppm	Analyzed By
					Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Chlor- ide (Cl)	Sul- fates (SO ₄)	Car- bon- ate (HCO ₃)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Flu- oride (F)				
SALINAS RIVER MILE 7.13 (STA. 246)																		
8-3-64	72	5.5	63	7.4	97	4.9	1.66	1.4	0	439	1.61	211	27			988	44	DNR
1800				8.2	4784	4703	7.22	0.38	0.00	7.20	3.35	5795	0.44		ABS = 3.1		88	Field
8-4-64	67	0.6	6	7.7														Field
0230																		Field
SALINAS RIVER MILE 9.51 (STA. 259)																		
8-17-64	65	0.9	9	7.5														Field
0310																		Field
8-17-64	69	4.9	54	7.6														Field
1332																		Field
SALINAS RIVER MILE 9.51 (STA. 259)																		
8-3-64	71	0.0	0	7.4	80	41	1.60	1.6	0	426	1.11	226	3.3			882	47	DNR
1250				8.1	3199	3138	6796	0.41	0.00	6798	2.31	6732	0.05		ABS = 4.9		20	Field
8-4-64	69	2.5	28	7.2														Field
0200																		Field
9-17-64	67	0.3	3	7.4														Field
0250																		Field
9-17-64	68	0.0	0	7.3														Field
1307																		Field

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in ppm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents.

g Gravimetric determination.

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i Mineral analyses made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

3525-D-68 (5-4) 200 JPL

TABLE D-2
ANALYSES OF SURFACE WATER
CENTRAL COASTAL REGION (NO. 3)

Date and time of day reported P.S.T.	Dissolved oxygen in %	Temp in °F	Dissolved oxygen in ppm	Specific conductance at 25°C in μ mhos/cm	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃ in ppm	Total Alkalinity in ppm	Total Hardness as CaCO ₃ in ppm	Total Solids in ppm	Analyzed by
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)						
10-3-63		7.0	68	4.4	4.8	1440	7.4	12.5	1.2	602	16.5	0.2	35	494	0.15	62.	USGS				
13-4								3,896	5.31	9,287	4,036										
11-7-63		26	55	1.6	15	881	7.2	5.7	0	336	57	0.2	27	308	16	230.					
08-45								6,166	2.31	1,761	1,361										
12-4-63		64	52	8.1	7.3	654	7.6	41	0	232	37	0.1	26	256	49	15	23.				
13-30								5,124	1.78	4,113	1,706										
1-7-64		40	56	15.5	14.7	738	8.2	16	0	247	52	0.2	26	278	49	10	62.				
13-4								3,366	2.00	4,039	1,447										
2-6-64		450	54	11.1	10.3	352	8.1	16.3	0	143	13	0.0	19	146	29	40	62.				
16-30								2,924	0.70	0,307	0										
3-4-64		6.5	59	7.9	7.8	1620	8.2	96	0	758	138	0.4	25	618	0	70	62.				
14-30								17,386	4.18	12,442	3,889										
6-7-64		7.4	65	11.7	12.3	1630	8.8	4	0	722	146	0.4	33	378	0	10	62.				
13-4								11,566	3.74	12,200	4,418										
5-7-64		4.9	58	1.6	16	1590	7.5	38	0	686	53	0.4	966	33	530	0	4	230.			
08-20								3,996	5.74	11,224	1,110										
6-10-64		0.6	70	7.8	8.7	1380	7.8	0	0	398	168	0.5	48	370	44	3	230.				
13-20								7,406	6.79	6,752	4,774										
7-8-64		0.8	75	8.9	10.6	1140	8.3	0	0	196	132	0.4	53	260	99	3	2400.				
14-59								3,206	3.87	3,221	3,372										
8-6-64		1.0	77	6.3	7.5	1150	7.4	135	0	218	140	0.5	53	264	85	10	2400.				
14-50								5,286	5.87	3,395	3,395										
9-4-64		0.6	64	1.7	18	1080	7.1	37	0	200	102	0.4	690	53	235	71	7	230.			
08-50								2,835	5.66	3,238	2,112										

SALINAS RIVER NEAR SPRECKELS (STA. 43)

a Field pH
b Laboratory pH
c Sum of calcium and magnesium in ppm.
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
e Derived from conductivity vs. TDS curves.
f Determined by addition of analyzed constituents.
g Gravimetric determination.
h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
i Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by United States Geological Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBCFD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc. (TTL), or California Department of Water Resources (DWR), as indicated.

TABLE D-2
ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time of day and P.S.T.	Discharge Temp. in cfs in °F	Dissolved oxygen in ppm % Sat	Specific Conductance (microhm/cm at 23°C) $\frac{\mu}{\Omega}$	Mineral constituents in parts per million										Total dissolved solids in ppm	Percent suspended solids	Hardness as CaCO ₃ Total (ppm)	Tur- bid- ity N.C. (ppm)	Tur- bid- ity MPN/ml in 100 ml	Analyzed by						
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbon- dioxide (CO ₂)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)							Boron (B)	Silica (SiO ₂)	Other constituents			
CARMEL RIVER AT ROBLES DEL RIO (STA. 83)																									
10-2-63 1800	2.4	63	8.6	96	4.39	7.6	7.6	26	0	0	152	2.49	0	0	0	0	25	0.71	0.0	26	160	35	1	230	USGS
11-8-63 0940	14	56	10.0	96	382	8.1	7.4	21	0	0	130	2.46	0	0	0	18	0.31	0.0	0.0	23	149	26	5	6.2	
12-4-63 1440	28	54	10.4	97	311	8.1	7.6	17	0	0	122	0.74	0	0	0	14	0.39	0.0	0.0	23	122	22	2	6.2	
1-7-64 1500	16	54	11.8	110	348	8.2	8.3	20	4	6	121	1.98	0.13	0.56	0.20	0.36	0.0	0.0	0.0	25	129	23	1	2.3	0.62
2-6-64 1530	73	50	10.8	96	221	8.2	8.0	4.0	0	0	94	0.00	0.17	0.27	0.95	0.27	0.0	0.0	0.0	9	88	11	1	2.3	
3-4-64 1320	23	55	11.2	106	275	8.4	8.4	1.5	3	10.6	1.5	1.74	0.65	0.42	0.15	0.1	0.0	0.1	0.1	23	108	16	2	6.2	
6-7-64 1445	48	60	11.0	111	269	8.2	8.2	13	0	10.7	0.00	1.75	0.31	0.0	0.0	0.0	0.0	0.0	0.0	22	102	14	0	2.3	
5-7-64 0640	29	52	10.6	97	286	7.9	6.8	9.2	2.1	2.1	0	1.3	0.67	0.7	0.2	0.2	0.0	0.0	0.0	22	108	15	1	6.2	
6-10-64 1430	14	69	10.6	119	289	8.5	8.5	1.6	16	11.4	0.07	1.87	0.37	0.0	0.0	0.2	0.0	0.0	0.0	25	107	10	0	5	
7-8-64 1400	0.1	76	13.2	159	456	8.2	8.2	3.50c	1.22	2.36	0.10	2.36	0.65	0.0	0.0	0.0	0.0	0.0	0.0	26	175	52	3	2.3	

a. Field pH.
b. Laboratory pH.
c. Sum of calcium and magnesium in ppm.
d. Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as $\frac{0.0}{0.00}$ except as shown.
e. Derived from conductivity vs TDS curves.
f. Determined by addition of analyzed constituents.
g. Gravimetric determination.
h. Annual median and range, respectively. Calculated from analysis of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
i. Annual analyses (SSCFCD), United States Geological Survey, Quality of Water Branch (USGS); California Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SSCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

ANALYSES OF SURFACE WATER

CENTRAL COASTAL REGION (NO. 3)

Date and time of day and P.S.T.	Discharge Temp in °F	Dissolved oxygen ppm (% Sat)	Specific Conductance (microhm/cm at 25°C)	Mineral constituents in parts per million							Total dissolved in ppm	Hardness as CaCO ₃ Total in ppm	Turbidity in MPN/ml	Analyzed by				
				Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)					Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)
10-2-63	600 est.	68	12.1	134	232	8.3	7.2	0.31	0	11.3	1.85	5.4	12	114	16	4	23	USGS
11-6-63	Bradley	54	9.5	90	269	6.8	8.2	0.36	0	12.8	2.10	5.5	13	122	17	1	6.2	23
0920	Bradley	54	9.5	90	269	6.8	2.45c	0.36	0	12.8	2.10	0.16	13	122	17	1	6.2	23
12-3-63	Bradley	57	12.1	118	264	8.4	8.1	0.35	0	12.6	2.07	4.0	13	121	18	2	6.2	23
1645	Bradley	57	12.1	118	264	8.4	2.42c	0.35	0	12.6	2.07	0.11	13	121	18	2	6.2	23
1-8-64	500 est.	54	11.2	106	261	8.3	8.5	0.37	0.17	11.8	1.88	6.0	13	121	19	5	2.3	USGS
1800	500 est.	54	11.2	106	261	8.3	2.742c	0.37	0.17	11.8	1.88	0.17	13	121	19	5	2.3	USGS
2-4-64	600 est.	57	11.9	117	220	8.2	7.3	0.32	0	10.0	5.0	0.0	14	98	16	6	2.3	USGS
1600	600 est.	57	11.9	117	220	8.2	1.96c	0.32	0	10.0	1.82	0.14	14	98	16	6	2.3	USGS
3-3-64	2.4	53	9.3	87	335	8.4	8.1	0.48	5	15.6	11	0.1	13	160	24	20	6.2	62
1010	2.4	53	9.3	87	335	8.4	3.20c	0.48	5	15.6	11	0.1	13	160	24	20	6.2	62
4-8-64	163	70	11.4	129	241	8.3	8.1	0.35	4.3	16.4	6.5	0.1	14	106	14	1	2.3	2.3
1030	163	70	11.4	129	241	8.3	2.172c	0.35	4.3	16.4	6.5	0.1	14	106	14	1	2.3	2.3
5-5-64	281	49	10.9	96	242	8.4	12	7.8	1.5	11.6	2.5	1.2	13	110	17	4	0.62	0.62
0735	281	49	10.9	96	242	8.4	1.720	7.9	0.04	0.00	1.87	0.16	13	110	17	4	0.62	0.62
6-11-64	410	56	12.2	118	232	8.3	8.4	0.37	1	11.7	1.92	0.1	13	123	25	1	6.2	6.2
1030	410	56	12.2	118	232	8.3	2.746c	0.37	1	11.7	1.92	0.1	13	123	25	1	6.2	6.2
7-9-64	470	70	10.2	116	237	8.4	8.2	0.36	2	11.8	4.5	0.1	13	119	19	2	2.3	2.3
1340	470	70	10.2	116	237	8.4	2.38c	0.36	2	11.8	4.5	0.1	13	119	19	2	2.3	2.3
8-5-64	558	55	9.6	92	369	7.8	8.4	0.37	0	12.7	5.0	0.1	13	124	20	1	2.3	2.3
0615	558	55	9.6	92	369	7.8	2.48c	0.37	0	12.7	5.0	0.1	13	124	20	1	2.3	2.3
9-2-64	514	59	8.2	82	279	7.7	31	12	8.6	2.1	24	5.2	165	13	126	16	1	2.3
0750	514	59	8.2	82	279	7.7	1.55	9.97	0.05	0.00	2.20	0.15	165	13	126	16	1	2.3

MACDONALD RIVER NEAR SAN MIGUEL (STA. 436)

a Field pH
b Laboratory pH
c Sum of calcium and magnesium in ppm.
d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.
e Derived from conductivity vs TDS curves
f Determined by addition of analyzed constituents
g Gravimetric determination
h Annual median and range, respectively. Calculated from analysis of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.
i Mineral analysis (SCECO), California State Geologist Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFD); Merced River Water District of Southern California (MRWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.
j 3025-5041 (6-63) 20

TABLE D-2
ANALYSES OF SURFACE WATER
CENTRAL COASTAL REGION (NO. 3)

Date in P.S.T.	Dissolved Temp in °F	Dissolved oxygen ppm	Specific conductance (microhm/cm @ 25°C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Total N.C. ppm	Total Calcium as CaCO ₃ ppm	Total Magnesium as CaCO ₃ ppm	Analyzed by 1		
					Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potash (K)	Carbon- dioxide (CO ₂)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)						Boron (B)	Silica (SiO ₂)
10-2-63 1300	DRY			8.2 8.4	82 7,08c	3,57	0.27	286 4,69	0	86 2,37	0.2	34	354	106	10	230	620				
11-6-63 0830	DRY			8.0 8.0	50 7,60c	2,10	0.00	308 3,09	0	64 1,92	0.0	22	382	129	2	230	230				
12-3-63	DRY			8.2 8.5	78 7,60c	3,39	0.20	330 5,41	6	64 1,81	0.4	31	380	100	20	6-2	2-3				
1-8-64 1630	4.0	56	10.8	105	101.0	8.2	8.4	82 7,68c	3,57	0.27	286 4,69	0	86 2,37	0.2	34	354	106	10	230	620	USGS
2-4-64	10	64	8.2	87	92.0	8.0	8.0	50 7,60c	2,10	0.00	308 3,09	0	64 1,92	0.0	22	382	129	2	230	230	
3-3-64 0910	6.0	48	11.2	98	100.0	8.2	8.5	78 7,60c	3,39	0.20	330 5,41	6	64 1,81	0.4	31	380	100	20	6-2	2-3	
4-8-64 1810	8.9	70	6.2	70	95.1	8.4	8.4	62 7,68c	2,70	0.00	286 4,85	0	64 1,83	0.2	26	384	141	2	1300	620	
5-5-64 0645	DRY																				
6-11-64 1130	DRY																				
7-9-64	DRY																				
8-5-64	DRY																				
9-2-64 0730	DRY																				

a. Field pH.

b. Laboratory pH.

c. Sum of calcium and magnesium in ppm.

d. Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e. Derived from conductivity vs TDS curves.

f. Determined by addition of analyzed constituents.

g. Gravimetric determination.

h. Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service.

i. Annual analyses made by United States Geological Survey, Quality of Water Branch (USGS); United States Department of the Interior, Bureau of Reclamation (USBR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBCFCD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water and Power (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBDDPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated.

33275-4-61 (4-1) 200 390

TABLE D-2
ANALYSES OF SURFACE WATER

SOUTH BAY AQUEDUCT

Date and Time of P.S.T.	Water Elevation (feet)	Temp of water (F)	Dissolved oxygen (ppm %Sat)	Specific Conductance (micromhos at 25°C)	pH	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Total Hardness as CaCO ₃ in ppm	Total Chloride in ppm	Total Coliform MPN/ml	Analyzed by				
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)						Boron (B)	Silica (SiO ₂)	Other constituents	
BETHANY FOREBAY AT SOUTH BAY PUMPING PLANT (STA. 207)																								
10-28-63 1225				506	7.7	25 1.25	13 1.05	60 2.18	2.0 0.07	0	106 1.76	38 1.39	76 2.79	2.6 0.1	0.1 0.05	0.19	18	Ca=0.02 Zn=0.00	286	48	115	28		DWR
12-2-63 1530	237.5			522	7.7	24 1.20	16 1.12	54 2.35	2.6 0.07	0	97 1.59	45 1.94	76 2.14	2.1 0.03	0.2 0.01	0.30	16	Al=0.03 Pb=0.00 As=0.00 Zn=0.00 Cu=0.01	295	49	117	37		
1-6-64 1410	229.9			551	7.4	26 1.30	13 1.04	60 2.61	2.1 0.05	0	90 1.48	56 1.16	81 2.28	2.5 0.04	0.2 0.01	0.38	14	Cu=0.02 Zn=0.00	314	52	117	43		
2-3-64 1345				588	7.8	26 1.30	16 1.18	63 2.74	2.1 0.05	0	93 1.52	62 1.39	88 2.48	2.4 0.04	0.0	0.40	13	Cu=0.00 Zn=0.00	333	52	126	48		
3-2-64 1330	231.0			615	7.8	38 1.90	21 1.72	87 3.18	3.5 0.09	0	106 1.74	102 2.12	128 3.91	4.0 0.06	0.0	0.40		Cu=0.00 Zn=0.00	474	50	181	94		
4-1-64 1530	234.7			616	7.7	33 1.65	16 1.29	62 2.70	3.0 0.08	0	98 1.61	66 1.37	90 2.34	3.3 0.05	0.0	0.20		Cu=0.00 Zn=0.00	349	47	147	67		
5-1-64 1430				585	7.8	30 1.50	12 1.38	59 2.57	2.7 0.07	0	113 1.85	60 1.25	80 2.26	3.1 0.05	0.0	0.30		Cu=0.00 Zn=0.00	328	46	146	51		
6-1-64 1045	233.9			406	8.1	25 1.25	11 0.89	35 1.52	2.5 0.06	0	88 1.44	34 1.21	55 1.35	0.7 0.01	0.0	0.20		Cu=0.00 Zn=0.00	218	41	107	35		
7-1-64 1020	232.6			322	8.1	17 0.85	11 0.89	30 1.30	2.1 0.05	0	87 1.42	28 0.38	35 0.99	1.7 0.03	0.0	0.10		Al=0.07 Pb=0.00 As=0.00 Zn=0.00 Cu=0.00	183	42	87	16		
8-1-64 0845	230.3			382	8.0	16 0.80	12 1.05	38 1.65	2.3 0.06	0	83 1.36	22 0.46	58 1.64	0.4 0.01	0.0	0.20			217	47	90	22		
9-1-64 0930	230.6			566	8.1	18 0.90	15 1.26	64 2.78	3.1 0.08	0	88 1.44	33 0.69	109 3.07	0.6 0.01	0.0	0.10			311	55	108	36		

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in eqm.

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown.

e Derived from conductivity vs TDS curves.

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses by (SBCED), California State, Civilian Survey, Quality of Water Branch (USGS), United States Department of the Interior, Bureau of Reclamation (USBR), United States Public Health Service (USPHS), San Bernardino County Flood Control District (SBFCFD), Metropolitan Water District of Southern California (MWD), Los Angeles Department of Water and Power (LADWP), City of Los Angeles, Department of Public Health (LADPH), City of Long Beach, Department of Public Health (LBDPH), Terminal Testing Laboratories, Inc (ITL), or California Department of Water Resources, as indicated.

125-1-64 1-1 23 31

TABLE D-2
ANALYSES OF SURFACE WATER

SOUTH BAY AQUEDUCT

Date and time sampled P.S.T.	Water Elevation (feet)	Specific location of collection	Specific conductance (microhm/cm at 25°C)	pH	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Per cent total in ppm	Turbidity in ppm	Total Coliform in /100 ml	Analyzed by
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					
LIVERMORE CANAL AT PATTERSON RESERVOIR (STA. 214)																			
10-28-63 1620		Reservoir	563		41	85	0.85	2.40											
12-2-63 1300		Reservoir	547		46	79	0.92	2.23											
1-6-64 1320	708.8	Canal	515		45	79	1.27	2.23											
2-3-64 1645		Reservoir	528		51	79	1.06	2.23											
3-2-64 1600	707.5	Reservoir	613		66	92	1.33	2.60											
4-1-64 1600	706.0	Reservoir	652		67	98	1.39	2.76											
5-1-64 1250		Reservoir	618		67	90	1.39	2.54											
6-1-64 1330	708.3	Reservoir	472		66	64	0.92	1.80											
7-1-64 1030	709.0	Canal	330		26	37	0.54	1.04											
8-1-64 1415	708.2	Canal	376		24	54	0.30	1.52											
9-1-64 1445	707.9	Canal	576		31	106	0.64	2.93											

a Field pH

b Laboratory pH

c Sum of calcium and magnesium in eqm

d Iron (Fe), aluminum (Al), arsenic (As), copper (Cu), lead (Pb), manganese (Mn), zinc (Zn), and hexavalent chromium (Cr⁶⁺), reported here as 0.0 except as shown

e Derived from conductivity vs TDS curves

f Determined by addition of analyzed constituents

g Gravimetric determination

h Annual median and range, respectively. Calculated from analyses of duplicate monthly samples made by California Department of Public Health, Division of Laboratories, or United States Public Health Service

i Mineral analyses made by United States Geological Survey, Division of Reclamation (USGR); United States Public Health Service (USPHS); San Bernardino County Flood Control District (SBFCFD); Metropolitan Water District of Southern California (MWD); Los Angeles Department of Water (LADWP); City of Los Angeles, Department of Public Health (LADPH); City of Long Beach, Department of Public Health (LBOPH); Terminal Testing Laboratories, Inc. (TTL); or California Department of Water Resources (DWR), as indicated

TABLE D-3

SUMMARY OF COLIFORM ANALYSES

Station	Station Number	Coliform MPN/ml		
		Maximum	Median	Minimum
<u>North Coastal Region (No. 1)</u>				
Gualala River, South Fork, near Annapolis	9a	2,400	3.0	0.2
Navarro River near Navarro	8b	1,300	6.2	0.50
Trono River near Fort Bragg	10c	2,400	13	0.62
Russian River, East Fork, at Potter Valley Powerhouse	10a	50	2.3	0.62
Russian River at Guerneville	10	2,400	13	0.62
Russian River near Healdsburg	9	230	23	0.62
Russian River near Hopland	8a	620	23	2.3
<u>San Francisco Bay Region (No. 2)</u>				
Alameda Creek near Niles	73	620	23	2.3
Coyote Creek near Madrone	82	620	23	0.62
Los Gatos Creek near Los Gatos	74	230	6.2	0.23
Napa River near St. Helena	72	7,000	62	1.3
<u>Central Coastal Region (No. 3)</u>				
Carmel River at Robles del Rio	83	230	5.6	0.23
Nacimiento River near San Miguel	43b	62	2.3	0.23
Pajaro River near Chittenden	77	230	6.2	2.3
Salinas River near Bradley	43c	62	6.2	0.23
Salinas River at Paso Robles	43a	1,300	230	2.3
Salinas River near Spreckels	43	7,000	62	21
San Antonio River near Pleyto	43d	230	9.6	2.3
San Benito River near Bear Valley Fire Station	77a	230	6.2	0.62
San Lorenzo River at Big Trees near Felton	75	130	6.2	1.3
Soquel Creek at Soquel	76	62	22	2.3
Uvas Creek near Morgan Hill	96	230	5.4	0.13

TABLE D-4
SPECTROGRAPHIC ANALYSES OF SURFACE WATER

S/o No.	Station	Date	Constituents in parts per billion														
			Alum. num (Al)	Beryll. num (Be)	Bismuth (Bi)	Cadmium (Cd)	Cobalt (Co)	Chromium (Cr)	Copper (Cu)	Iron (Fe)	Gallium (Ga)	Compo. num (Gr)	Manganese (Mn)	Nickel concn (Ni)	Lead (Pb)	Titanium (Ti)	Vanadium (V)
<u>NORTH COASTAL REGION (No. 1)</u>																	
10	RUSSIAN RIVER AT GUERNEVILLE	5-14-64	≤1.2	<0.50	<0.25	<1.2	<1.2	<1.2	<1.2	<1.4	1.2	1.2	<1.2	<1.2	<0.50	<0.50	<5.0
10	RUSSIAN RIVER AT GUERNEVILLE	9-4-64	3.7	<0.57	<0.29	<1.4	<1.4	<1.4	<1.4	5.4	5.4	<1.4	<1.4	<0.57	<0.57	<5.7	
<u>SAN FRANCISCO BAY REGION (No. 2)</u>																	
73	ALAMEDA CREEK NEAR NILES	5-5-64	≤1.4	<0.57	<0.29	<1.4	<1.4	<1.4	<1.4	2.2	2.2	<1.4	<1.4	<1.4	<0.57	2.8	<5.7
73	ALAMEDA CREEK NEAR NILES	9-2-64	7.7	<0.57	<0.29	<1.4	<1.4	<1.4	<1.4	6.6	6.6	<1.4	<1.4	<0.57	<0.57	7.1	<5.7
71	ARROYO DEL VALLE NEAR LIVERMORE	5-4-64	≤1.4	<0.57	<0.29	<1.4	<1.4	<1.4	<1.4	1.9	1.9	<1.4	<1.4	<1.4	<0.57	0.40	<5.7
82	COVOTE CREEK NEAR MADRONE	5-7-64	≤1.4	<0.57	<0.29	<1.4	<1.4	<1.4	<1.4	2.1	2.1	<1.4	<1.4	<0.57	0.74	<5.7	
82	COVOTE CREEK NEAR MADRONE	9-4-64	11	<0.57	<0.29	<1.4	<1.4	<1.4	<1.4	2.8	2.8	<1.4	<1.4	<0.57	1.7	<5.7	
72	MAPA RIVER NEAR ST. HELENA	5-12-64	≤1.2	<0.50	<0.25	<1.2	<1.2	<1.2	<1.2	1.6	2.5	<5.0	<5.0	<1.2	<0.50	1.9	<5.0
72	MAPA RIVER NEAR ST. HELENA	9-2-64	3.4	<0.57	<0.29	<1.4	<1.4	<1.4	<1.4	3.4	3.4	<5.7	<5.7	<0.57	<0.57	<5.7	
<u>CENTRAL COASTAL REGION (No. 3)</u>																	
77	PAJARO RIVER AT CHITTENDEN	5-7-64	6.6	<0.57	<0.29	<1.4	<1.4	<1.4	<1.4	2.1	2.1	<5.7	<5.7	<1.4	<0.57	2.9	<5.7
77	PAJARO RIVER AT CHITTENDEN	9-4-64	8.3	<0.57	<0.29	<1.4	<1.4	<1.4	<1.4	4.6	4.6	<5.7	<5.7	<1.4	<0.57	4.6	<5.7
43	SALINAS RIVER NEAR SPRECKELS	5-7-64	≤1.4	<0.57	<0.29	<1.4	<1.4	<1.4	<1.4	6.0	9.7	<0.29	13	9.7	<0.57	1.3	<5.7
43	SALINAS RIVER NEAR SPRECKELS	9-4-64	4.6	<0.57	<0.29	<1.4	<1.4	<1.4	<1.4	21	30	<5.7	12	19	<0.57	1.4	<5.7

RADIOASSAYS OF SURFACE WATER

STATION	STA. NO.	DATE	PICO CURIES PER LITER			
			DISS. ALPHA	SOLID ALPHA	DISS. BETA	SOLID BETA
REGION (NO. 1)						
BIG RIVER NEAR MOUTH	8c	5-15-64	-0.53 ± 0.26	0.68 ± 0.89	1.60 ± 11.15	0.88 ± 8.37
BIG RIVER NEAR MOUTH	8c	9-3-64	-0.70 ± 0.32	0.17 ± 0.91	9.53 ± 11.28	2.91 ± 7.91
GUALALA RIVER, SOUTH FORK NEAR ANNAPOLIS	9a	5-14-64	1.02 ± 1.39	-0.25 ± 0.34	1.48 ± 11.34	-1.97 ± 8.10
GUALALA RIVER, SOUTH FORK NEAR ANNAPOLIS	9a	9-4-64	0.32 ± 1.12	-0.29 ± 0.61	-9.00 ± 11.10	-4.27 ± 7.61
NAVARRO RIVER NEAR NAVARRO	8b	5-14-64	-0.13 ± 0.96	-0.33 ± 0.42	4.68 ± 11.41	-1.08 ± 0.62
NAVARRO RIVER NEAR NAVARRO	8b	9-4-64	-0.96 ± 0.39	-0.12 ± 0.72	-3.00 ± 11.09	6.70 ± 7.97
NOYO RIVER NEAR FORT BRAGG	10c	5-14-64	-0.32 ± 0.26	-0.33 ± 0.42	6.71 ± 9.66	3.87 ± 8.74
NOYO RIVER NEAR FORT BRAGG	10c	9-4-64	0.05 ± 0.97	0.14 ± 0.91	-1.42 ± 10.79	2.90 ± 7.82
RUSSIAN RIVER, EAST FORK AT POTTER VALLEY POWERHOUSE	10a	5-12-64	-0.38 ± 0.74	-0.03 ± 0.59	-2.61 ± 11.12	-1.60 ± 8.71
RUSSIAN RIVER, EAST FORK AT POTTER VALLEY POWERHOUSE	10a	9-2-64	0.70 ± 1.37	-0.43 ± 0.46	-8.06 ± 9.47	-6.56 ± 8.45
RUSSIAN RIVER AT GUERNEVILLE	10	5-14-64	-0.50 ± 0.64	-0.33 ± 0.42	-3.19 ± 11.33	4.66 ± 8.89
RUSSIAN RIVER AT GUERNEVILLE	10	9-4-64	-0.32 ± 1.05	-0.12 ± 0.93	0.78 ± 11.31	-3.96 ± 9.00
RUSSIAN RIVER NEAR HEALDSBURG	9	5-12-64	-1.07 ± 0.45	0.27 ± 0.84	0.75 ± 10.51	-7.65 ± 8.58

TABLE D-5

RADIOASSAYS OF SURFACE WATER

STATION	STA. NO.	DATE	PICO CURIES PER LITER			
			DISS. ALPHA	SOLID ALPHA	DISS. BETA	SOLID BETA
<u>REGION (NO. 1)</u>						
RUSSLAN RIVER NEAR HEALDSBURG	9	9-2-64	-1.23 ± 0.45	-0.81 ± 0.29	-2.12 ± 10.10	-3.80 ± 7.60
RUSSLAN RIVER NEAR HOPLAND	8a	5-12-64	-0.33 ± 0.26	1.34 ± 1.10	4.10 ± 9.00	-1.54 ± 9.25
RUSSLAN RIVER NEAR HOPLAND	8a	9-2-64	-0.76 ± 0.76	-0.43 ± 0.46	-1.60 ± 10.10	1.17 ± 8.71
<u>REGION (NO. 2)</u>						
ALAMEDA CREEK NEAR NILES	73	5-5-64	0.50 ± 1.01	1.19 ± 1.20	14.67 ± 10.98	-3.13 ± 10.17
ALAMEDA CREEK NEAR NILES	73	9-2-64	-1.77 ± 1.38	-0.57 ± 0.48	4.96 ± 13.14	-9.30 ± 7.84
ARROYO DEL VALLE NEAR LIVERMORE	71	5-4-64	0.19 ± 1.41	-0.08 ± 0.61	-11.89 ± 9.63	-4.60 ± 9.61
COYOTE CREEK NEAR MADRONE	82	5-7-64	-0.18 ± 0.80	0.62 ± 1.00	-3.64 ± 9.39	3.49 ± 9.81
COYOTE CREEK NEAR MADRONE	82	9-4-64	-0.81 ± 1.87	-0.25 ± 0.44	-9.56 ± 12.17	-2.88 ± 8.63
LOS GATOS CREEK NEAR LOS GATOS	74	5-6-64	-0.85 ± 1.17	0.23 ± 0.65	-1.56 ± 13.62	4.61 ± 8.99
LOS GATOS CREEK NEAR LOS GATOS	74	9-3-64	0.40 ± 3.14	0.21 ± 0.81	-1.01 ± 13.14	-5.38 ± 9.05
NAPA RIVER NEAR ST. HELENA	72	5-12-64	-0.50 ± 0.27	0.23 ± 0.65	-0.01 ± 12.11	9.72 ± 9.48
NAPA RIVER NEAR ST. HELENA	72	9-2-64	-0.40 ± 0.88	0.20 ± 0.70	5.89 ± 12.46	9.42 ± 8.80

RADIOASSAYS OF SURFACE WATER

STATION	STA. NO.	DATE	PICO CURIES PER LITER			
			DISS. ALPHA	SOLID ALPHA	DISS. BETA	
					SOLID BETA	
REGION (NO. 3)						
CARMEL RIVER AT ROBLES DEL RIO	83	5-7-64	-0.28 ± 0.55	-0.15 ± 0.56	1.44 ± 11.36	-1.68 ± 8.66
NACIMIENTO RIVER NEAR SAN MIGUEL	43b	5-5-64	0.06 ± 1.07	0.22 ± 0.75	-4.31 ± 11.53	-7.08 ± 8.45
NACIMIENTO RIVER NEAR SAN MIGUEL	43b	9-2-64	0.23 ± 1.13	-0.35 ± 0.45	10.27 ± 11.64	-0.77 ± 9.21
PAJARO RIVER NEAR CHITTENDEN	77	5-7-64	2.01 ± 4.66	-0.06 ± 0.50	12.37 ± 14.86	3.67 ± 8.38
PAJARO RIVER NEAR CHITTENDEN	77	9-4-64	-5.12 ± 4.31	-0.07 ± 0.72	-1.15 ± 13.67	-5.83 ± 8.58
SALINAS RIVER NEAR BRADLEY	43c	5-5-64	-0.12 ± 0.97	0.22 ± 0.76	9.35 ± 11.66	1.73 ± 8.84
SALINAS RIVER NEAR BRADLEY	43c	9-2-64	-0.40 ± 1.06	0.24 ± 0.81	-1.85 ± 10.45	-3.88 ± 8.69
SALINAS RIVER NEAR SPRECKELS	43	5-7-64	-0.35 ± 5.49	-0.21 ± 0.68	-0.84 ± 16.03	6.74 ± 9.01
SALINAS RIVER NEAR SPRECKELS	43	9-4-64	-0.91	0.74 ± 0.97	28.00 ± 14.41	-0.44 ± 2.55
SAN ANTONIO RIVER NEAR PLEYTO	43d	5-5-64	-0.16 ± 1.09	-0.15 ± 0.55	1.80 ± 11.03	-1.81 ± 8.57
SAN BENITO RIVER NEAR BEAR VALLEY FIRE STATION	77a	5-5-64	1.65 ± 5.62	-0.15 ± 0.56	14.74 ± 16.16	7.51 ± 9.02
SAN BENITO RIVER NEAR BEAR VALLEY FIRE STATION	77a	9-2-64	-4.61 ± 8.24	-0.05 ± 0.59	-26.01 ± 33.22	-3.17 ± 8.62
SAN LORENZO RIVER AT BIG TREES NEAR FELTON	75	5-6-64	0.41 ± 1.14	-0.52 ± 0.22	6.57 ± 12.64	0.97 ± 8.74

TABLE D-5
RADIOASSAYS OF SURFACE WATER

STATION	STA. NO.	DATE	PICO CURIES PER LITER			
			DISS. ALPHA	SOLID ALPHA	DISS. BETA	SOLID BETA
<u>REGION (NO. 3)</u> SAN LORENZO RIVER AT BIG TREES NEAR FELTON SOQUEL CREEK AT SOQUEL SOQUEL CREEK AT SOQUEL UVAS CREEK NEAR MORGAN HILL UVAS CREEK NEAR MORGAN HILL	75	9-3-64	0.15 ± 1.02	0.33 ± 0.84	-3.18 ± 10.27	-1.80 ± 8.43
	76	5-6-64	-0.16 ± 1.80	-0.34 ± 0.46	0.48 ± 13.58	-4.14 ± 8.52
	76	9-3-64	2.60 ± 3.94	-0.46 ± 0.46	-9.98 ± 12.87	-10.05 ± 8.38
	96	5-7-64	0.51 ± 1.12	0.21 ± 0.75	1.37 ± 10.39	10.05 ± 10.64
	96	9-4-64	-0.41 ± 1.33	-0.57 ± 0.48	-9.91 ± 11.75	-4.77 ± 7.77

TABLE D-6

DESCRIPTION OF SALINITY OBSERVATION STATION
1963-64 Water Year

STATION	Miles from Golden Gate (a)	Time Interval (b)		LOCATION
		Hours	Min	
Crockett - San Pablo Bay	27.7	3	30	West end of Carquinez Strait, south shore, 0.2 mile east of Carquinez Bridge on wharf of C and H Sugar Refinery Corporation.
Martinez - Carquinez Strait	33.1	3	50	Sampled from Shell Oil Company dock, about 0.6 mile downstream from Southern Pacific Company railroad bridge.
Port Chicago - Suisun Bay	41.0	4	20	South shore of Suisun Bay at U. S. Naval ammunition loading wharf below Port Chicago.
Middle Point - Suisun Bay	41.5	4	30	South shore of Suisun Bay at Allied Chemical Plant intake, about 0.5 mile upstream from Middle Point.
Pittsburg - Suisun Bay	48.0	5	00	East end of Suisun Bay, south shore, at Pittsburg Yacht Harbor.
Spoonbill Creek - Suisun Bay	48.9	5	05	At Sacramento Northern Railroad crossing.
Collinsville - Sacramento River	50.8	5	25	Sacramento River, north bank at junction with San Joaquin River.

MAXIMUM OBSERVED SALINITY AT BAY AND DELTA STATIONS

In parts of chloride per million parts of water*

STATION	WATER YEAR											
	1931	1938	1939	1944 c	1952	1955	1956 d	1958	1959	1962	1963	1964
Sacramento - San Joaquin Delta System Unimpaired Runoff in Percent of Average (e)	35	191	50	63	171	64	178	169	67	93	132	63
Crockett					13200	16600	15300	11900	15000	13900	13100	14600
Martinez	16900	11600	16400		8900	11900	11900	7150	10200	12700	11500	12900
Port Chicago					6900	12500	9750	5830	15640	9370	9200	10700
Middle Point***												10100
Pittsburg					1200	7800	3440	1200	5110	3980	1350	3280
Spoonbill Creek**	13900	2560	11800	7300	2800	6400	4040	930	6270	3540	2940	2980
Collinsville	12600	860	10400	4700	783	3880	2280	550	5430	2430	1980	3730

* Ocean water contains approximately 18,200 parts per million of chloride.

** Station discontinued December 1963.

*** Station initiated January 1964.

a Mileage measured to station along main channel. For stations off the main channel, the mileage shown is the same distance along the main channel to a point whereon the time of the occurrence of the tidal phase is the same as that of the observation station.

b Time interval between high tide at Golden Gate and time for taking samples at station.

c Releases of stored water from Shasta Lake commenced in 1944.

d Releases of stored water from Folsom Reservoir commenced in 1956.

e Average taken as mean annual unimpaired flow at foothill stations of major tributaries for 50-year period October 1910 through September 1960.

TABLE D-7

SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS*

In parts of chloride per million parts of water

STATION	DATE							
	10-2-63	10-6-63	10-10-63	10-14-63	10-18-63	10-22-63	10-26-63	10-30-63
Crockett	11200			10400	9800	9220	8040	10400
Martinez	5880	8820	a7160	7740	7840	e6280	6860	7350
Port Chicago	4510	1960	6180	3950	2740	3380	2940	4020
Pittsburg	b4233		e235	169		a142	471	116
Spoon Bill Creek	e557	480	e569	407			220	419
Collinsville	e230	230	e76	82	e41	e25	e20	87

STATION	DATE							
	11-2-63	11-6-63	11-10-63	11-14-63	11-18-63	11-22-63	11-26-63	11-30-63
Crockett	11300		6760	10000	7450	4510	5980	7600
Martinez	10700	a7840	e4410	7840	6220	e4120	6470	6130
Port Chicago	5490		2160		1810	470	1470	1950
Pittsburg			b488		45	a31		
Spoon Bill Creek	485	2980		108				26
Collinsville	336	167	36	27	22	15		

STATION	DATE							
	12-2-63	12-6-63	12-10-63	12-14-63	12-18-63	12-22-63	12-26-63	12-30-63
Crockett	6860	5490	7450	7400	7500	6180	e7200	
Martinez	3870	4260	4070	2840	6810	4750		5930
Port Chicago		529	3240	2720		1790	4510	3530
Pittsburg			28			41		59
Spoon Bill Creek	45	31						
Collinsville	11		14	13	e12		19	37

STATION	DATE							
	1-2-64	1-6-64	1-10-64	1-14-64	1-18-64	1-22-64	1-26-64	1-30-64
Crockett	4800	7650	8480	7940	6180	3430	5200	4610
Martinez	3280	3280	3870			2060	6030	1470
Port Chicago								e464
Middle Point	1400	2350	3240	3680	3040	1520	451	58
Pittsburg	72	56	52	b474		94	38	30
Collinsville	e21	34	23	113	30	28	14	15

* Samples taken at four-day intervals approximately one and one-half hours after high high tide.

a Taken after low high tide.

d Taken over one hour off scheduled time.

b Taken on following day.

e Taken on preceding day.

c Taken two days later.

f Taken two days earlier.

TABLE D-7

SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS *

in parts of chloride per million parts of water

STATION	DATE							
	2-2-64	2-6-64	2-10-64	2-14-64	2-18-64	2-22-64	2-26-64	2-30-64
Crockett	3870	6320	7400	7200	6080	8040		
Martinez		4460	d2110	6620	4850			
Port Chicago	52	868	3580	2010	882	bd3190	2200	
Middle Point	34	515	2940	1720	a181	3580	2550	
Pittsburg	44	41		45	45	46	b668	
Collinsville	16	24	19	20	18	29	19	

STATION	DATE							
	3-2-64	3-6-64	3-10-64	3-14-64	3-18-64	3-22-64	3-26-64	3-30-64
Crockett	8630	7650	9610	9800	10800	10000	9220	10100
Martinez	5100	6370	7450	7740	8140	a7260	6370	a6270
Port Chicago	2110	2400	4460	3630	5240	6180	2740	3920
Middle Point	1620	1370	3870	2790	4900			1720
Pittsburg	a77		bd111	a174	bd343	bd216		abd189
Collinsville	42	24	75	372	274	176		198

STATION	DATE							
	4-2-64	4-6-64	4-10-64	4-14-64	4-18-64	4-22-64	4-26-64	4-30-64
Crockett	9410	7840	10800	8430	10300	10700	11400	11600
Martinez	7650	5780	8240	6860	10200	9020	9410	9410
Port Chicago	3820	2300	a3770	6080	7200	bd6270	6570	6760
Middle Point	2990	1720	3480	5640		4800	5340	d5830
Pittsburg	ab474	152	a122	a255	618	a622		a672
Collinsville	179	34	a39	a113	613	a672	a706	1410

STATION	DATE							
	5-2-64	5-6-64	5-10-64	5-14-64	5-18-64	5-22-64	5-26-64	5-30-64
Crockett	10900	a10400	11800	12600	11000	11600	10700	
Martinez	9100	9300	9610	9900	a8430	9020	10200	a7840
Port Chicago			6370	ed7990	abd4560	5540	6760	5200
Middle Point		5050	5740	6670		a2110	5640	3920
Pittsburg	1040	a720	a470	a529	a564	a333	a397	
Collinsville	1120	a539	a539	1540	a470	a211	a326	

* Samples taken at four-day intervals approximately one and one-half hours after high high tide.

a Taken after low high tide.

b Taken on following day.

c Taken two days later.

d Taken over one hour off scheduled time.

e Taken on preceding day.

f Taken two days earlier.

TABLE D-7

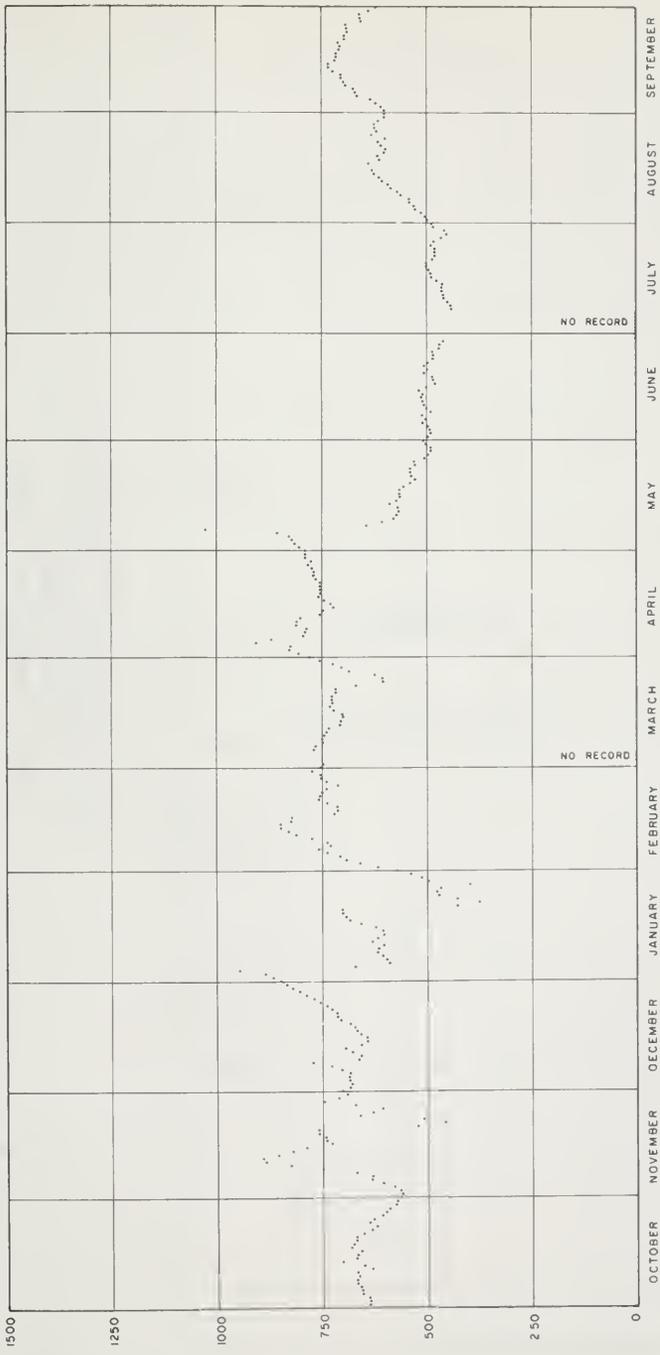
SALINITY OBSERVATIONS AT BAY AND DELTA STATIONS*

In parts of chloride per million parts of water

STATION	DATE							
	6-2-64	6-6-64	6-10-64	6-14-64	6-18-64	6-22-64	6-26-64	6-30-64
Crockett		12000	11800		e11600	10900	13400	11200
Martinez	8490	10600	10400		e7690	9330	e49420	10300
Port Chicago	b3240	bd7170	7790	e46370	6340	7600	9120	
Middle Point		5460	3530	5690	2400	3940		5480
Pittsburg	a356	a393	ab4853	eb4774	e510	e577	d2280	
Collinsville	a333	a394	e755	1050	a404	a510	a1560	1840
STATION	DATE							
	7-2-64	7-6-64	7-10-64	7-14-64	7-18-64	7-22-64	7-26-64	7-30-64
Crockett	12300	a12000	13500	13200	e13800	14000	14600	13800
Martinez	e8670	10300	12200	e11700	e9250	9980		
Port Chicago	7400	8020	9810	8060	e9380	9820	10200	9250
Middle Point	5350	8560	8480	7040	8620	8520	9000	8170
Pittsburg	ab1400			1650	e1780		e2220	2340
Collinsville	a1160	a1500		a2750	e1850	a2360		a2890
STATION	DATE							
	8-2-64	8-6-64	8-10-64	8-14-64	8-18-64	8-22-64	8-26-64	8-30-64
Crockett	e14100	14100		a14100	e14200		13200	
Martinez		12900	9960	e10100	e10200	12200	11400	a9820
Port Chicago	e9620	e7110	10600	10000	10000	ed10700		11200
Middle Point		e7630	8900	8750	6540	9410	7670	10100
Pittsburg	e2270		3280	a2570			bd2160	ed1960
Collinsville	a2250	a2570	3730	a2410		a2550		
STATION	DATE							
	9-2-64	9-6-64	9-10-64	9-14-64	9-18-64	9-22-64	9-26-64	9-30-64
Crockett	e11900	13000	10800	9840	11600	11400	12700	e9990
Martinez	e6130	10700	9260	a6180	a8780	a7640	a7380	e8600
Port Chicago	8440	9050	6130	4390	6910	5890	7560	e6120
Middle Point	6300	8100	5090	4580	d3080	4230	6290	
Pittsburg	ab1290		e830	e684	a425		a687	a412
Collinsville		a1570	1040	a334	a392	a340	a697	

* Samples taken at four-day intervals approximately one and one-half hours after high tide.
a Taken after low high tide. d Taken over one hour off scheduled time.
b Taken on following day. e Taken on preceding day.
c Taken two days later. f Taken two days earlier.

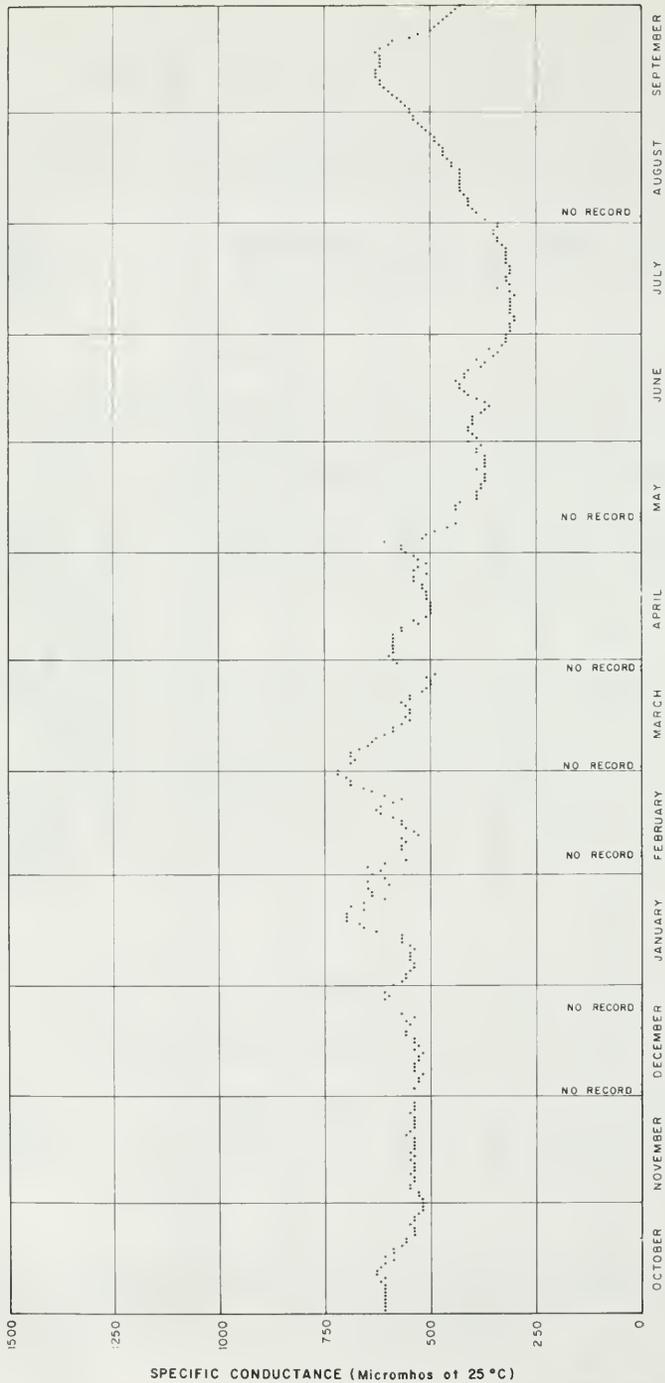
FIGURE D-1



ELECTRICAL CONDUCTANCE
DAILY MEAN
ALAMEDA CREEK NEAR NILES (STA 73)
1964

SPECIFIC CONDUCTANCE (Micromhos of 25°C)

FIGURE D-2



ELECTRICAL CONDUCTANCE
DAILY READINGS AT 1300 HOURS
BETHANY FOREBAY AT
SOUTH BAY PUMPING PLANT (STA 207)
1964

APPENDIX E

GROUND WATER QUALITY



ACKNOWLEDGMENTS

The Department of Water Resources gratefully acknowledges the assistance and contributions of the many public agencies, private organizations, and individuals whose cooperation greatly facilitated the preparation of this appendix. Special mention is made of the following agencies:

State

California Department of Public Health

California Disaster Office

Local

Alameda County Flood Control and Water Conservation District

Alameda County Water District

Mendocino County

Monterey County Flood Control and Water Conservation District

Santa Clara Valley Water Conservation District

Sonoma County Flood Control and Water Conservation District

INTRODUCTION

Data presented in this appendix are measured values of selected quality characteristics of ground water samples collected in the Central Coastal Area during the period from July 1, 1963, through June 30, 1964. It consists of a table showing results of analyses of ground water and a table showing results of radioassay of ground water. Wells and ground water basins are numbered in accordance with the system described in Appendix C. The data are presented in water pollution control board region, ground water basin and well number order.

Analyses of Ground Water

Tabulated values for dissolved minerals are the analytical quantity reported in parts per million (ppm) and a computed value for equivalents per million (epm). Electrical conductivity is reported as micromhos at 25°C and water temperature is reported in degrees Fahrenheit. Values for temperature are those measured in the field at the time of sampling. Laboratory analyses of ground water were performed by the Department of Water Resources and the United States Geological Survey, all in accordance with "Standard Methods for the Examination of Water and Waste Water", 11th Edition, or with U. S. Geological Survey Water Supply Paper 1454, "Methods for Collection and Analyses of Water Samples". The methods yield comparable accuracy. Heavy metal concentrations were determined by "wet" analyses.

Table E-1 presents analyses of ground water. Definitions of abbreviations used in this table are as follows:

1. TDS---Total dissolved solids by gravimetric determination at 180°C
2. T.O.--Odor.

3. ABS---Alkyl benzene sulfonate.
4. DWR---Department of Water Resources.
5. USGS--United States Geological Survey.

Radioassay of Ground Water

Radioassay of ground water are presented in Table E-2. Determinations were made by the California Disaster Office and the Department of Public Health of suspended alpha and beta activities and dissolved alpha and beta activities in some samples and for gross activity in other samples. The samples through December 1963 were analyzed by the California Disaster Office. Samples taken after this time were analyzed by the Department of Public Health. Negative values of measured activity in some analyses reported by the Department of Public Health resulted when activity at the time of sampling was less than during the five-day background period.

Results are expressed as pico curies per liter (pc/l). The term pico curies is also written micro-micro curies and is further defined as 10^{-12} curies. The most probable error is reported along with the measured value. Results should be considered qualitative and undue emphasis should not be given to quantitative values.

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	Site well number and other number	Date sampled	Temp in °F	Specific conductivity (micro-mhos at 25° C)	pH	Mineral constituents in parts per million						Total dissolved solids in ppm	Hardness as CaCO ₃	Analyzed by								
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)				Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Barium (B)	Silica (SiO ₂)	Other constituents		
								SANTA ROSA VALLEY (1-18)														
Mrs G. Mallory domestic	6N/8H-381	9-24-63		375	8.0	31 1.38	19 1.37	19 0.83	1.6 0.06	0.0 0.00	137 2.23	1.0 0.02	44 1.22	13 0.21	0.1 0.01	0.0 0.0	35	246	22	148	36	DMR
Coraci Public Utility District municipal	6N/8H-35A2	9-24-63		300	7.2	15 0.76	7.5 0.62	39 1.70	1.7 0.04	0.0 0.00	117 1.92	3.0 0.06	37 1.05	0.0 0.00	0.2 0.01	0.0 0.0	55	234	54	69	0	DMR
City of Sebastopol Water Treatment municipal	6N/9H-201	9-25-63	326													0.0						DMR
Dr. Audley S. Moore irrigation and domestic	7N/7H-18C1	9-25-63		255	7.4	16 0.82	7.5 0.62	25 1.10	4.2 0.11	0.0 0.00	147 2.42	0.5 0.01	33 0.15	0.0 0.00	0.2 0.01	0.0 0.0	50	200	42	72	0	DMR
Oakmont Builders Irrigation	7N/7H-23B	9-25-63		117	7.5	0.4 0.32	2.4 0.20	1.3 0.35	3.1 0.08	0.0 0.00	38 0.62	1.6 0.34	7.1 0.20	2.7 0.04	0.1 0.01	0.1 0.0	40	112	48	26	0	DMR
Earl F. Becharada Irrigation	7N/7H-29D1	9-25-63		230	7.7	17 0.84	9.6 0.79	17 0.74	1.7 0.04	0.0 0.00	131 2.15	1.9 0.04	11 0.30	0.4 0.01	0.2 0.01	0.1 0.0	48	174	31	82	0	DMR
C. Bordena domestic	7N/8H-5C1	9-19-63		481	7.4	25 1.25	28 2.27	29 1.26	4.8 0.12	0.0 0.00	151 2.47	7.0 1.15	50 1.41	36 0.58	0.2 0.01	0.0 0.0	74	320	26	176	52	DMR
Harry Rasmussen Irrigation	7N/8H-18Q1	9-25-63		750	7.9	35 1.73	29 2.41	102 4.03	2.2 0.06	0.0 0.00	391 6.42	15 0.32	60 1.70	0.0 0.00	0.1 0.01	0.2 0.0	44	524	51	207	0	DMR
C. Datti Irrigation and stock	7N/8H-30P1	9-20-63		766	6.8	43 2.13	39 3.23	48 2.09	2.7 0.07	0.0 0.00	162 2.66	17 0.35	233	1.04 1.29	0.2 0.01	0.3 0.0	62	538	28	269	136	DMR
A. Marx domestic and irrigation	7N/8H-38R1	9-25-63		360	8.2	23 1.17	13 1.06	37 1.60	1.6 0.04	0.0 0.00	200 3.28	0.0 0.00	17 0.47	0.0 0.00	0.2 0.01	0.1 0.0	42	238	41	112	0	DMR
C. W. Gilbert domestic	7N/9H-9F1	9-20-63		161	8.1	16 0.80	1.9 0.16	15 0.65	1.2 0.03	0.0 0.00	60 0.98	11 0.23	14 0.39	1.2 0.02	0.3 0.02	0.0 0.0	61	149	40	48	0	DMR
Redwood Ranch, Inc. irrigation	8N/9H-2201	9-19-63		241	8.4	11 0.55	13 1.05	19 0.83	2.5 0.06	2.2 0.07	90 1.48	5.0 0.10	26 0.73	4.4 0.07	0.4 0.02	0.0 0.0	84	206	33	80	3	DMR
Fred Bros. Winery domestic and industrial	9N/10H-1C1	9-19-63		539	8.5	29 1.45	51 4.21	13 0.57	0.6 0.02	11 0.37	298 4.88	17 0.35	10 0.28	1.7 0.02	0.2 0.01	0.1 0.0	37	333	9	283	21	DMR

ANALYSES OF GROUND WATER

1964

Owner and use	State well number and other number	Date sampled	Temp. in °F	Specific conductance (micro-mhos at 25° C)	pH	Mineral constituents in equivalents per million							Total dissolved solids in ppm	Hardness as CaCO ₃	Analyzed by		
						Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Bicar- bonate (HCO ₃)	Sul- fure (SO ₄)	Chlo- ride (Cl)				Ni- trate (NO ₃)	Fluo- rine (F)
						SAN FRANCISCO BAY REGION (ND-1,2)											
						Petaluma Valley (2-1)											
Mrs. H. Clokie domestic and stock	ND802 3N/6A-1Q1	9-63	1300									162 4,00					DMR
		4-4-64	1320			220 9.57						140 3.95					DMR
O. White domestic and irrigation	3N/6A-3C1	9-63	4130									1070 30.18					DMR
		4-4-64	4250			329 14.31						1120 31.60					DMR
S. K. Herzog Co., Sleepy Hollow Dairy domestic and stock	3N/6A-11B1	9-63	1880									331 9.34					DMR
		6-4-64	1930			312 13.57						329 9.28					DMR
C. Strozzi stock	3N/6A-13H1	9-20-63	175									17 0.48					DMR
		4-17-64	344									26 0.73					DMR
Rupprecht domestic, irrigation, and stock	3N/6A-18H1	9-20-63	640									52 1.47					DMR
		4-17-64	672	6.7		26 1.13	0.5 0.01	0	1.68 2.75	52 1.08		52 1.47	65 1.05		0.0		DMR
Karl Johnson domestic	3N/7A-14F1	9-20-63	685									75 2.12					DMR
		4-17-64	687												0.6		DMR
Lopes domestic	4N/6A-7H1	9-63	1150									44 1.24					DMR
		4-4-64	1120	7.9		97 4.22	0.7 0.02	0	6.22 10.19	32 0.67		49 1.38	22 0.35		1.7		DMR
Lopes irrigation	4N/6A-7H2	9-63	4010									901 25.42					DMR
		4-4-64	4240									948 26.74					DMR

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	Site well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos/cm at 25° C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Percent calcium in ppm	Hardness as CaCO ₃ Total ppm	Analyzed by		
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Potassium sum (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Bicarbonate (B)	Silica (SiO ₂)
						MAPA VALLEY (P-2, O1) (Cont'd)															
G. Lawrence domestic and stock	4N/4A-13E1	4-13-64	1870	7.5	136 6.79	34 2.76	202 8.79	1.3 0.03	0 0.00	2.21 3.62	265 5.52	295 8.32	.25 0.4		0.2		1190	48	479	297	DMR
Vernon Basham domestic	4N/4A-14C2	9-17-63	1580									324 9.14									DMR
H. Mini domestic	4N/4A-25K1	4-16-64	225			7.7 0.33						34.0 9.59	8.2 0.23		0.1				98		DMR
N. L. George domestic	5N/4A-9Q2	9-17-63	513									4.3 1.21									DMR
		4-16-64	520									4.6 1.24									DMR
Silverado Hotel domestic	5N/4A-11F3	9-17-63	704									103 2.90			2.0						DMR
		4-16-64	726									1.02 2.88			2.1						DMR
J. M. Davis domestic and stock	5N/4A-10C1	9-17-63	243									1.8 0.51									DMR
		4-16-64	249	7.1	14 0.70	12 0.96	18 0.78	2.3 0.68	0 0.00	106 1.74	6.1 0.13	20 0.56	1.1 0.72		0.0		182	31	83	0	DMR
John Healy domestic and irrigation	5N/4A-13E1	9-17-63	421									35 0.99									DMR
		4-16-64	414									31 0.87			0.1						DMR
F. D. Loney domestic	5N/4A-20R2	9-17-63	865									146 4.12									DMR
		4-16-64	630									81 2.28									DMR
J. C. Carr domestic	5N/4A-21P2	9-17-63	2260									416 11.74			0.5						DMR
		4-16-64	2010	7.2	31 1.55	11 0.89	371 16.14	6.2 0.16	0 0.00	340 5.27	95 1.92	195 11.14	0.6 0.31		0.6		1190	86	122	0	DMR

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos at 25° C)	pH	Mineral constituents in parts per million						Fluoride (F)	Barium (B)	Silica (SiO ₂)	Other constituents ¹	Total dissolved solids in ppm	Per cent iron in ppm	Hardness as CaCO ₃		Analyzed by	
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)							Chloride (Cl)	Nitrate (NO ₃)		Total
	1056a																				
M. Klier Irrigation	5N/6H-24K1	9-63	342																		DMR
		4-4-64	361																		DMR
Connolly domestic	5N/6H-25P1	9-63	508																		DMR
		4-4-64	515																		DMR
N. Taryld domestic	6N/6H-23R2	9-63	521																		DMR
		4-4-64	512																		DMR
O. Stumore domestic	6N/6H-26E1	9-63	438																		DMR
		4-4-64	435																		DMR
A. G. Faglani domestic	7N/4H-30L1	4-15-64	90																		DMR
J. Alcouffé domestic	9N/6H-31Q1	9-18-63	138																		DMR
		4-16-64	134																		DMR
R. H. Archerd domestic	9N/7H-23N1	9-18-63	935																		DMR
		4-16-64	928																		DMR
Mrs. Taylor domestic	3N/1E-481	9-12-63	1420																		DMR
McDougal Livestock Co. stock	3N/1E-2101	9-12-63	1770																		DMR

ANALYSES OF GROUND WATER
1964

Owner and use	Site well number and other number	Date sampled	Temp in F	Specific conductance (micro-mhos at 25° C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃ Total N/C ppm	Analyzed by			
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Palates-sulfate (SO ₄)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)				Boron (B)	Silica (SiO ₂)	Other constituents
	<u>MDBSH</u>																				
A. Sebastiani domestic	1N/14-7K1	8-13-63		2240	7.8	119 5.94	73 6.02	298 12.96	1.8 0.05	0 0.00	446 7.31	535 11.15	208 5.87	18 0.29	0.5 0.03	0.9 26	1570	52	598	232	USGS
G. Lande domestic	1N/14-29C1	8-13-63		1890	8.5	115 3.74	64 3.26	206 9.83	1.3 0.03	18 0.60	486 7.97	218 4.54	244 6.88	18 0.29	0.9 0.05	0.9 21	1180	47	550	122	USGS
Chenter Hook domestic	1N/24-11N1	8-13-63		1240	8.1	86 4.29	35 2.86	133 5.78	3.0 0.08	0 0.00	506 8.29	32 0.67	143 4.03	0.9 0.01	0.6 0.02	1.2 38	715	44	358	0	IMR
John F. Welle domestic and irrigation	1N/24-13P1	8-13-63		1590	8.0	112 5.59	73 6.00	133 5.78	0.7 0.02	0 0.00	609 9.98	116 2.42	150 4.23	36 0.38	0.4 0.02	1.4 31	955	33	580	81	USGS
F. H. Dornham domestic	2N/24-27R1	8-13-63		1660	8.5	67 2.33	26 2.81	276 12.01	3.9 0.10	18 0.60	490 8.03	26 0.54	279 7.87	3.4 0.05	0.2 0.01	6.2 44	982	70	258	0	USGS
Mrs. A. Buscaglia domestic	2N/24-36E1	8-13-63		3360	7.4	240 11.98	164 13.52	272 11.83	1.3 0.03	0 0.00	576 9.44	424 8.83	376 16.31	133 2.13	0.6 0.02	1.2 26	2330	32	1280	808	USGS
	2N/24-36E2	8-13-63		1750	8.3	136 6.79	86 7.11	113 4.92	1.7 0.04	6 0.20	538 9.15	51 1.06	279 7.87	17 0.2	0.2 0.01	0.5 29	1140	26	695	228	USGS

TABLE E-1

ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos/cm at 25° C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃		Analyzed by		
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)		Silica (SiO ₂)	Other constituents		Total ppm	N.C. ppm
	INDUS																				
Mannase Block Tanning Company Industrial	1S/4H-4A1	6-3-64	1360	8.5	95 4.74	65 5.35	97 4.22	1.1 0.03	12 0.40	338 5.36	90 2.06	200 5.04	24 0.39		0.1		879	29	505	227	DNR
Red Star Yeast Co. Industrial	1S/4H-34F2	6-3-64	993	8.5	32 1.60	29 5.44	125 5.44	2.2 0.06	8.5 0.28	251 4.11	27 0.56	161 4.54	8.8 0.14		0.2		540	58	198	0	DNR
National Lead Co. Industrial	2S/3H-8Q1	6-3-64	1780	8.4	111 5.74	63 7.48	172 7.48	2.4 0.06	6 0.20	312 3.47	32 0.74	446 12.58	21 0.34		0.4		1120	43	494	310	DNR
A. Ratco Irrigation	2S/3H-28Q1	6-19-64	67	8.3	60 2.95	25 2.08	91 3.96	2.3 0.06	0 0.00	251 4.11	45 0.94	138 3.89	0.4 0.01		0.4		506	44	254	48	DNR
Soarea Irrigation	2S/3H-30Q2	6-3-64	4210	7.8	148 7.81	268 12.16	1168 11.68	8.2 0.21	0 0.00	238 3.90	128 2.86	1260 35.54	2.4 0.04		0.4		2800	28	1500	1305	DNR
Hobener Packing Co. domestic and industrial	2S/3H-33H3	6-19-64	65	8.1	34 1.70	19 1.56	81 3.32	3.4 0.09	0 0.00	315 5.16	36 0.75	27 0.76	0.8 0.01		0.4		364	51	163	0	DNR
Ralph A. Zobel Irrigation	2S/3H-34A2	6-19-64	67	7.3	70 3.49	61 3.40	48 2.09	0.4 0.01	0 0.00	316 5.18	68 1.42	40 1.13	64 1.03		0.3		506	23	345	86	DNR
John A. Jacklitch domestic	2S/3H-34D3	6-19-64	586	8.5	38 1.90	22 1.82	61 2.65	1.2 0.03	6.9 0.23	289 4.74	25 0.52	27 0.76	2.3 0.04		0.4		345	41	186	0	DNR
Alameda Naval Air Station Irrigation	2S/4H-3E1	6-3-64	790	7.6	33 1.65	19 1.59	106 4.61	1.7 0.04	0 0.00	288 4.72	33 0.69	87 2.45	1.0 0.02		0.3		464	58	162	0	DNR
Todd Shipyard Industrial	2S/4H-3F1	6-3-64	913	7.8	40 2.00	25 2.08	110 4.78	1.7 0.04	0 0.00	241 3.95	23 0.48	133 4.32	1.3 0.02		0.3		511	54	204	6	DNR
Alameda High School Irrigation	2S/4H-12R1	6-3-64	389	8.4	20 1.00	12 1.02	39 1.70	2.0 0.05	2 0.07	155 2.54	4.4 0.09	37 1.04	0.5 0.01		0.1		243	45	101	0	DNR
Ratco Irrigation	2S/4H-25A1	6-3-64	761	8.4	26 1.30	16 1.18	118 5.13	2.4 0.06	3 0.17	224 3.84	40 0.83	99 2.79	0.9 0.01		0.4		425	67	124	0	DNR
Byrnes-Warner Irrigation	3S/3H-7J1	6-19-64	1000	8.0	78 3.89	41 3.46	78 3.39	2.4 0.06	0 0.00	319 5.23	96 2.00	81 2.28	55 0.89		0.3		611	32	363	101	DNR
Hoffman domestic	3S/3H-8N2	6-30-64	1230	7.6	123 6.14	51 4.19	80 3.48	1.0 0.02	0 0.00	485 7.95	116 2.42	78 2.20	31 0.82		0.5		753	25	517	119	DNR
Kreger and Sons Industrial	3S/3H-19R4	6-19-64	66	1190	8.3	116 5.79	64 3.44	79 3.44	1.2 0.03	410 6.72	86 1.79	129 3.64	42 0.68		0.3		734	27	471	135	DNR

ANALYSES OF GROUND WATER

1964

Owner and use	Site well number and other number	Date sampled	Temp in °F	Specific conductance in micromhos at 25°C	Mineral constituents in parts per million										Total dissolved solids in ppm	Per cent total iron	HeOAs as CaCO ₃ Total ppm	Analyzed by		
					Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Calcium carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Boron (B)	Silica (SiO ₂)
					EAST BAY AREA OF SANTA CLARA VALLEY (Contd.)															
Al Matac Irrigation	35/24-30R14	6-19-64		1300	126 6.29	4.7 3.90	100 4.35	0.7 0.02	0 0.00	512 8.39	78 1.62	129 3.64	39 0.63		0.4	801	30	510	90	DMR
Lurman Estate Irrigation	35/24-31K1	6-29-64		656	18 0.90	23 1.92	88 3.83	2.0 0.05	6.5 0.15	254 4.16	61 0.85	51 1.44	0.3 0.00		0.4	361	57	141	0	DMR
Mt. Eden Nursery domestic and irrigation	35/24-32D2	6-29-64	74	798	34 1.70	10 0.82	125 5.44	2.1 0.05	0 0.00	273 4.47	56 1.12	84 2.37	0.7 0.01		0.5	458	68	126	0	DMR
Aviation Mortenson Co. Irrigation	35/34-1C3	6-19-64	74	1060	45 2.24	22 1.84	157 6.83	1.6 0.04	0 0.00	367 6.02	56 1.12	123 3.47	0.3 0.00		0.7	591	62	204	0	DMR
Trojan Powder Co. abandoned	35/34-1I1	6-19-64	70	1330	63 3.14	26 2.15	172 7.48	3.3 0.08	0 0.00	282 4.62	42 0.87	262 7.39	0.8 0.01		0.5	721	58	265	34	DMR
Clemell Irrigation	35/34-13B2	6-19-64		1910	113 5.64	77 6.31	220 9.57	1.0 0.02	0 0.00	678 11.11	196 4.08	166 4.68	52 0.84		1.2	1200	44	598	42	DMR
Greenwood Corp. domestic and irrigation	35/34-24J1	6-19-64	65	2040	135 6.74	92 7.56	186 8.09	1.7 0.06	10 0.33	472 7.74	150 3.12	331 9.90	38 0.61		0.7	1310	36	716	313	DMR
J. Horst domestic and stock	35/34-24Q2	6-19-64		2170	140 6.99	91 7.49	172 7.48	0.5 0.01	0 0.00	472 7.74	116 2.42	351 9.90	54 0.87		0.4	1450	34	725	338	DMR
Zwasek Brothert Irrigation	45/14-7F2	10-31-63		1020																DMR
		5-20-64		1000																DMR
Southern Pacific Railroad Irrigation	45/14-7R1	10-30-63		2080																DMR
		5-5-64		1700																DMR
		5-5-64		1040																DMR
Deconco Haseotic Home domestic, farm, and garden	45/14-7K5	5-5-64		1300	94 4.88	70 5.71	76 3.30	2.6 0.07	0 0.00	228 3.76	92 1.92	272 7.67	10 0.16		0.1 0.01	924	24	520	333	DMR
M. Freese Irrigation	45/14-17E4	10-16-63		1870																DMR
		5-5-64																		DMR

ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in F	Specific conductance (micro mhos at 25 C)	pH	Mineral constituents in equivalents per million											Total dissolved solids in ppm	Percent total Hardness as CaCO ₃	Analyzed by
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)			
Citizen's Utilities municipal	MOSEM 4S/1W-21P2	3-10-64	733	7.4	733	60	25	6.9	2.4	0	218	60	77	2.7	0.5		378	30	66
						2.99	2.06	2.13	0.06	0.00	3.57	1.25	2.17	0.04			ABS 0.0 Al 0.02 As 0.00 Cr +6 0.00 Cu 0.00 Pb 0.00 Mn 0.00 Zn 0.00 Phenol 0.00 Fe 0.00 (Total) Se 0.00	245	
J. W. Stocking Irrigation and Domestic	4S/1W-21K3	6-12-64	762	7.9	762	60	26	58	2.7	0	236	68	78	4.1	0.5		430	33	62
		2.99	2.12	2.52	0.07	0.00	3.87	1.42	2.20	0.07			ABS 0.0 Al +6 0.00 Cu 0.00 Pb 0.00 Mn 0.00 Zn 0.00 Phenol 0.00 Fe 0.02 (Total) Se 0.00	236		DNR			
Alameda County Water District municipal	4S/1W-21P6	9-10-63	623	7.6	623	76	7.2	52	3.2	0	265	78	28	6.0	0.65	1.5	367	34	13
		12-5-63	638		638	3.69	0.59	2.26	0.08	0.00	4.02	1.62	0.79	0.10	0.02			214	
Alameda County Water District municipal	4S/1W-21P6	10-24-63	643		643								30	0.85					
		12-5-63	736	7.6	736	63	2.9	43	1.7	0	269	72	55	3.2	0.3	0.02	423	25	58
		3-10-64	724	7.7	724	65	28	39	1.8	0	279	69	45	3.8	0.6		372	23	49
						3.24	2.29	1.70	0.03	0.00	4.37	1.44	1.27	0.06			ABS 0.0 Al 0.03 As 0.00 Cr +6 0.00 Cu 0.02 Pb 0.01 Mn 0.00 Zn 0.01 Phenol 0.00 Fe 0.02 (Total) Se 0.00	277	
5-6-64												49	0.5						
												1.38	0.01						

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conduct- ance (micro- mhos at 25° C)	pH	Mineral constituents in equivalents per million										Total dis- solved solids in ppm	Per- cent sod- ium in ppm	Hardness as CaCO ₃		Analyzed by	
						Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Bicar- bonate (CO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluo- ride (F)	Baron (B)			Silico (SiO ₂)	Other constituents		Total ppm
						EAST BAY AREA OF SANTA CLARA VALLEY (2-9) (Cont.)															
Alameda County Water District municipal	4S/14-21P6	6-12-64	734	7.9	67 3.34	2.6 2.17	48 2.09	2.0 0.03	0	2.56 4.20	69 1.44	62 1.73	4.4 0.07		0.6		422	27	276	66	DMR
Alameda County Water District municipal	4S/14-21P7	10-30-63	650	8.2	46 2.27	36 2.98	46 2.00	1.8 0.03	0	2.34 3.84	87 1.83	62 1.76	3.4 0.06	0.1 0.01	0.6	1.3	420	27	262	70	DMR
E. F. Nortonstein irrigation	4S/14-21R2	10-30-63	700	8.4	50 2.50	35 2.86	66 2.87	1.9 0.03	4.8 0.16	305 5.00	68 1.43	55 1.55	9.3 0.13	0.1 0.01	0.8	1.3	484	35	268	10	DMR
A. J. Rezendes irrigation	4S/14-22N2	10-21-63	820	8.6	16 0.82	17 1.42	175 7.60	6.0 0.13	15.6 0.32	356 5.84	76 1.58	67 1.89	2.7 0.04	0.1 0.01	2.1	1.8	638	76	112	0	DMR
Joseph S. Britra	4S/14-28R2	5-6-64	1690																		DMR
			825																		DMR
			888																		DMR
			620	8.3	38 1.86	29 2.36	53 2.30	1.9 0.03	3.6 0.12	181 2.96	87 1.82	59 1.67	4.7 0.08	0.1 0.01	0.6	1.5	382	35	211	57	DMR
Alameda County Water District municipal	4S/14-28C14	10-24-63	688																		DMR
			653																		DMR
J. M. Braga irrigation and domestic	4S/14-28P4	10-16-63	1190																		DMR
			1010																		DMR
			750																		DMR

ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in F	Specific conductance (micro-mhos/cm at 25° C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃ Total ppm	Analyzed by			
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Boron (B)				Silica (SiO ₂)	Other constituents	
EAST BAY AREA OF SANTA CLARA VALLEY (CONT.)																					
Alameda County Water District municipal	4S/1W-2809	5-6-64	763															DMR			
Washington Township Hospital domestic	4S/1W-2885	10-63	484															DMR			
	5-5-64		581															DMR			
L. S. Williams domestic	4S/1W-2881	10-31-63	1290	8.0		56 6.06	113 4.80	2.5 0.06	0 0.00	498 8.16	180 3.75	85 2.39	94 1.51	0.1 0.01	0.6	0.2	9.16	31	533	125	DMR
Cy Galdeira domestic	4S/1W-2938	4-29-64	2720															DMR			
	5-64		3000	8.0		293 10.60	200 8.70	4.5 0.12	0 0.00	541 8.86	93 1.94	794 22.40	13 0.21	0.1 0.01	0.9	1.4	2352	26	1255	812	DMR
Alameda County Water District municipal	4S/1W-29112	4-29-64	1760															DMR			
Alameda County Water District municipal	4S/1W-30E3	10-63	650			37 1.86	79 3.43	1.6 0.04	0 0.00	234 3.84	41 0.86	92 2.79	0.9 0.01	0.1 0.01	0.4	1.7	398	48	187	0	DMR
	5-6-64		745															DMR			
Joseph Talles	4S/1W-30N	9-11-63	660	8.1		90 4.29	31 1.35	1.1 0.03	0 0.00	252 4.13	88 1.83	29 0.82	4.3 0.07	0.4 0.02	0.1	3.6	430	19	278	71	DMR
W. E. Hutchins domestic	4S/1W-31A2	10-63	1200	8.0		86 4.18	58 3.47	80 0.07	22.4 0.00	55 3.66	55 1.14	266 7.51	0 0.00	0.1 0.01	0.4	1.4	774	28	447	264	DMR
	5-8-64		1100															DMR			
Alameda County Water District municipal	4S/1W-31B3	10-63	737															DMR			
	5-5-64		1110															DMR			
Frank Bechtart and domestic	4S/1W-32A5	5-5-64	2460															DMR			

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	Stole well number and other number	Date sampled	Temp in F	Specific conductance (micro-mhos/cm at 25° C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃	Analyzed by
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Calcium carbonate (CaCO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)			
EAST BAY AREA OF SANTA CLARA VALLEY (E-9) (Cont'd.)																		
Alameda County Water District	45/14-32P1	10-63	1300														DMR	
J. and V. C. Pismetto irrigation and domestic	45/14-33E1	4-29-64	1570														DMR	
R. Clark irrigation and domestic	45/14-33K1	10-16-63	1130														DMR	
Bertha Rose domestic	45/14-34Q4	10-22-63	1200	8.4													DMR	
O. N. Hirsch irrigation	45/14-34R2	10-63	590	8.1													DMR	
Alameda County Water District municipal	45/14-35P3	10-17-63	580	8.5													DMR	
Weigman domestic and irrigation	45/24-38L	10-14-63	550	8.5													DMR	
City of Hayward municipal	45/24-5A14	6-29-64	650	8.3													DMR	
J. F. & F. Baccenour irrigation	45/24-9Q2	6-29-64	4430	8.1													DMR	
Holly Sugar Industrial	45/24-10C1	10-16-63	530	8.3													DMR	

ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in F	Specific conductance in micro-mhos at 25° C	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃		Analyzed by		
						Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Bicor- bon- ate (CO ₃)	Sul- fates (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluo- ride (F)	Baron- ium (B)		Silico- dioxide (SiO ₂)	Other constituents		Total ppm	N.C. ppm
						EAST BAY AREA OF SANTA CLARA VALLEY (E-9) (Cont'd.)															
	<u>INDEX</u>																				
Holly Sugar Industrial	4S/24-10C1	5-25-64		623																DHR	
Alameda County Water District municipal	4S/24-10R6	10-24-63		573																DHR	
		5-5-64		664																DHR	
Santa Brothers and domestic	4S/24-10Q2	10-23-63		2700	8.0	301 15,000	126 10,440	157 6,883	4.0 0.10	0 0.00	417 6,884	368 7,466	61.0 17,280	5.5 0.09	0.1 0.01	0.5 1.7	1876	21	1270	928	DHR
		5-5-64		2940																DHR	
H. S. Andrade and irrigation	4S/24-10Q3	10-18-63		2100																DHR	
		5-5-64		2490																DHR	
J. I. Whipple abandoned	4S/24-11A2	10-24-63		866																DHR	
		5-64		820	7.8	72 3,600	33 2,770	68 2,935	0.8 0.02	0 0.00	3.8 5.86	66 1,330	53 1,689	3.1 0.30	0.1 0.01	0.2 1.8	520	32	315	22	DHR
Kilowatt Irrigation	4S/24-11C1	10-17-63		938																DHR	
		5-11-64		844																DHR	
M. Frels domestic	4S/24-11J1	10-23-63		890																DHR	
Benny Dutra domestic and irrigation	4S/24-11Q5	5-6-64		673																DHR	
Joe Coularte domestic	4S/24-11R12	10-63		974																DHR	
		5-7-64		1460																DHR	
Alameda County Water District municipal	4S/24-12C1	10-63		643																DHR	

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos/cm at 25° C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Per cent iron	Hardness as CaCO ₃		Analyzed by
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Iron (Fe)	Chloride (Cl)	Fluoride (F)	Bromine (Br)	Sulfate (SO ₄)	Other constituents	Total ppm			N.C. ppm		
						EAST BAY AREA OF SANTA CLARA VALLEY (Cont.)														
State of California	4S/1W-31D1	7-10-63		1990	8.6	92 4,59	0.6 0.05	326 14,18	14 0.36	10 0.33	208 3,41	57 1.19	500 14,10	0.9 0.01	0.3 0.02	0.27	16	232	45	DKR
E. R. Blacow irrigation, stock, and domestic	5S/1W-4D1	10-17-63		587									20 0.56	20						DKR
		5-4-64		587									0.56							DKR
J. E. Trindad stock and irrigation	5S/1W-6D1	10-23-63		2000	7.9	170 8,50	88 7.18	155 6,75	3.5 0.09	0 0.00	264 4,34	125 2.61	539 15,21	0 0.00	0.1 0.01	2.0	15	784	567	DKR
		5-5-64		2360									563 15,88							DKR
L. Milani irrigation	5S/1W-6G1	10-23-63		825	8.4	65 3,24	23 1.86	99 4,30	2.5 0.06	4.2 0.14	273 4,28	32 0.67	169 4,19	2.1 0.03	0.1 0.01	0.3	15	255	24	DKR
		5-7-64		2120									533 15,03							DKR
Alameda County East Bay Title Insurance Company domestic, duck pond	5S/1W-9J1	10-23-63		950	8.2	36 1,70	40 3,33	116 5,05	2.3 0.06	0 0.00	231 3,78	42 0.88	201 5,65	0 0.00	0.2 0.01	0.5	22	251	62	DKR
		5-5-64		1980									409 11,54		0.5					DKR
A. F. Brosius irrigation and domestic	5S/1W-9K1	10-22-63		860	8.2	46 2,28	43 3,27	87 3,80	4.3 0.11	0 0.00	281 4,60	56 1.17	135 3,81	3.6 0.06	0.1 0.01	0.3	25	287	57	DKR
		5-64		963									95 2,68							DKR
W. B. Brinker irrigation	5S/1W-9H1	5-64		1490									317 8,94							DKR
Lawrence Roland, Jr. water ponds	5S/1W-15C1	5-64		957									69 1,94							DKR
P. G. & E. Industrial and domestic	5S/1W-17A1	10-17-63		570	8.3	42 2,08	13 1,08	69 3,00	2.5 0.06	3.0 0.10	295 4,84	79 0.60	28 0.81	0.1 0.02	0.1	18	158	0	DKR	
		5-64		675									28 0,79							DKR
Phillip Encisco stock and domestic	5S/1W-181	10-24-63		520	8.5	19 0,94	3.3 0,27	113 4,90	1.4 0.04	12 0.40	283 4,64	25 0.53	20 0,57	0 0.00	0.1 0.01	0.4	20	60	0	DKR

ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in F	Specific conductance (micro-mhos at 25 C)	pH	Mineral constituents in parts per million equivalents per million										Total dissolved solids in ppm	Per cent sum	Hardness as CaCO ₃ ppm		Analyzed by		
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Barium (Ba)			Silica (SiO ₂)	Other constituents		Total	N.C.
	ND8841																					
Philip Encisco stock and domestic	55/24-181	5-6-64	582									18	0.31				0.4				DMR	
Wasteco Chemical Co. Industrial	55/24-1N1	5-7-64	435									13	0.37				0.2				DMR	
J. R. Coelho domestic	55/1E-31E1	9-20-63	643									22	0.62				0.4				DMR	
Winsor Bros. domestic	65/1E-7C1	8-21-63	586									23	0.65				0.2				DMR	
Azzarello Irrigation	65/1E-23M	8-27-63	828									65	1.83				2.6				DMR	
Shattuck Irrigation	65/1E-27C	9-25-63	954	8.1								31	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	DMR
R. Murray domestic	65/1E-28A4	8-21-63	590									31	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	DMR
N. Nuchido Irrigation and domestic	65/1E-30M1	9-23-63	540									21	0.59				0.4				DMR	
A. French Irrigation and domestic	65/1A-14E1	8-22-63	70	6.32								37	1.06				0.1				DMR	
	65/1A-15M3	8-16-63	66	4.50								15	0.42				0.1				DMR	
	65/1A-15Q1	8-31-63	70	11.90								87	2.45				0.8				DMR	
C. W. Danton Irrigation	65/1A-17M1	9-25-63	60	4.42								14	0.39				0.2				DMR	
G. H. Fukumoto domestic and Irrigation	65/1A-29C1	8-23-63	542									24	0.68				0.1				DMR	
Reconex domestic	65/24-9H1	8-26-63	68	5.68								30	0.85				0.2				DMR	

ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos/cm at 25°C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Per cent iron	Hardness as CaCO ₃	Analyzed by				
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Calcium carbonate (CaCO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Bromide (Br)	Silica (SiO ₂)	Other constituents	
						SOUTH BAY AREA OF SANTA CLARA VALLEY (2-9) (cont.)																	
	ND86A																						
Well irrigation	85/1E-13K	9-12-63	70	937																DAR			
Athens Bros. irrigation	85/1E-160L	8-15-63	70	369	7.9	30	22	13	2.7	0	181	27	8.5	2.4						DAR			
Farmatec domestic	85/1E-17B	8-6-63	62	360	7.9	28	22	12	0.9	0	177	25	8.5	1.0						DAR			
F. Nazzone domestic & irrigation	85/1E-27C1	9-10-63	62	733	8.3	39	57	32	0.6	0	280	91	27	36						DAR			
TEW Corp. irrigation	85/2E-7E	8-7-63	64	610	7.9	43	42	25	1.6	0	279	58	19	9.4						DAR			
Rouse domestic	85/2E-166L	9-12-63	70	531	8.2	50	29	21	1.3	0	260	42	20	7.6						DAR			
Kawashima	85/2E-171L	8-8-63	63	616		230	252	191	0.03	0.00	4,228	0.87	0.56	0.12						DAR			
Benson domestic	85/2E-34A1	8-8-63	61	558	7.8	46	31	26	1.4	0	220	66	18	26						DAR			
H. Ramke irrigation	95/2E-2C1	8-8-63	61	520	7.8	29	31	31	1.4	0	194	58	20	21						DAR			
J. Martinez irrigation	95/2E-22B3	8-9-63	68	459		145	235	135	0.06	0.00	3,118	1.21	0.56	0.35						DAR			
J. Chatri irrigation	95/2E-36F	8-12-63	64	463	8.1	44	17	27	1.9	0	203	21	22	22						DAR			
T. P. Bishop Co. irrigation	2S/1M-22A1	6-30-64	67	1050	8.3	76	18	118	2.6	4	306	13	168	0.6						DAR			
Alameda County domestic	3S/1E-3Q1	6-30-64	64	1280	8.2	123	5.0	148	1.6	0	448	70	133	29						DAR			
U. S. Air Force domestic and irrigation	3S/1E-8H3	6-30-64	65	895	8.2	64	56	37	1.6	0	358	53	80	9.5						DAR			
	3S/1E-9K2	6-30-64	65	1220	8.1	64	80	79	2.5	0	452	79	128	21						DAR			
						319	474	161	0.04	0.00	5,687	1.10	2.26	0.15									
						319	474	161	0.06	0.00	7,411	1.64	3.61	0.34									
											LIVERMORE VALLEY (2-10)												

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in F	Specific conductance (micro-mhos at 25° C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Hardness as CaCO ₃		Analyzed by		
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Calcium carbonate (CaCO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)		Boron (B)	Silica (SiO ₂)		Other constituents	Total ppm
						LIVERMORE VALLEY (2-E-10) (Cont.)															
Neillon	3S/1E-9J1	6-30-64	64	144.0	8.0	102 5.09	80 6.34	92 4.00	2.6 0.07	0 0.00	508 8.33	94 1.96	170 4.00	19 0.31	1.2		816	25	582	166	DMR
Jamison Irrigation	3S/1E-11E1	6-30-64	66	1300	8.3	94 4.69	81 6.68	53 2.30	2.4 0.06	0 0.00	44.9 7.36	45 0.94	177 4.99	14 0.22	0.7		743	17	569	201	DMR
Ed Hageman domestic and Irrigation	3S/1E-11H1	6-30-64	66	779	8.2	123 6.14	9.4 0.77	33 1.44	1.8 0.03	0 0.00	31.6 5.18	40 0.83	63 1.78	20 0.32	0.4	ABS 0.0	451	17	34.6	87	DMR
California Rock and Gravel Company domestic	3S/1E-13P2	6-30-64		696	8.1	97 4.84	1.2 0.10	52 2.26	1.6 0.04	0 0.00	275 4.51	44 0.92	58 1.64	1.4 0.02	0.9	ABS 0.0	364	31	24.7	21	DMR
H. J. Keiser Ind. domestic	3S/1E-15L1	6-30-64	64	546	8.1	87 4.34	3.6 0.30	25 1.09	1.1 0.03	0 0.00	222 3.64	36 0.75	31 0.87	13 0.21	0.2		304	19	232	50	DMR
M. Kruse Irrigation	3S/1E-17H2	6-30-64	66	1150	7.8	107 5.34	63 5.21	42 1.83	2.2 0.06	0 0.00	41.2 6.75	72 1.50	131 3.70	1.6 0.22	0.4		686	15	528	190	DMR

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in F	Specific conductance (micro-mhos/cm at 25° C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Percent calcium in ppm	Hardness as CaCO ₃ Total ppm	Analyzed by			
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Pates-Carbon-ate (CO ₃)		Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Bicarbonate (B)	Silica (SiO ₂)	Other constituents
									Sum (K)	Sum (K)												
	<u>ROBAM</u>																					
	12S/2E-18L1	5-21-64		454																DMR		
E. Yappert Irrigation and domestic	12S/2E-30E1	8-12-63	60	14000											0.6					DMR		
Bosser domestic	12S/2E-31A1	8-14-63	66	683																DMR		
		9-26-63	702																	DMR		
		5-20-64	687																	DMR		
Johnson Irrigation	12S/2E-32K1	9-26-63	585																	DMR		
		5-20-64	549	7.3	25 1,225	1.8 1,49	4.9 2.13	2.5 0.06	0 0.00	11.3 1.85	86 2.43	22 0.35			0.0			324	43	DMR		
F. Capurro & Sons domestic and irrigation	13S/2E-6F1	9-25-63	1330																	DMR		
		5-20-64	1370	8.3	18 0.90	7.0 0.58	24.3 10.57	5.7 0.14	0 0.00	220 3.60	256 1.87	0.7 0.01			0.2			759	87	DMR		
		6-17-64	486																	DMR		
T. Andrade Irrigation	9S/3E-25N3	6-17-64	467																	DMR		
P. L. Rudson Irrigation	10S/3E-1E2	6-17-64	468																	DMR		
J. Orlando Irrigation and domestic	10S/3E-23J1	6-17-64	448	7.5	31 1,335	26 2,115	18 0.78	0.8 0.02	0 0.00	197 3.23	13 0.27	36 0.38			0.0			276	17	DMR		
E. H. Henderson domestic and irrigation	10S/3E-26J1	6-17-64	432																	DMR		

ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conduct- in micro-mhos on 25° C	pH	Mineral constituents in parts per million										Total dis- solved in ppm	Per- cent total sum	Hardness as CaCO ₃		Analyzed by			
						Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Bicar- bonate (HCO ₃)	Sul- fide (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluo- ride (F)	Boran (B)			Silica (SiO ₂)	Other constituents		Total	N.C. ppm	
	NOR24					Calcium (Ca)	Magne- sium (Mg)	Sodium (Na)	Potas- sium (K)	Bicar- bonate (HCO ₃)	Sul- fide (SO ₄)	Chlo- ride (Cl)	Ni- trate (NO ₃)	Fluo- ride (F)	Boran (B)	Silica (SiO ₂)	Other constituents						
						CE ROY-HOLIFIELDSTER BASIN (3-3) (Cont.)																	
Vonkel domestic	10S/4E-17F1	6-17-64		700							12 0.25		8.5 0.14										
E. Nichols domestic and irrigation	10S/4E-18G2	6-17-64	4.94	7.6		39 1.95	28 2.33	18 0.78	1.0 0.02	0 0.00	214 3.31	18 0.51	22 0.35		0.1			289	15	214	39	DMR	
Walter Henz dom. and irrigation	10S/4E-18J1	6-17-64		447							17 0.35	18 0.51	8.5 0.14										
D. Wolfe irrigation and domestic	10S/4E-28D2	6-17-64	5.73	7.6		30 1.50	37 3.04	31 1.35	1.3 0.03	0 0.00	251 4.11	32 1.10	14 0.22		0.1			321	23	227	21	DMR	
S. Armendriz irrigation and domestic	10S/4E-34I5	6-17-64	7.06	7.5		48 2.40	37 3.04	42 1.83	1.4 0.06	0 0.00	303 5.03	39 1.10	32 0.52		0.1			426	25	272	20	DMR	
G. Hoang irrigation	11S/4E-46Q3	6-17-64		927							12 0.34	8.7 0.14											DMR
Hugh Hereman irrigation	11S/4E-48F2	6-17-64		517							43 0.90	23 0.63	3.6 0.09		0.3			317	19	231	21	DMR	
Mrs. C. R. Lanini domestic	11S/5E-27H1	6-17-64	5.57	7.6		50 2.50	26 2.12	26 1.13	1.3 0.03	0 0.00	256 4.20	23 0.63	3.6 0.09		0.3			1510	26	875	475	DMR	
Ferry Morse Seed Co. irrigation	12S/4E-34P2	6-18-64	2160	7.5		10.38	6.50	6.05	0.08	0.00	8.00	8.83	6.88	0.44									DMR
Olympic School domestic	12S/4E-35C1	6-18-64	1760								254 7.37				0.9								DMR
M. Diaz domestic	12S/4E-36G1	6-18-64	2040	7.9		89 4.44	140 11.54	157 6.83	4.0 0.10	0 0.00	617 10.11	651 9.39	1.8 0.03		1.2			1380	30	800	294	DMR	
	12S/5E-28N1	9-18-63	4820	7.8							11 0.28	1200 36.30			1.2			2560	76	516		DMR	
	12S/5E-28C2	9-18-63	2370	8.1							4.2 0.11	210	5.92		1.3			1650	31	948		DMR	
	12S/5E-29G1	9-17-63	4330	8.4							12 0.31	1200 33.09			1.2			2330	78	434		DMR	
	12S/5E-29C2	9-18-63	2000	8.3							4.6 0.12	272	7.67		1.3			1210	53	485		DMR	

ANALYSES OF GROUND WATER

1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos at 25° C)	pH	Mineral constituents in equivalents per million										Total dissolved solids in ppm	Hardness as CaCO ₃ ppm	Analyzed by				
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Patato-Carbon-Sulfate (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Barium (B)				Silica (SiO ₂)	Other constituents		
	NIDBOM																					
J. Tate domestic and irrigation	135/ZE-20R2	8-23-63	65	1200	7.8	87 4.34	36 2.93	91 3.96	3.8 0.10	0	186 7.72	60 1.25	237 6.40	4.6 0.77	0.0		743	35	364	228	DHR	
Permanente Industrial	135/ZE-29C4	8-23-63	66	1290																		DHR
J. J. King irrigation	135/ZE-3102	8-22-63	70	770	8.1	46 2.28	16 1.30	104 4.50	3.1 0.08	0	222 3.64	30 0.762	144 4.05	1.3 0.02	0.1 0.01	0.3	37	476	55	179	0	DHR
Nolera Estate domestic	135/ZE-31K2	8-22-63	69	545	8.3	45 2.24	12 0.99	61 2.65	2.4 0.06	4.8 0.16	228 3.74	17 0.36	64 1.80	1.7 0.03	0.1	0.1	32	330	22	162	0	DHR
E. Ballone irrigation	135/ZE-31K2	8-22-63	63	1400	8.1	93 4.67	50 4.06	135 5.87	4.5 0.12	0	179 2.94	62 1.30	364 10.25	0.8 0.01	0.2 0.01	0.2	33	886	40	436	289	DHR
irrigation	135/ZE-32A2	8-27-63	73	648	8.2	45 2.24	20 1.64	62 2.70	3.0 0.08	0	244 4.00	12 0.25	78 2.20	3.1 0.05	0.1	0.1	32	379	40	194	0	DHR
O. P. Overhouse irrigation	135/ZE-32C1	8-23-63	62	515	8.3	44 2.20	12 1.02	55 2.40	2.5 0.06	8.4 0.28	207 3.40	15 0.32	60 1.69	0.8 0.01	0.1	0.1	32	306	42	161	0	DHR
Nolera Estate irrigation	135/ZE-32N1	8-29-63	71	564																		DHR
C. Risantelli irrigation and domestic	135/ZE-33R1	8-27-63	66	890	8.0	83 4.14	27 2.23	56 2.44	3.9 0.10	0	261 3.93	97 2.02	102 2.88	1.0 0.16	0.0		551	27	319	121		DHR
Mrs. L. Martin irrigation and domestic	145/ZE-4Q1	8-21-63	73	570	8.4	33 1.68	12 1.00	81 3.50	3.0 0.06	3.0 0.10	220 3.60	40 0.84	60 1.69	2.1 0.03	0.1 0.01	0.2	39	364	56	133	0	DHR
E. Struve irrigation	145/ZE-6R2	8-21-63	65	561																		DHR
Dorothy V. Orcutt irrigation	145/ZE-9K1	9-30-63	68	1050	8.1	86 4.29	27 2.68	66 2.87	4.5 0.12	0	181 2.97	105 2.19	167 4.71	1.4 0.02	0.1		628	29	349	201		DHR
E. C. Eaton irrigation	145/ZE-12Q1	8-22-63	62	500	8.5	58 2.86	17 1.39	37 1.60	1.9 0.05	12 0.40	230 3.76	18 0.38	4.3 1.19	4.7 0.08	0.2 0.01	0.1	27	316	27	213	5	DHR
L. A. Wilder domestic	145/ZE-14N1	8-22-63	62	627																		DHR
Monterey County Bank irrigation and domestic	145/ZE-15L1	8-22-63	64	587																		DHR

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos at 25° C)	pH	Mineral constituents in parts per million equivalents per million										Total dissolved solids in ppm	Hardness as CaCO ₃ ppm	Analyzed by		
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Calcium carbonate (CaCO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)				Barium (B)	Silica (SiO ₂)
	<u>NOBEX</u>																			
John W. Druett irrigation	14S/2E-16A1	8-23-63	67	664					SALINAS VALLEY (3-4) (Cont.)									DMR		
N. T. OeSerpa irrigation	14S/2E-24E1	8-28-63	68	621	8.1	4.7 2.34	1.8 1.46	52 2.26	3.1 0.08	0 0.00	203 3.33	38 0.79	69 1.95	3.0 0.05	0.1	378	37	190	24	DMR
H. T. OeSerpa irrigation	14S/2E-23B1	8-28-63	64	1090									1.2 4.65	0.2					DMR	
O. P. McFadden irrigation	14S/2E-35Q1	8-20-63	66	440	8.3	4.8 2.41	1.3 1.06	29 2.25	2.9 0.07	2.4 0.08	167 2.42	88 1.85	18 0.49	0.8 0.01	0.1	300	26	173	48	DMR
A. Ebnatri irrigation and domestic	14S/3E-30E1	8-22-63	62	1750	8.0	12.0 6.01	7.6 6.26	167 7.25	5.3 0.14	0 0.00	307 5.04	235 4.31	326 9.21	1.0 0.10	0.1	1218	37	613	361	DMR
P. G. & E. municipal	14S/3E-33C1	8-19-63	64	660	8.3	5.0 2.47	2.5 2.08	58 2.50	2.8 0.07	3.6 0.12	197 3.24	73 1.52	74 2.09	4.3 0.07	0.1	464	35	227	59	DMR
irrigation and domestic	15S/2E-1M3	8-24-63	64	454	8.2	4.7 2.34	1.3 1.04	26 1.13	3.4 0.09	0 0.00	162 2.86	66 1.37	15 0.42	2.0 0.02	0.0	251	25	169	36	DMR
L. Jacks irrigation	15S/2E-2Q1	7-63	62	1010	8.0	6.2 3.09	5.7 4.65	37 3.26	4.1 0.10	0 0.00	257 4.21	217 4.52	76 2.16	0.5 0.01	0.1	684	29	387	176	USGS
irrigation	15S/3E-4X3	8-12-63	66	674									37 1.06	0.2					DMR	
F. Giattinni domestic and irrigation	15S/3E-7Q1	8-13-63	60	1240	8.1	9.7 4.58	7.2 5.85	82 3.55	4.7 0.12	0 0.00	246 4.04	314 6.54	130 3.67	0 0.00	0.1	976	25	521	319	DMR
K. R. Nutting irrigation	16S/4E-24A1	8-1-63	60	1610	7.8	10.3 5.14	7.3 5.99	134 5.83	4.9 0.12	0 0.00	196 3.21	439 9.14	127 3.58	55 0.85	0.4	1120	34	557	396	DMR
J. C. Tusselman irrigation	16S/4E-25K1	8-1-63	60	1130									292 6.08	0.2					DMR	
Field Estates	17S/5E-14Q1	5-25-64		723	8.1	5.9 2.94	1.9 1.58	59 2.57	3.5 0.09	0 0.00	218 3.57	76 1.58	70 1.97	15 0.25	0.0	422	36	226	47	DMR
N. Baker irrigation	17S/6E-27K1	7-29-63	67	1370	8.2	12.9 6.44	5.3 4.35	95 4.13	3.9 0.10	0 0.00	290 4.75	348 7.24	95 2.66	4.8 0.06	0.3	978	27	540	302	DMR

Al 0.05 As 0.00
Cu 0.01 Pb 0.00
Mn 0.00 Zn 0.01
Phenol 0.00
Fe 0.26 (total)

ANALYSES OF GROUND WATER

1964

Owner and use	Site well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos/cm @ 25° C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Dis-sol. Solids in ppm	Per-cent non-hardness	Hardness as CaCO ₃ ppm	Analyzed by	
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Calcium Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)						Boron (B)
	MSB&K							SALINAS VALLEY (3-4) (Cont'd.)													
Mort Baker Irrigation	175/6E-33F1	7-29-63	63	1150		6.5 3.24	82 3.57	4.4 0.11	0 0.00	24.9 4.08	156 3.25	38 1.07	78 2.720	10 0.16	0.8	0.3	528	41	255	51	DKR
L. M. & V. Jacke Irrigation	185/6E-1E1	7-24-63	68	830	8.1																DKR
L. Jacke Irrigation	185/6E-2N1	8-29-63	60	1180																	DKR
Kaiser stock	195/7E-17P1	5-25-64	1470	8.2		14.5 7.24	103 4.48	0 0.00	2.38 3.90	0 0.00	105 2.96	322 6.70	105 2.96	0.2	0.1						DKR
B. J. Marks domestic and Irrigation	195/7E-17Q2	5-25-64	1260	7.9		11.6 5.79	77 3.35	0 0.00	24.0 3.93	0 0.00	163 4.60	322 6.70	163 4.60	0.1	0.1						DKR
A. Dirate Irrigation	205/8E-5R1	5-25-64	1750	8.2		12.9 6.44	178 7.74	4.8 0.12	0 0.00	29.0 4.75	40.7 8.47	180 5.08	180 5.08	0.6 0.01	1.0		1210	42	536	298	DKR
	245/12E-17L2	9-23-63	74	1462	7.3	10.1 5.70	63 3.18	5 0.13	0 0.00	32.0 5.24	46.9 9.76	47 1.33	47 1.33	5.5 0.09	0.6	0.46	1075		511		DKR
	245/12E-17F	9-24-63	66	1664	7.8	5.2 2.59	180 8.22	4 0.10	0 0.00	52.5 8.60	29.4 6.12	145 4.09	145 4.09	4.0 0.06	1.35	4.0	1020		561		DKR
	245/12E-33C3	9-24-63	70	1404	7.8	6.6 3.29	65 3.17	3 0.08	0 0.00	52.2 8.56	188 3.91	113 3.19	113 3.19	7.5 0.12	1.10	0.8	870		432		DKR
	255/12E-16N1	9-23-63	68	814	7.6	3.7 1.85	40 3.39	3 0.08	0 0.00	30.3 4.97	7.6 1.38	68 1.92	68 1.92	1.5 0.24	0.7	0.35	480		257		DKR
	255/12E-28R1	9-24-63	62	1965	7.4	15.5 7.73	92 4.81	3 0.08	0 0.00	48.1 7.88	47.5 9.89	176 4.96	176 4.96	5.5 0.09	0.60	0.3	1390		778		DKR
	255/12E-19R1	9-24-63	66	540	8.1	3.5 1.75	28 2.30	2 0.05	0 0.00	24.6 4.03	1 0.02	40 1.13	40 1.13	2.4 0.39	0.8	0.12	315		203		DKR
	255/14E-33Q1	9-24-63	63	631	8.3	3.1 1.55	22 3.13	3 0.08	0 0.00	30.4 4.96	42 0.87	24 0.68	24 0.68	6.4 0.10	0.7	0.46	407		168		DKR
	265/12E-22P2	9-26-63	68	725	8.3	3.4 1.70	21 1.73	3 0.08	3 0.08	14 4.47	38 0.79	58 1.64	58 1.64	1.0 0.4	0.38	0.47	450		172		DKR
	265/14E-35D1	9-26-63	72	478	7.6	4.1 2.05	10 0.82	4 0.10	0 0.00	17.6 2.88	24 0.50	43 1.21	43 1.21	1.0 0.16	0.5	0.06	300		144		DKR

TABLE E-1

ANALYSES OF GROUND WATER

1964

Owner and use	State well number and other number	Date sampled	Temp in F	Specific conductance (micro mhos/cm at 25° C)	pH	Mineral constituents in parts per million													Total dissolved solids in ppm	Per cent sodium	Hardness as CaCO ₃ Total ppm	N.C. ppm	Analyzed by
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Bromine (Br)	Silica (SiO ₂)	Other constituents						
	MDBAM					SALINAS VALLEY (CONT.)																	
	265/13E-2R1	9-24-63	72	2146	8.4	36	5	442	4	24	283	530	182	2.0	0.5	1.85	28	1370	111	DMR			
						180	0.41	19,22	0.10	0.80	4.04	11,03	5.13	0.03							DMR		
	265/13E-2OR1	9-26-63	73	374	7.8	62	6	32	0	156	31	17	1.3	0.2	0.04	47	265	122	DMR				
						210	0.33	1,39	0.08	0.00	2.56	0.65	0.48	0.21							DMR		
	265/16E-31B1	9-26-63	74	1634	7.9	34	21	310	2	0	339	356	107	5.2	1.2	2.00	22	1060	172	DMR			
						170	1.73	13,48	0.05	0.00	5.56	7.37	3.02	0.84							DMR		
	275/12E-3E2	9-26-63	70	822	8.1	66	40	68	0	328	15	104	1.0	0.3	0.10	45	510	329	DMR				
						329	3.29	2,09	0.05	0.00	3.39	0.31	2.93	0.16							DMR		
	275/12E-29P2	7-10-63	63	1170	7.4	180	34	46	1	0	324	312	73	7.3	0.1	0.09	23	904	589	DMR			
						898	2.80	2,00	0.03	0.00	5.31	6.50	2.06	0.12							DMR		
	275/12E-29P3	7-10-63	69	970	7.8	124	41	38	1	0	311	231	48	3.2	0.1	0.11	21	724	478	DMR			
						619	3.37	1,65	0.03	0.00	5.10	4.81	1.35	0.05							DMR		
	275/12E-29E4	7-10-63	59	770	7.5	87	37	32	2	0	293	154	30	2.7	0.2	0.13	18	548	369	DMR			
						434	3.04	1,39	0.05	0.00	4.80	3.21	0.85	0.06							DMR		
	275/12E-30C3	7-11-63	62	900	7.4	113	38	37	1	0	314	169	41	3.2	0.2	0.11	23	654	439	DMR			
						564	3.13	1,61	0.03	0.00	5.15	3.52	1.16	0.05							DMR		
	275/12E-32C4	7-11-63	60	1210	7.6	131	79	46	2	0	360	192	62	1.4	0.2	0.10	21	1084	653	DMR			
						654	6.50	2,00	0.05	0.00	5.90	7.33	1.75	0.23							DMR		
	275/12E-32Q1	7-10-63	63	770	8.0	69	49	35	1	0	253	180	38	0.0	0.2	0.08	19	620	374	DMR			
						346	4.03	1,52	0.03	0.00	4.15	3.75	1.07	0.00							DMR		
	275/13E-9P1	9-26-63	73	653	8.4	14	9	130	2	24	327	172	23	4.0	0.4	0.38	44	410	72	DMR			
						070	0.76	5,65	0.05	0.80	5.36	0.75	0.83	0.06							DMR		
	275/13E-10R2	9-25-63	63	635	7.7	86	12	35	2	0	305	41	24	2.6	0.2	0.10	41	390	264	DMR			
						429	0.99	1,52	0.05	0.00	5.00	0.85	0.68	0.42							DMR		
	275/13E-13A1	9-25-63	72	4478	7.5	196	97	720	5	0	290	927	840	22	0.9	2.50	22	3008	786	DMR			
						978	5.92	31,31	0.00	0.00	4.75	19.30	23.69	0.35							DMR		
	275/16E-23N1	9-25-63	70	772	8.6	34	13	110	3	0	293	60	5.6	1.2	0.6	0.44	34	482	139	DMR			
						170	1.07	4,78	0.08	0.00	4.80	1.25	1.38	0.19							DMR		
	285/12E-4J2	7-10-63	58	650	7.7	106	34	25	1	0	229	136	22	2.3	0.1	0.09	22	480	405	DMR			
						529	2.80	1,09	0.03	0.00	3.75	2.83	0.62	0.04							DMR		
	285/12E-10R2	9-27-63	62	875	7.8	86	48	38	2	9	327	155	49	1.5	0.4	0.04	28	540	412	DMR			
						429	3.95	1,65	0.03	0.00	5.36	3.23	1.38	0.02							DMR		

ANALYSES OF GROUND WATER

1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductance (micro-mhos/cm at 25° C)	pH	Mineral constituents in parts per million										Total dissolved solids in ppm	Per cent calcium	Hardness as CaCO ₃ Total ppm	Analyzed by			
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)					Boron (B)	Silica (SiO ₂)	Other constituents
	MDR&M																					
	288/12E-1A12	7-9-63	62	570	8.0	50 2,50	35 2,88	26 1,13	1 0	0 0,00	246 4,00	75 1,56	28 0,79	5,2 0,06	0,2 0,05	2,0	446	269	DMR			
	288/12E-24F2	7-9-63	62	490	7.7	46 2,30	23 1,89	27 1,17	1 0	0 0,00	191 3,13	64 1,33	22 0,62	5,7 0,09	0,2 0,05	1,8	356	210	DMR			
	288/12E-2581	7-10-63	61	540	7.7	51 2,54	33 2,77	20 0,87	1 0	0 0,00	210 3,44	85 1,77	20 0,56	9,2 0,15	0,2 0,01	2,2	400	263	DMR			
	288/12E-2582	7-10-63	61	530	7.5	50 2,50	27 2,22	24 1,04	1 0	0 0,00	212 3,36	69 1,44	20 0,56	6,8 0,11	0,1 0,09	1,7	340	236	DMR			
	288/13E-31R2	9-27-63	68	1117	7.7	91 4,54	60 5,76	60 2,61	1 0	0 0,00	451 7,39	178 3,71	66 1,86	1,0 0,02	0,4 0,01	2,4	675	515	DMR			
	288/16E-14N1	9-25-63	62	561	7.9	47 2,35	22 1,81	35 1,52	1 0	0 0,00	168 2,75	102 2,12	24 0,68	11 0,18	0,4 0,04	3,5	340	208	DMR			
									GARRETT VALLEY (3-7)													
R. Odello irrigation	16S/1W-13L1	8-7-63	62	735	8.1	70 3,49	22 1,78	47 2,04	4,6 0,12	0 0,00	218 3,57	96 2,00	62 1,75	1,1 0,02	0,1		450	27	264	85	DMR	
Carnel Sewage Treatment Plant Industrial	16S/1W-13L2	8-7-63	61	1000	8.1	88 4,39	25 2,06	79 3,44	4,9 0,12	0 0,00	265 4,34	106 2,21	12,6 3,55	1,4 0,02	0,1		611	34	323	106	DMR	
B. Odello irrigation	16S/1W-13R1	8-7-63	62	708																	DMR	
	16S/1E-16L1	8-7-63	75	326																	DMR	
E. Huber irrigation	16S/1E-16N1	8-7-63	60	812	8.0	89 4,44	23 1,93	48 2,09	2,6 0,07	0 0,00	128 4,21	128 2,66	51 1,44	0,9 0,01	0,1		516	24	319	108	DMR	
Harbert irrigation and domestic	16S/1E-17G1	8-7-63	66	1200	8.2	124 6,19	29 2,40	92 4,00	5,0 0,13	0 0,00	362 5,00	170 3,54	131 3,70	0,3 0,00	0,1		767	31	630	150	DMR	
	16S/1E-18K1	8-7-63	61	650																	DMR	
B. Odello irrigation	16S/1E-18P1	8-29-63	61	584																	DMR	

TABLE E-1
ANALYSES OF GROUND WATER
1964

Owner and use	State well number and other number	Date sampled	Temp in °F	Specific conductivity (micro-mhos at 25° C)	pH	Mineral constituents in parts per million						Total dissolved solids in ppm	Hardness as CaCO ₃		Analyzed by						
						Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)		Sulfate (SO ₄)	Chloride (Cl)		Nitrate (NO ₃)	Fluoride (F)	Boron (B)	Silica (SiO ₂)	Other constituents	Total ppm
E. Holt Irrigation	NURSE 165/1E-2561	8-6-63	65	537	7.8	4.6	1.5	3.8	0	0	135	92	0.35	0.3	0.0	0.0	324	29	178	67	DMR
						2.30	1.26	1.48	0.10	0.00	2.21	1.72	0.39	0.00							
						CAMEL VALLEY (3-7) (cont.)															

RADIOASSAYS OF GROUND WATER

WELL NUMBER	DATE SAMPLED	DATE ANALYZED	RADIOASSAY IN PICO CURIES PER LITER				GROSS ACTIVITY
			SUSPENDED ACTIVITY		DISSOLVED ACTIVITY		
			ALPHA	BETA	ALPHA	BETA	
			SANTA CLARA VALLEY 2-9 (East Bay)				
4S/1W-21F2	9-5-63	11-12-63	0 ± 0.5	1.9 ± 6.0	0 ± 0.5	1.6 ± 6.0	4.6 ± 4.6
4S/1W-21F2	12-5-63	1-8-64	0 ± 0.3	0 ± 6.0	0.1 ± 0.4	1.1 ± 6.0	
4S/1W-21F2	3-10-64	3-17-64 3-16-64	-0.10 ± 0.80	-4.16 ± 7.57	-2.12 ± 0.91	11.57 ± 12.77	
4S/1W-21F2	6-12-64	1-9-63 1-8-64	0 ± 0.5	7.0 ± 8.0	0 ± 0.5	4.2 ± 5.9	
4S/1W-21P6	12-5-63	3-17-64 3-16-64	0 ± 0.4	0.44 ± 6.1	0 ± 0.4	0 ± 6.1	
4S/1W-21P6	3-10-64		0.70 ± 1.05	-7.37 ± 8.42	0.0 ± 2.61	-19.35 ± 12.33	
4S/1W-21P6	6-12-64						



0674
2159
2290
7916
8680
9675

1170
1247
1339
1730-0
1766
2322
3417
3422
3928
4022
4022-1
4025
4035
5853
5844
5973
5973-1
6610
7190
7249
7719
7755
7835
8447
9189
9473

0322
2362
3238
3502
3591
3722
4555
5795
6850
6926
7150
7668
7669
7845-14
7959-14
8276
8338
8338-01
8446
8446-01

0360-01
1034
4963
5017
6703
6706
7672
7734
8449
9221

0790
0998-21
1534
5184
6856
7249-21
7539-01
7731

5120-03
5869
7024

9179



D3

D6

LEGEND

- TYPE OF DATA
- ● ○ PRECIPITATION ONLY
 - ○ ○ PRECIPITATION, STORAGE
 - ● ○ PRECIPITATION AND TEMPERATURE
 - ◆ ○ PRECIPITATION, TEMPERATURE AND EVAPORATION

TYPE OF GAGE

- NON-RECORDING
 - RECORDING
 - BOTH TYPES
- USWB STATIONS SHOWN IN BLACK
OTHER STATIONS SHOWN IN RED

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN FRANCISCO BAY DISTRICT

CLIMATOLOGICAL STATIONS
IN THE
CENTRAL COASTAL AREA
1964



CLIMATOLOGICAL STATIONS

SANTA CRUZ COAST (No. D0)

0674	Eco Lagoon
1159	Crest Ranch
2290	Deverport
7916	Santa Cruz
7640	Sunset Beach State Park
9475	Wildcat Ranch

PAJARO-SAN BENITO RIVERS (No. D1)

1170	Buena Vista
1247	Buzzard Lagoon
1329	Chilcenden Pass
1330-01	Chilcenden
1366	Cienega
3232	Freedom 8 NW
3417	Gilroy
3422	Gilroy 14 ENE
3478	Hartman 7 SE
1022	Hollister
1027-10	Hollister Costa
4025	Hollister No. 2
4035	Hollister 10 ENE
5853	Morgan Hill SCS
5854	Morgan Hill 2 E
5973	Mount Madonna
3373-11	Mt. Madonna Co. Park
6610	Palmer Overhill Ranch
7190	Quinn Sabe - Hay Camp
7249	Rancho Quin Sabe
1111	San Benito
1755	San Felipe Highway Station
7635	San Juan Bautista Mission
8447	Spreckels Hill-Laguna Seca
9189	Upper Tres Pinos
6473	Watsonville Water Works

LOWER SALINAS RIVER (No. D2)

0322	Arroyo Seco
3252	Del Norte
3268	Fremont Peak State Park
3502	Gonzales 9 ENE
3591	Greenfield ESE
3722	Hamer Valley
4515	King City
3795	Monterey
8450	Palomares
6126	Pioneros National Mon.
1150	Priest Valley
7668	Salinas 2 E
7669	Salinas FAA Airport
7716	San Ardo
7843-10	San Lucas Guidici
1939-10	Santa Rita Mother
8276	Siack Canyon
8338	Soledad
8338-01	Soledad CDF
8446	Spreckels Hwy. Bridge
8446-01	Spreckels

UPPER SALINAS RIVER (No. D3)

0260-01	Atascadero HOS
1034	Adley
1963	Elgin Ranch
5017	Lockwood 2 N
6703	Parkfield
6706	Parkfield 7 NW
7877	Salinas Dam
7714	San Antonio Mission
1349	Templeton
6221	Valleton

MONTEREY COAST (No. D4)

5190	Big Sur State Park
9493-27	Southers Cap
1534	Carmel Valley
1124	Lucia Willow Springs
1856	Pico Blanco E.S. Camp
7248-21	Rancho Rito
1519-01	Roseville Ranch
7231	San Clemente Dam

SAN LUIS OBISPO COAST (No. D5)

5170-03	Los Burros
5419	Morro Bay 3 N
1024	Point Piedra Blanca

SANTA MARIA-CUYAMA RIVERS (No. D6)

1175	Upper Horse Creek
------	-------------------

COAST-MARIN (No. E1)

MARIN-SONOMA (No. E2)

3134	Hamilton A.F.B.
4100	Kestfield
3547	Mill Valley
6790-02	Movato Fire House
6356	Oakville 4 SW No. 2
6826	Petaluma F. S. No. 2
6826-01	Petaluma - Burns
6829	Petaluma 1 W
6833	Phonola Lake Dam
7107-01	San Anselmo
7850	San Rafael
7830-08	San Rafael Nat. Bear
8331	Socoma
8779	Tamapala Valley
8970-21	Tiburon-Topham

NAPA-SOLANO (No. E3)

0212	Angelo Fac. Union Col
0372	Atlas East
1312	Calistoga
1572	Carmichael Valley
1919	Collinsville
1976	Conn
2309-45	Deverport 1 S
2580	Dutons Landing
2933	Fairfield
2934	Fairfield Police Sta.
3012-01	Green Valley
4677	Lake Curry
5333	Napa Island
5905	Napa
6068	Napa Haven
6074	Napa State Hospital
6331	Oakville 1 NW
6354	Oakville 4 SW
7863	Saint Helena
7864	Saint Helena 4 NW
9006	Travis Air Force Base
9305	Veterans Home
9875-41	Wild Horse Valley
9861	Yountville Gamble

NAPA-SOLANO (No. E3)

0064	Alamo 1 N
0650	Belkeley
1216	Burton Ranch
1962	Comstock 3 E
2177	Crocker
3863	Hayward 6 ESE
4633	Lafayette 2 NW
5371	Martinez 3 S
5372	Martinez 3 SSE
5957	Martinez Fire Station
5913	Nt. Diablo North Gate
6323	Oakland VP AF
7070	Fort Chicago NAD
7416	Richmond
7803	Saint Mary's College
4185	Upper San Leandro Filters
9430	Walser School
9423	Walnut Creek 2 ESE
9426	Walnut Creek 2 ENE
9427	Walnut Creek 4 E

EAST BAY (No. E4)

1781	Calaveras Reservoir
3387	Gerber Ranch
4096	Livermore Sewage Plant
4597	Livermore 2 SW
5933	Mt. Hamilton
6164	Nevert
6189-03	Niles S. F. Depot
6991-05	Pleasanton Nursery

ALAMOGA CREEK (No. E5)

0053	Alamo Park Pond
0125	Alameda Reservoir
0706	Bearyassa 1 E (Toyon Ave.)
0830	Black Mountain 2 SW
1225	Cairo Reservoir
1341-10	Cambrian Park
1377-01	Campbell Water Co
3109	Coyote Reservoir
2919	Evangelina-Silver Cr. Rd.
3419	Gilroy 8 NE

SANTA CLARA VALLEY (No. E6)

7681	Guadalupe Reservoir
4916	Leroy Anderson Dam
4922	Lexington Reservoir
5123	Los Gatos
5123-04	Los Gatos-Old Orchard Rd.
5135	Los Gatos 4 SW
5046	Morgan Hill 6 NW
5897-01	Mt. View F. S.
6646	Palo Alto City Hall
6791-43	Penitencia Rato Co.
7339	Redwood City
7821	San Jose
7824	San Jose Derid. P. F. 1
7912	Santa Clara University
7998-01	Saratoga-Clark
7998-03	Saratoga-Krlege
8068	Saratoga-Lake
8519	Slovens Creek Reservoir
9210	Watson Reservoir
9814	Wright

SANTA CLARA VALLEY (No. E6) Cont'd

7681	Guadalupe Reservoir
4916	Leroy Anderson Dam
4922	Lexington Reservoir
5123	Los Gatos
5123-04	Los Gatos-Old Orchard Rd.
5135	Los Gatos 4 SW
5046	Morgan Hill 6 NW
5897-01	Mt. View F. S.
6646	Palo Alto City Hall
6791-43	Penitencia Rato Co.
7339	Redwood City
7821	San Jose
7824	San Jose Derid. P. F. 1
7912	Santa Clara University
7998-01	Saratoga-Clark
7998-03	Saratoga-Krlege
8068	Saratoga-Lake
8519	Slovens Creek Reservoir
9210	Watson Reservoir
9814	Wright

BAYSIDE-SAN MATEO (No. E7)

7106	Burlington
7169	San Francisco WS AP
7172	San Francisco Fed. Office Bldg.
7804	San Mateo

COAST-SAN MATEO (No. E8)

3726	Half Moon Bay 2 NW
4660	La Bonda
7085	Portola State Park
7767	San Francisco Richmond Sunset
7807	San Gregorio 3 SE

MENDOCINO COAST (No. F9)

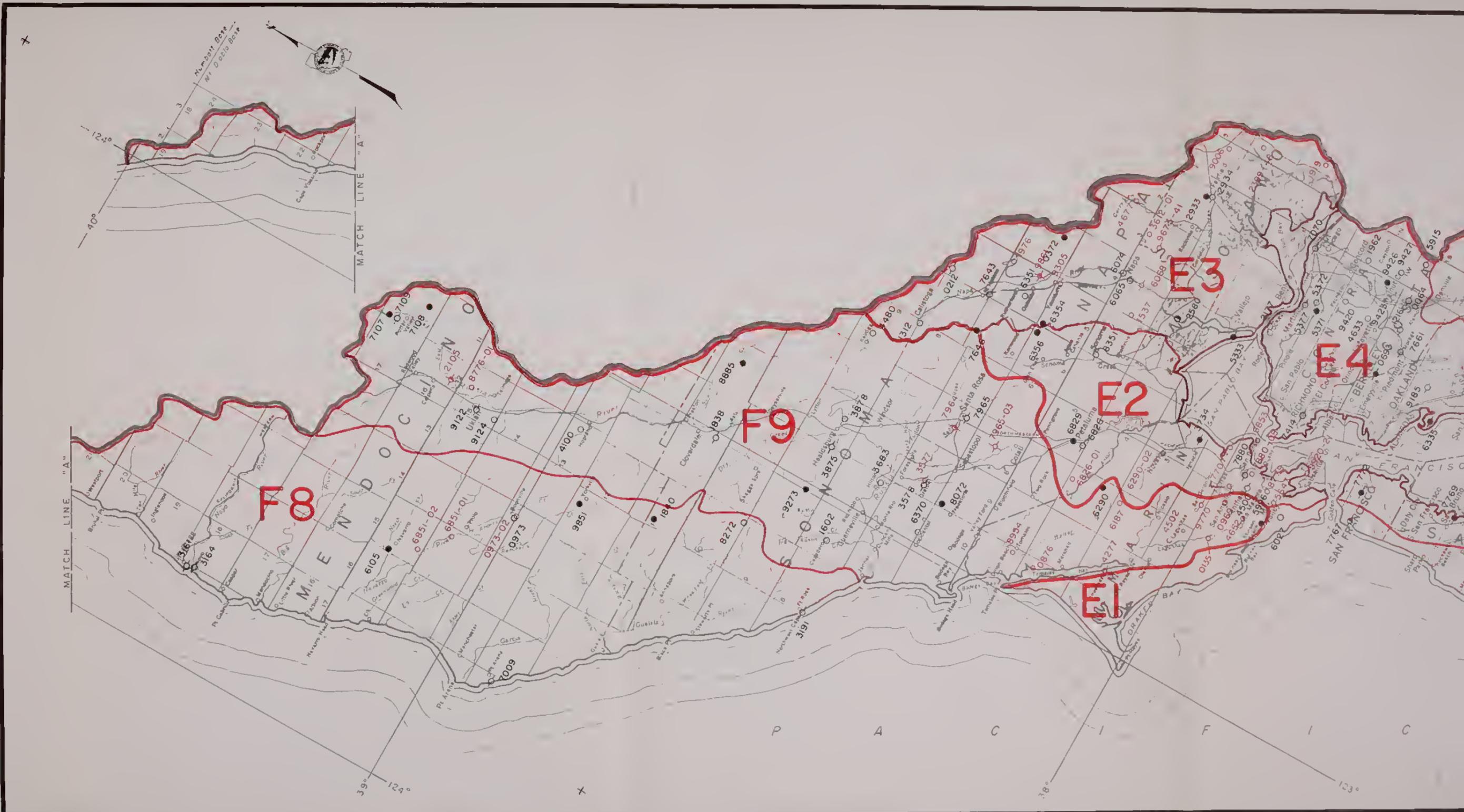
0973	Boonville HNS
0973-02	Boonville-Farner
1840	Ciudadela 1W
3101	Fort Bragg
3164	Fort Bragg Aviation
3191	Fort Ross
6105	Hevarro 1 NW
6551-01	Philo 2 SW
6851-02	Philo 4 NW
7009	Point Arena
6172	Skaggs Spr. Las Lomas Ranch
9851	Yorville

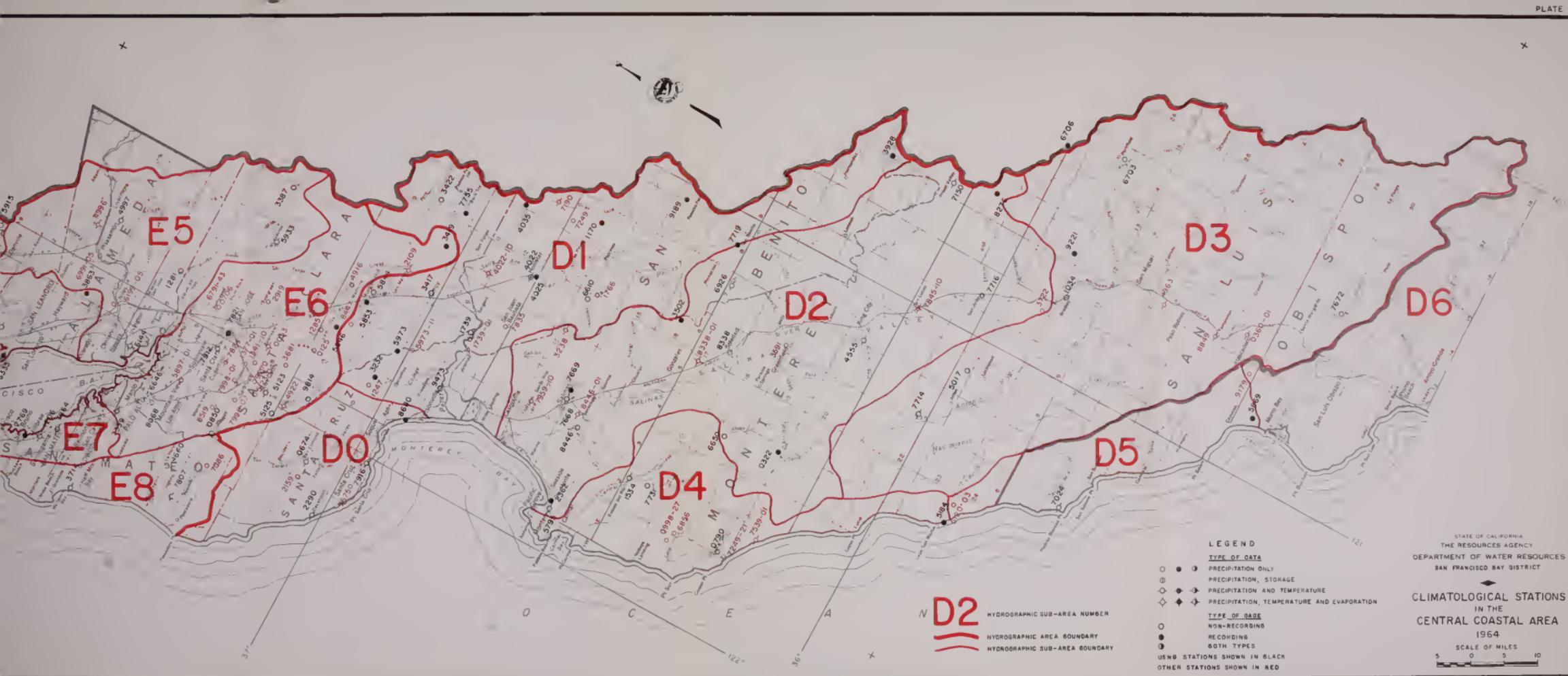
RUSSIAN RIVER (No. F9)

0135	Alpino Dam
0878	Bizaco Landing
0969	Bob Zim-er Dam
1602	Casadero
1826	Ciudadela 3 SSE
2105	Coyote Dam-Lake Mendocino
3577	Graton
3578	Graton 1 W
3683	Guerneville
3825	Healdsburg
3518	Healdsburg 2 E
4100	Hopland Lago Station
4277	Inverness-Mery
4480	Pallog
4502	Pat Lake
4523	Lagunitas Lake
5996	Mt. Tamapala 2 SW
6187	Sisallo
6290	Novato 8 NW
6370	Occidental
7107	Potter Valley 3 NW
7108	Potter Valley 3 SE
7109	Potter Valley F. H.
7844	Saint Helena 4 WSW
7964	Santa Rosa Sewage Plant
7963	Santa Rosa
7965-03	Santa Rosa Federalist
8012	Sebastopol 4 SSE
8776-01	Tillamook
8881	The Geysers
8954	Tomales
9122	Uliah
9124	Uliah 6 WSW
9273	Venado
9770	Woodacre

SANTA CLARA VALLEY (No. E6)

0053	Alamo Park Pond
0125	Alameda Reservoir
0706	Bearyassa 1 E (Toyon Ave.)
0830	Black Mountain 2 SW
1225	Cairo Reservoir
1341-10	Cambrian Park
1377-01	Campbell Water Co
3109	Coyote Reservoir
2919	Evangelina-Silver Cr. Rd.
3419	Gilroy 8 NE





LEGEND

TYPE OF DATA

- ● ○ PRECIPITATION ONLY
- ⊖ ○ PRECIPITATION, STORAGE
- ⊕ ○ PRECIPITATION AND TEMPERATURE
- ◇ ◆ ◇ PRECIPITATION, TEMPERATURE AND EVAPORATION

TYPE OF STAGE

- NON-RECORDING
- RECORDING
- ⊖ BOTH TYPES

USWB STATIONS SHOWN IN BLACK
OTHER STATIONS SHOWN IN RED

D2 HYDROGRAPHIC SUB-AREA NUMBER

— HYDROGRAPHIC AREA BOUNDARY

— HYDROGRAPHIC SUB-AREA BOUNDARY

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN FRANCISCO BAY DISTRICT

**CLIMATOLOGICAL STATIONS
IN THE
CENTRAL COASTAL AREA
1964**

SCALE OF MILES
0 5 10

The following table shows the results of the experiments conducted on the effect of temperature on the rate of reaction between hydrogen peroxide and potassium iodide. The reaction is catalyzed by the presence of a small amount of potassium iodide. The rate of reaction is measured by the volume of oxygen gas evolved in a given time.

Temperature (°C)	Volume of O ₂ (ml)	Time (min)	Rate (ml/min)
10	10	10	1.0
20	20	10	2.0
30	30	10	3.0
40	40	10	4.0
50	50	10	5.0
60	60	10	6.0
70	70	10	7.0
80	80	10	8.0
90	90	10	9.0

It is evident from the above table that the rate of reaction increases with increasing temperature. This is due to the fact that the molecules of the reactants possess more energy at higher temperatures and are therefore more likely to undergo a successful collision.



NORTH O
 4.00
 5.00
 6.00
 7.00
 8.00
 18.01
 18.02
 8.00

SAN FRAN
 .00
 .00
 2.01
 2.02
 .00
 .00
 .00
 9.01
 9.02
 0.00
 2.00
 4.00
 6.00

LEGEND

WATER QUALITY CONTROL
STANDARD REGION NUMERAL

WATER QUALITY CONTROL
STANDARD REGION BOUNDARY

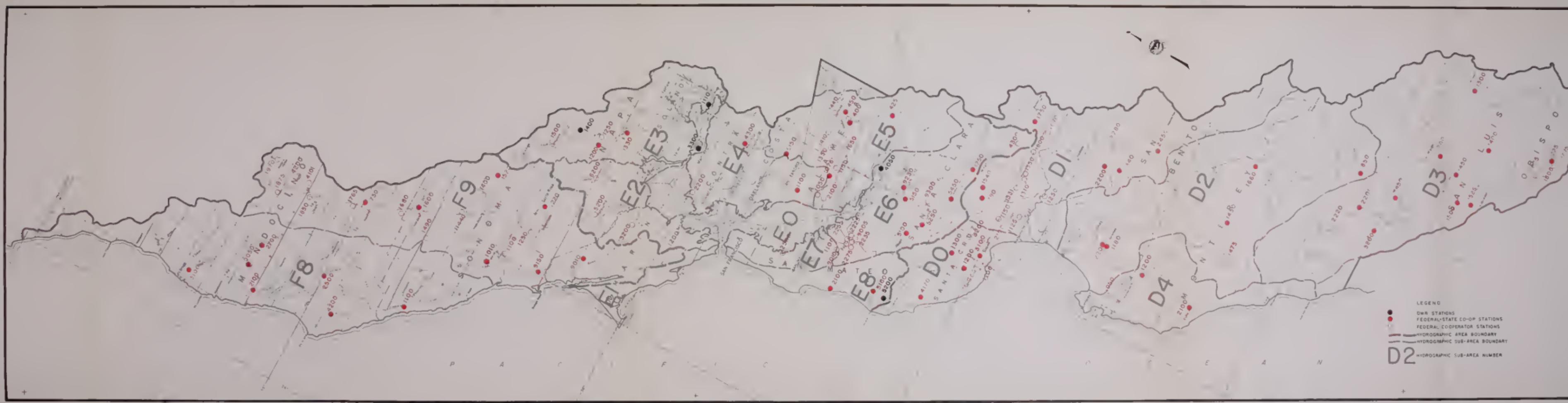


GROUND WATER BASIN OR UNIT

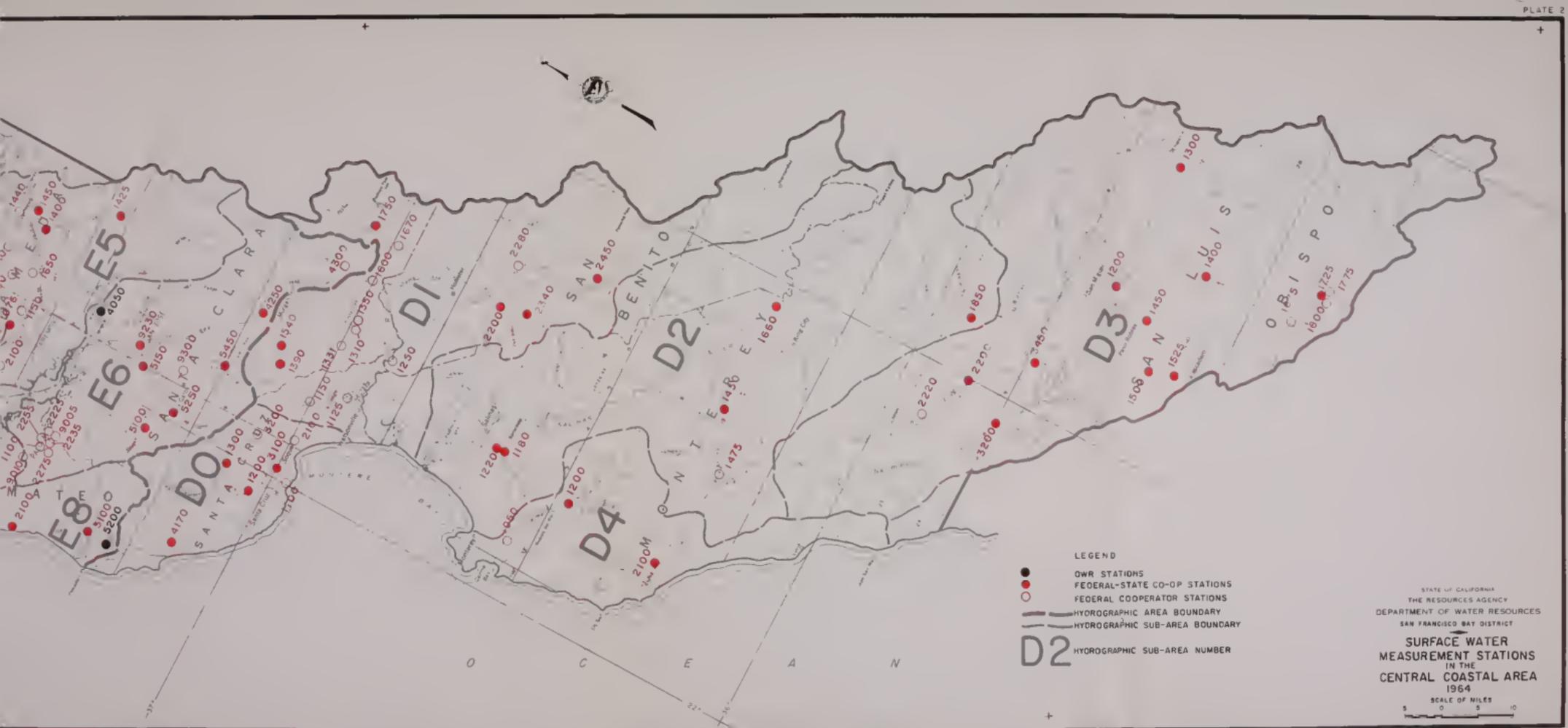
STATE OF CALIFORNIA
 THE RESOURCES AGENCY
 DEPARTMENT OF WATER RESOURCES
 SAN FRANCISCO BAY DISTRICT

GROUND WATER BASINS OR UNITS
 IN THE
 CENTRAL COASTAL AREA
 1964





- LEGEND
- DWR STATIONS
 - FEDERAL-STATE CO-OP STATIONS
 - FEDERAL COOPERATOR STATIONS
 - HYDROGRAPHIC AREA BOUNDARY
 - - - HYDROGRAPHIC SUB-AREA BOUNDARY
- D2 HYDROGRAPHIC SUB-AREA NUMBER



LEGEND

- OWR STATIONS
- FEDERAL-STATE CO-OP STATIONS
- FEDERAL COOPERATOR STATIONS
- HYDROGRAPHIC AREA BOUNDARY
- HYDROGRAPHIC SUB-AREA BOUNDARY
- D2 HYDROGRAPHIC SUB-AREA NUMBER

STATE OF CALIFORNIA
 THE RESOURCES AGENCY
 DEPARTMENT OF WATER RESOURCES
 SAN FRANCISCO BAY DISTRICT

**SURFACE WATER
 MEASUREMENT STATIONS
 IN THE
 CENTRAL COASTAL AREA
 1964**

SCALE OF MILES
 0 5 10



ORTH C
 a Rus
 b Nav
 c Big
 a Rut
 a Gud
 4
 Rus
 a Rus
 I
 c Noy
 AN FRA
 Arr
 Nag
 Ali
 Los
 Coy
 All
 I
 Liv
 H
 Sad
 San
 Cas
 Sul
 Sul
 Sp
 But
 But
 Det
 Sul
 Pes
 Put
 Put
 San
 CENTRAL
 Sal
 Sal
 Naq
 Sal
 San
 San
 n
 Soq
 Pa
 San
 F
 GEND



RTER QUALITY CONTROL BOARD REGION NUMERAL
 RTER QUALITY CONTROL BOARD REGION BOUNDARY
 RFACE WATER QUALITY SAMPLING STATION

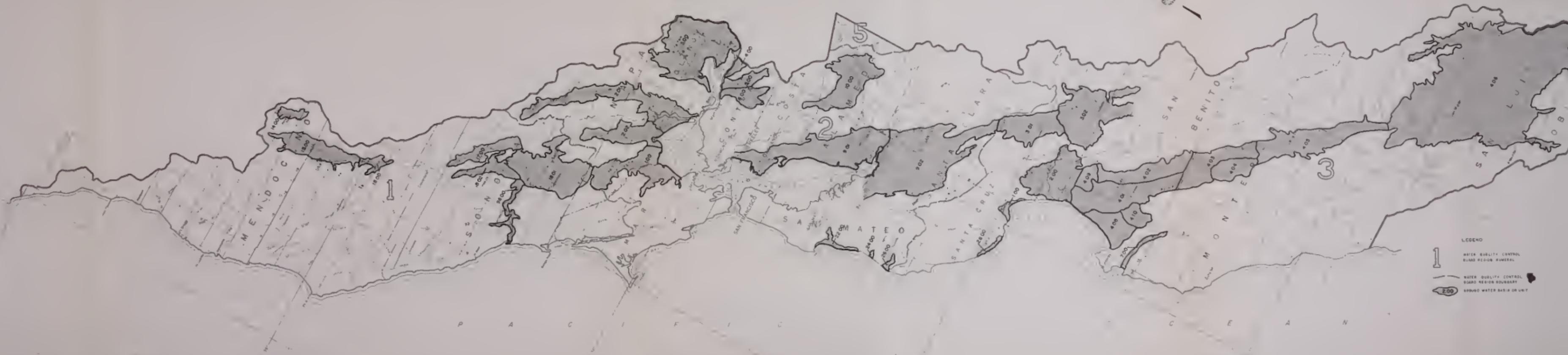
NCENTRATION OF STATIONS ALONG THE
 N LORENZO AND SALINAS RIVERS RESULTED
 OM SPECIFIC INVESTIGATIONS

STATE OF CALIFORNIA
 THE RESOURCES AGENCY
 DEPARTMENT OF WATER RESOURCES
 SAN FRANCISCO BAY DISTRICT

**SURFACE WATER
 QUALITY STATIONS
 IN THE
 CENTRAL COASTAL AREA
 1964**







LEGENO

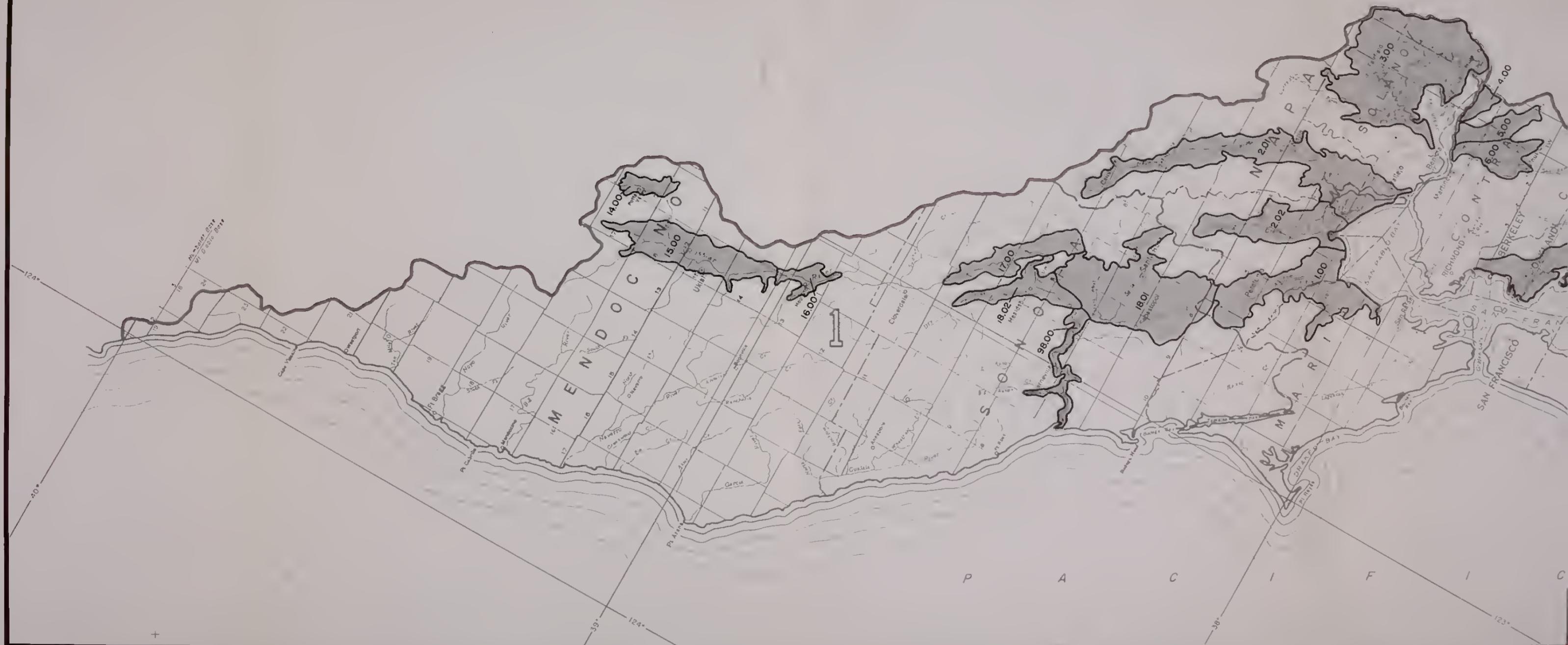
1 WATER QUALITY CONTROL BOARD REGION NUMBER

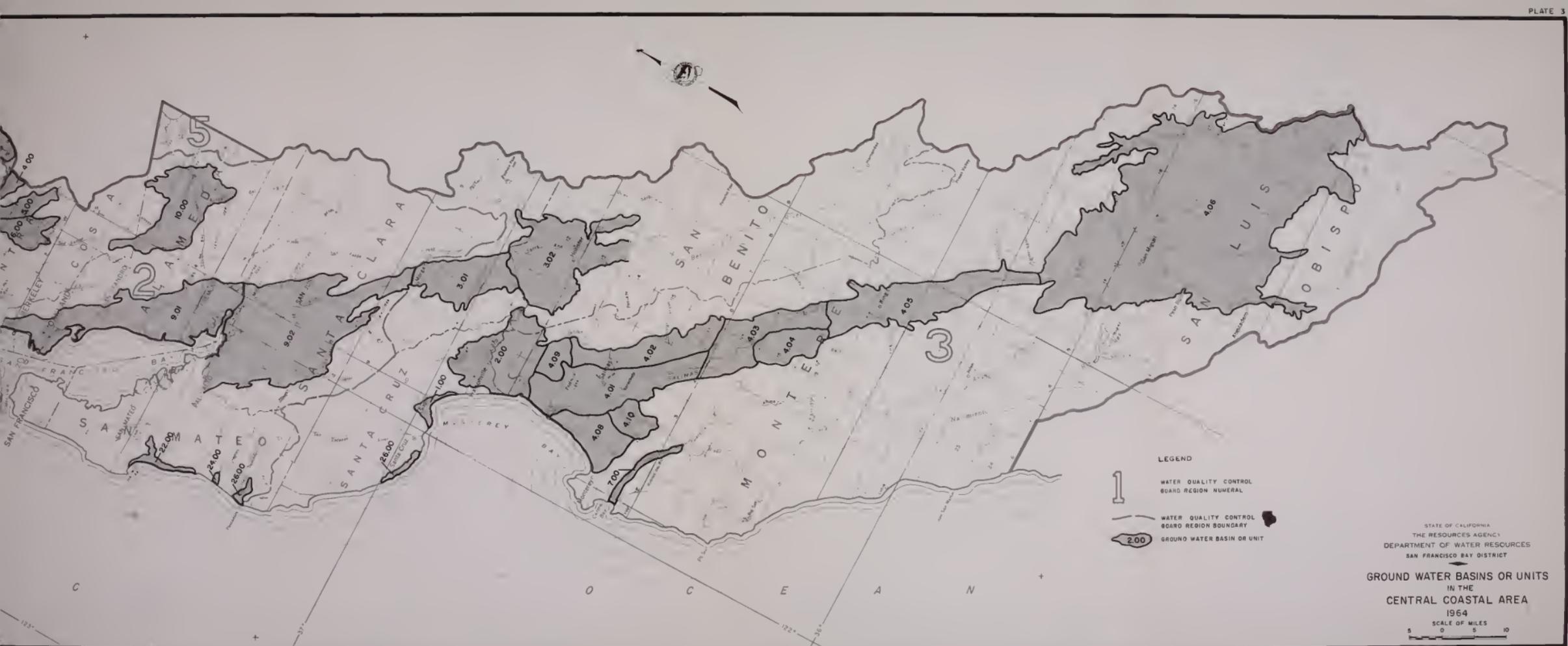
--- WATER QUALITY CONTROL BOARD REGION BOUNDARY

200 DRAINAGE WATER BASIN OR UNIT

GROUND WATER BASINS OR UNITS
IN THE
CENTRAL COASTAL AREA

NORTH COASTAL REGION (No. 1)		CENTRAL COASTAL REGION (No. 3)	
1-14.00	Potter Valley	3-1.00	Soquel Valley
1-15.00	Utah Valley	3-2.00	Fajero Valley
1-16.00	Sanel Valley	3-3.00	Gilroy-Hollister Valley
1-17.00	Alexander Valley	3-3.01	South Santa Clara County
1-18.00	Santa Rosa Valley	3-3.02	San Benito County
1-18.01	Santa Rosa Area	3-4.00	Salinas Valley
1-18.02	Healdsburg Area	3-4.01	Pressure Area
1-98.00	Lower Russian River Valley	3-4.02	East Side Area
		3-4.03	Forebay Area
		3-4.04	Arroyo Seco Cone
		3-4.05	Upper Valley Area
		3-4.06	Paso Robles Basin
		3-4.08	Seaside Area
		3-4.09	Langley Area
		3-4.10	Corral de Tierra Area
		3-7.00	Carrol Valley
		3-26.00	West Santa Cruz Terrace
SAN FRANCISCO BAY REGION (No. 2)			
2-1.00	Petaluma Valley		
2-2.00	Napa-Sonoma Valley		
2-2.01	Napa Valley		
2-2.02	Sonoma Valley		
2-3.00	Suisun-Fairfield Valley		
2-5.00	Clayton Valley		
2-6.00	Ignacio Valley		
2-9.00	Santa Clara Valley		
2-9.01	East Bay Area		
2-9.02	South Bay Area		
2-10.00	Livermore Valley		
2-22.00	Half Moon Bay Terrace		
2-23.00	San Gregorio Valley		
2-26.00	Pescadero Valley		





LEGEND



WATER QUALITY CONTROL BOARD REGION NUMERAL



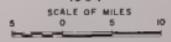
WATER QUALITY CONTROL BOARD REGION BOUNDARY



GROUND WATER BASIN OR UNIT

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SAN FRANCISCO BAY DISTRICT

GROUND WATER BASINS OR UNITS
IN THE
CENTRAL COASTAL AREA
1964



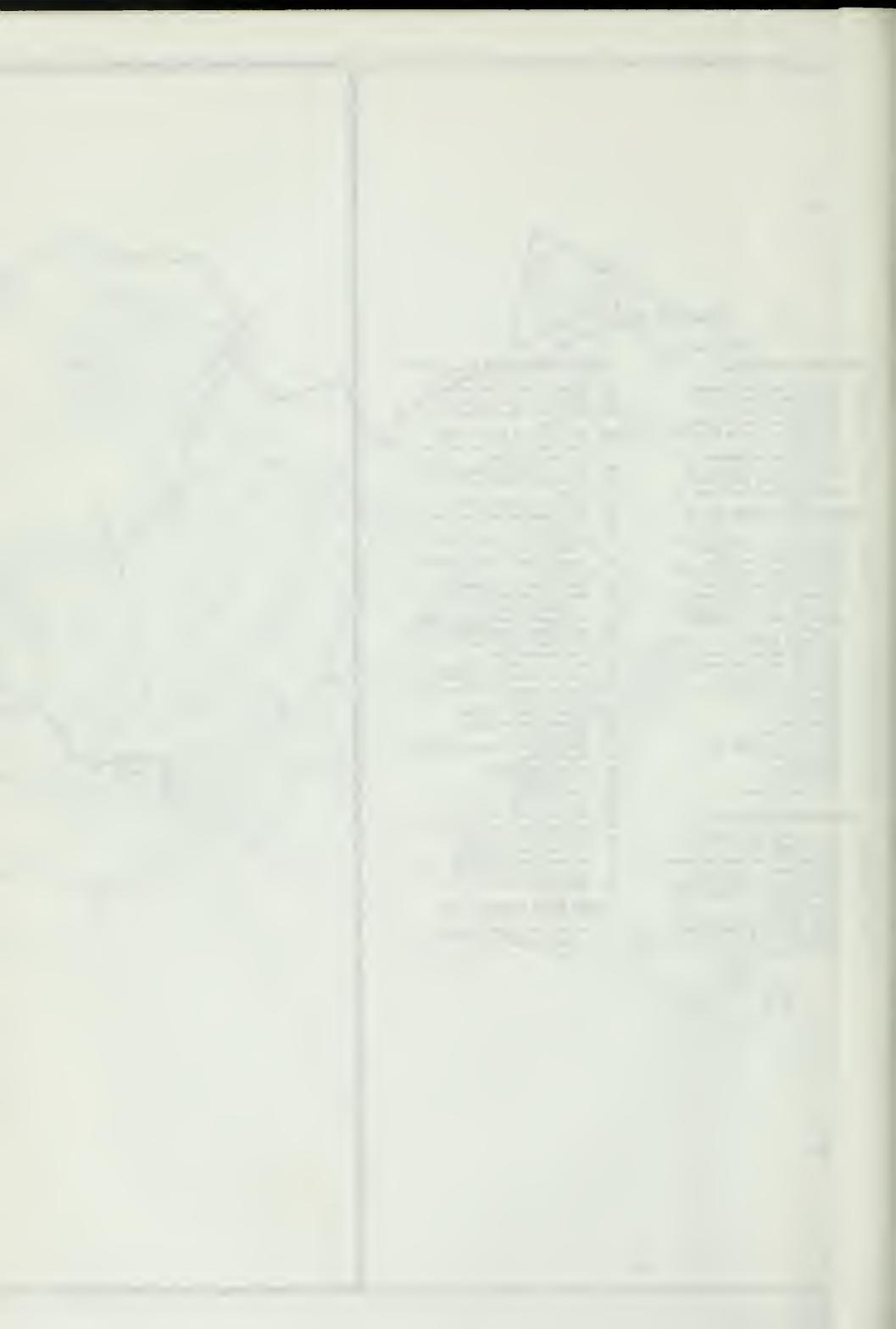
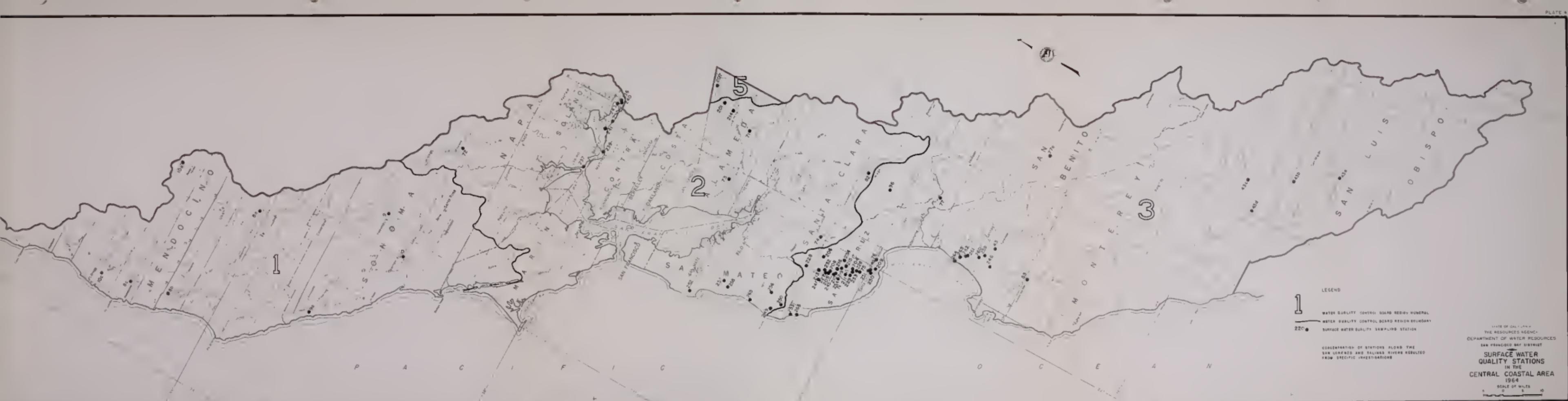


PLATE 101





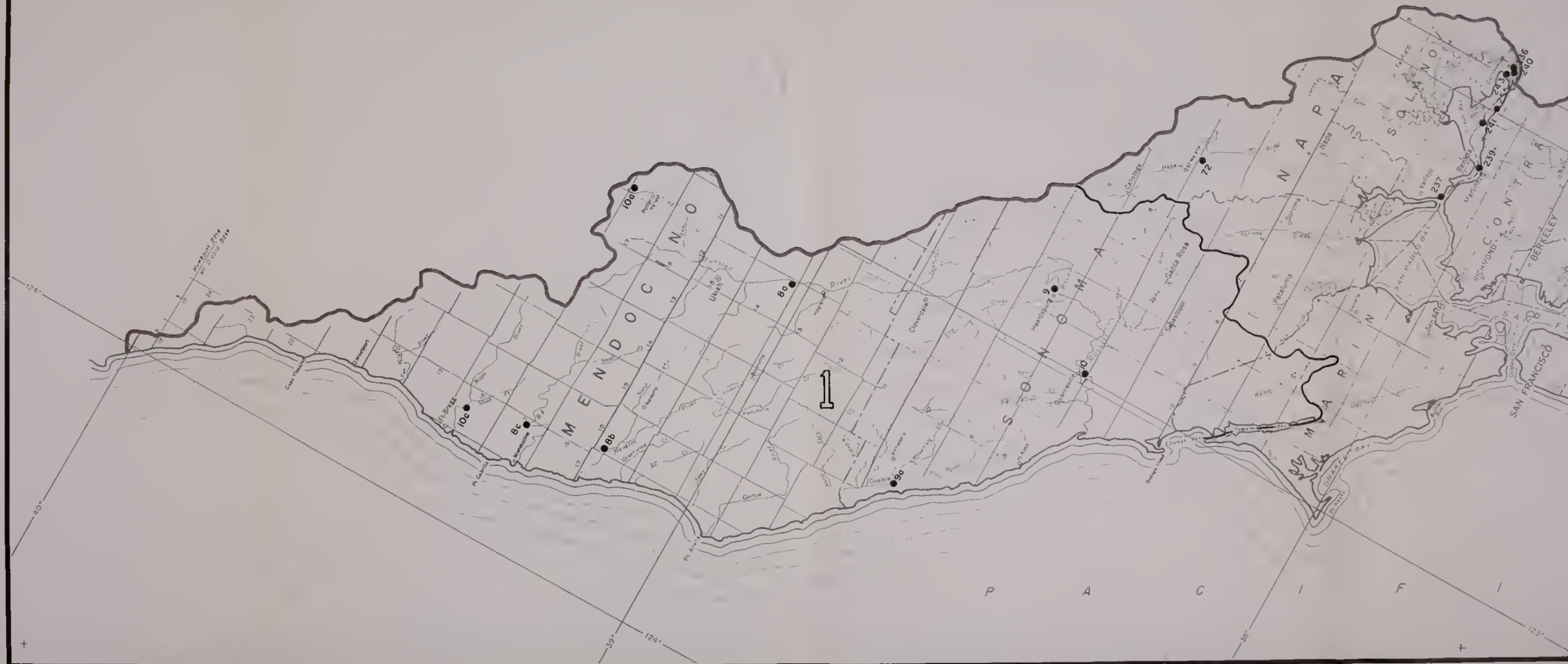
1 WATER QUALITY CONTROL BOARD REGION NUMBERAL
--- WATER QUALITY CONTROL BOARD REGION BOUNDARY
220 SURFACE WATER QUALITY SAMPLING STATION

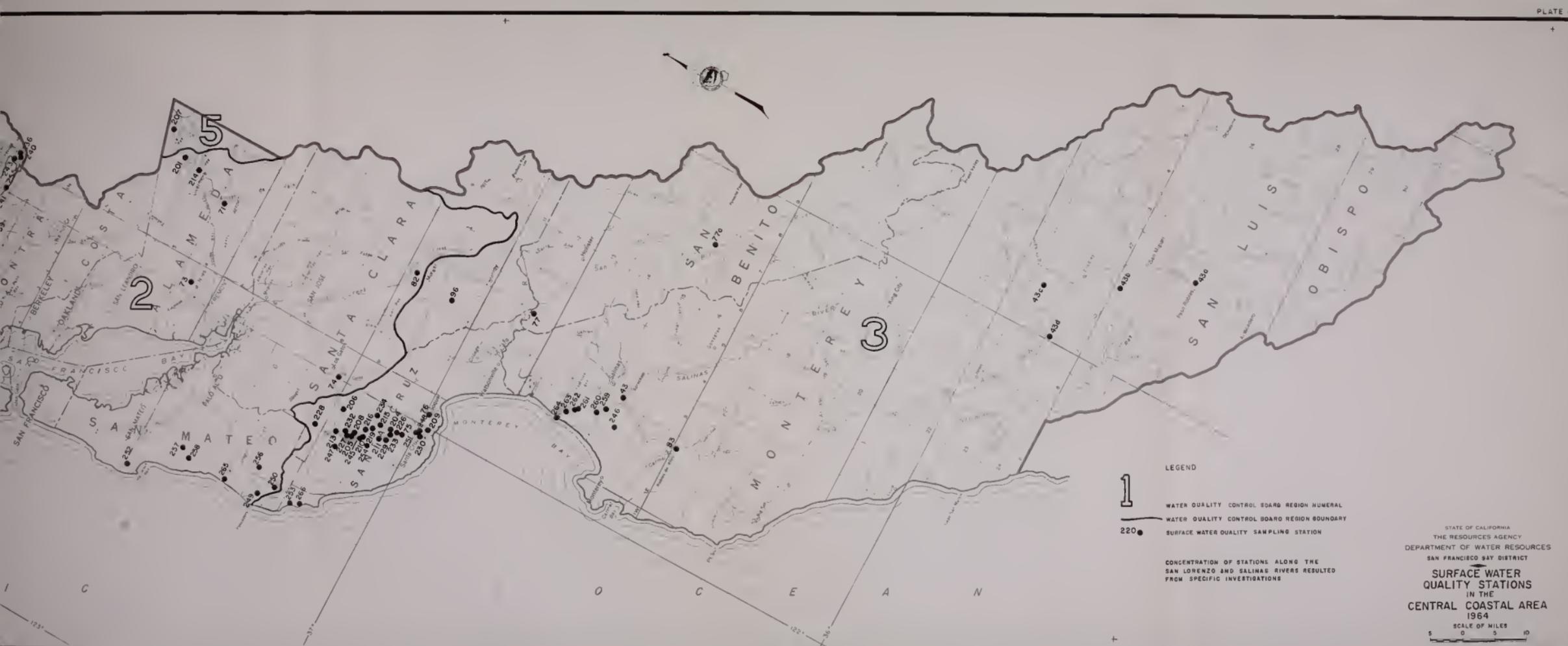
CONCENTRATION OF STATIONS ALONG THE SAN LORENZO AND SALINAS RIVERS RESULTED FROM SPECIFIC INVESTIGATIONS

STATE OF CALIFORNIA
 THE RESOURCE AGENCY
 DEPARTMENT OF WATER RESOURCES
 SAN FRANCISCO DISTRICT
SURFACE WATER QUALITY STATIONS
 IN THE
CENTRAL COASTAL AREA
 1964
 SCALE OF MILES
 0 5 10

SURFACE WATER QUALITY STATIONS

NORTH COASTAL REGION (No. 1)		CENTRAL COASTAL REGION (No. 3) Cont'd	
8a	Russian River near Hopland	83	Carmel River at Robles Del Rio
8b	Navarro River near Navarro	96	Uvas Creek near Morgan Hill
9c	Big River near mouth	204	Bean Creek one mile east of Felton
9	Russian River near Healdsburg	203	Bear Creek at Boulder Creek
9e	Coalela River, South Fork, near Annapolis	206	Bear Creek four miles northeast of Boulder Creek
10	Russian River at Guerneville	208	Boulder Creek at Boulder Creek
10a	Russian River, East Fork, at Potter Valley Power House	209	Brancifortia Creek near Santa Cruz
10c	Noyo River near Fort Scott	210	Clear Creek at Brookdale
SAN FRANCISCO BAY REGION (No. 2)		211	Fall Creek one-half mile north of Felton
71	Arroyo Del Valle near Livermore	213	Kings Creek two miles north of Boulder Creek
72	Napa River near St. Helena	215	Lampiro Creek one mile north of Olympia
73	Alameda Creek near Niles	216	Love Creek at Ben Lomond
74	Los Gatos Creek near Los Gatos	219	Newell Creek one mile northeast of Ben Lomond
82	Coyote Creek near Madrona	226	San Lorenzo River at Big Trees
201	Altamont Creek at Altamont Turnout of South Bay Aqueduct	227	San Lorenzo River at Boulder Creek
214	Livermore Canal at Patterson Reservoir	228	San Lorenzo River six miles north of Boulder Creek
236	Sacramento River at Collierville	229	San Lorenzo River at Felton
237	San Pablo Bay at Crockett	230	San Lorenzo River at Santa Cruz
239	Carquinez Strait at Martinez	232	Two Bar Creek one mile north of Boulder Creek
240	Suisun Bay at Pittsburg	233	Boulder Creek
241	Suisun Bay at Port Chicago	234	Zayante Creek at Felton
243	Spoonhill Creek	234	Zayante Creek at Layantse
249	Butano Creek	245	Alba Creek
250	Butano Creek	246	Blanco Drain into Salinas River
252	Dennistown Creek	247	Boulder Creek
255	Suisun Bay at Middle Point	248	Brancifortia Creek
256	Pescadero Creek	251	Carbonera Creek
257	Purisima Creek	253	Gasos Creek
258	Purisima Creek	254	Marshall Creek
265	San Gregorio Creek	259	Salinas River, mile 9.51
CENTRAL COASTAL REGION (No. 3)		260	Salinas River, mile 7.13
43	Salinas River near Sprockels	261	Salinas River, mile 4.65
43a	Salinas River at Paso Robles	262	Salinas River, mile 3.50
43b	Nacolinon River near San Miguel	263	Salinas River, mile 1.70
43c	Salinas River near Stadley	264	Salinas River, mile 0.00
43d	San Antonio River near Playto	266	Whitchose Creek
75	San Lorenzo River at Big Trees near Felton	CENTRAL VALLEY REGION (No. 5)	
76	Soquel Creek at Soquel	207	Bethany Forebay at South Bay Pumping Plant
77	Pajaro River near Chittenden		
77a	San Benito River near Bear Valley Fire Station		





- 1** WATER QUALITY CONTROL BOARD REGION NUMERAL
- WATER QUALITY CONTROL BOARD REGION BOUNDARY
- 220 ●** SURFACE WATER QUALITY SAMPLING STATION

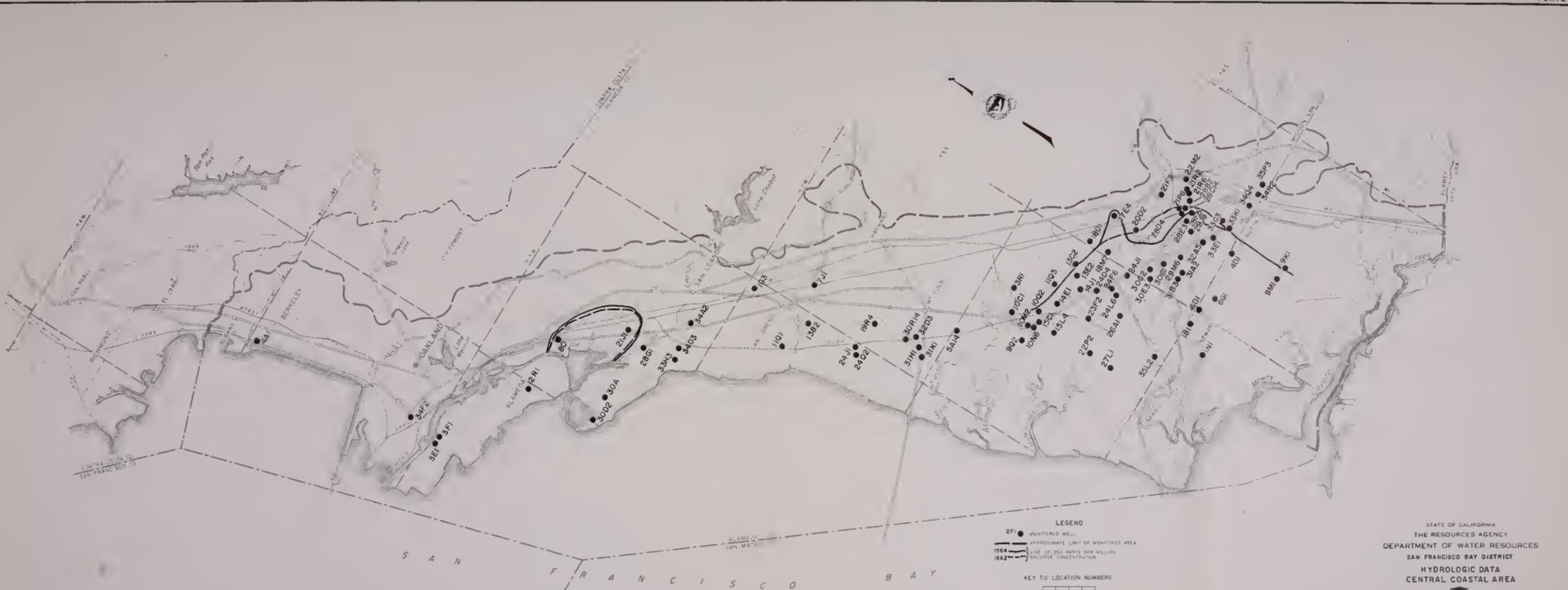
CONCENTRATION OF STATIONS ALONG THE
 SAN LORENZO AND SALINAS RIVERS RESULTED
 FROM SPECIFIC INVESTIGATIONS

STATE OF CALIFORNIA
 THE RESOURCES AGENCY
 DEPARTMENT OF WATER RESOURCES
 SAN FRANCISCO BAY DISTRICT

**SURFACE WATER
 QUALITY STATIONS
 IN THE
 CENTRAL COASTAL AREA
 1964**

SCALE OF MILES
 0 5 10





LEGEND

- MONITORED WELL
- - - APPROXIMATE LIMIT OF MONITORED AREA
- LINE OF 350 PARTS PER MILLION CHLORIDE CONCENTRATION 1964
- - - LINE OF 350 PARTS PER MILLION CHLORIDE CONCENTRATION 1952

KEY TO LOCATION NUMBERS

B	C	D	E
F	G	H	I
J	K	L	M
N	O	P	Q

WELLS NOT DISPLAYED TO MAINTAIN ANONYMITY OF OWNERS

STATE OF CALIFORNIA
 THE RESOURCES AGENCY
 DEPARTMENT OF WATER RESOURCES
 SAN FRANCISCO BAY DISTRICT
 HYDROLOGIC DATA
 CENTRAL COASTAL AREA

**STATUS OF SEA-WATER INTRUSION
 SANTA CLARA VALLEY
 EAST BAY AREA**

1964

SCALE OF MILES

**THIS BOOK IS DUE ON THE LAST DATE
STAMPED BELOW**

**RENEWED BOOKS ARE SUBJECT TO IMMEDIATE
RECALL**

MAR 14 1974
MAY 21 REC'D

LIBRARY, UNIVERSITY OF CALIFORNIA, DAVIS

Book Slip-25m-6,'66(G3855s4)458



N^o 482510

California. Dept.
of Water Resources.
Bulletin.

PHYSICAL
SCIENCES
LIBRARY

TC824
C2
A2
no.130:64
v.3
c.2

LIBRARY
UNIVERSITY OF CALIFORNIA
DAVIS

482510

California. Dept.
of Water Resources.
Bulletin.

Call Number:

TC824
C2
A2
no.130:64
v.3

